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SEARCH FOR A SOLUTION TO THE PROBLEMS OF FORMING A SUIT TO ENSURE COMFORTABLE CONDITIONS FOR THE POPULATION OF THE ARCTIC

Abstract: *In the article, the authors tried to show a way out of the current crisis situation in light industry through a competent assortment and assortment policy within the framework of the advanced development territory with icing up the efforts of all branches of government, namely municipal, regional and federal, as well as in alliance with manufacturers with the support of the Chamber of Commerce and Industry, they will offer consumers of their regions not only demanded and competitive products, but what is especially important - economically justified and guaranteeing enterprises to obtain sustainable TPEs, providing manufacturers with bankruptcy prevention and guaranteeing them stability within the framework of standardization as a tool for managing the production of quality products, and the population of these regions - employment and satisfaction their social problems.*

Key words: *assortment, assortment policy, competence, preference, standardization, production management, product quality, demand, competitiveness, stable financial position, stable TPP, demand, profit.*

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Introduction

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Economic science arose and developed in the context of politics, like political economy. Today, economists in politics are guided not by political economy, but by economics in politics. Instead of investing in the development of production, they hide money in foreign banks, cut funding for education and self-education, increase the number of the poor, do not index pensions, refuse to help farmers, etc. "Manilov" nineties were replaced by "buns" of the tenth of the XXI century.

There is no progress without retreats, slowdowns in movement, recessions. The policy is called upon to take active, purposeful actions to help overcome the obstacles arising in development. Politicians must stay ahead of the economic movement and direct it, stimulate domestic economic factors with political levers, and clear economic paths to efficient production. Instead, politicians continue to link development plans to the price of oil, the ruble size of the European and American currencies, referring to the integration trends in the world and globalization.

The integration of transnational relations is an objective reality, but for all its objectivity, it does not deny the specifics of national economic advancement. Moreover, integration is objectively called upon to contribute to national development. Why can't we do it as it should be? This question arises from a logical comparison of the policy in the field of strengthening defense capabilities, restoring the country's international authority in the most difficult circumstances of the formation of a new world architectonics with the fact that from year to year Russians observe and fully feel on themselves in the sphere of the rest of the economy. two governments? The second one "clicks on the gas and slows down" at the same time.

The protracted recession in the Russian economy can be explained in two ways. First, the people have lost the ability to work well, squandered "human capital", second, the managers are helpless. The media assure that politicians know their business, keep events under control, take the necessary measures and promise changes for the better in the near future. Therefore, the reason is the poor performance of the performers and the unfavorable global environment.

How naive do you need to be to rely on the sincerity, disinterestedness, and sympathy of your competitors when planning your economic policy? The President of the Russian Federation stated long ago that our Western partners do not want to strengthen Russia, they need an obedient Russia, such as the Baltic republics that were formerly part of the USSR. I didn't want to sadden the politicians responsible for the economy, but following Aristotle, we were forced to state: “Friends in the East” are also on their minds - in the sense“ Plato is my friend, but the truth is dearer . They will help us as we benefit from such assistance.

It's time to understand that all economic and political alliances in the modern world space are an attempt to achieve national gain in the environment of transnational relations, i.e. you can count on partners as long as this cooperation is beneficial to them. From which the conclusion follows - it is necessary to face your economy. Only in this way, albeit with great effort, will it be possible to solve their problems. For example, there are no objective reasons that would justify the decline in production in light industry for a quarter of a century.

The problems of agriculture and light industry are not specific to them, they have always been political. In the USA and Europe, farmers have a lot of our problems. The difference is that the farmer there is a national problem among the most important and basic ones. Its consideration is relevant for the existence of politicians. From how the policy contributes to the resolution, the public place of the politician is assessed. The farmer and the politician are linked by economic policy. They balance on one tightrope of economic viability.

There is nothing similar in Russia. Let us recall the history of the last ministers of agriculture. In the USSR, there was a Ministry of Light Industry, which emphasized the importance of the industry. What prevents, in the context of import substitution and declarations about the importance of developing our own production, to restore equality in industrial management. A "chintz land" without light industry is the same as native nature without birch groves or lyric poetry without the creativity of S. Yesenin.

The reformers of the 1990s were the least worried about the fate of the Fatherland and the country's industrial identity. They built their business on the ease of maximizing profits and placed the walrus away from the land of their ancestors. Light industry has traditionally been a difficult management problem. Managers must be, first of all, patriots, otherwise light industry cannot be raised. It is also necessary to understand the national importance of “long money”. Resilience of demand would compensate for the difficulties.

What is the essence of the ineffectiveness of politics in the economy of the late last century and the beginning of the new century? This is question number 1, and it is not so much about who is to blame. We are interested in the essence of the political paradigm developed by those who were "at the helm". Question number 2 - what should be changed and how, apparently, should it be done in order to raise the national industry, the production of clothing, footwear, leather goods, textiles, accessories, not least?

The answer to question # 1 is simple - no one was going to develop a paradigm of economic policy aimed at a radical transformation of the basis. It was decided to choose the method of reforming (not without outside help) from ready-made samples. It was proposed to take the Swedish experience, the Polish "shock therapy", reforms in Portugal and Argentina as a model. Such innovators, courageous scientists, wise organizers as Gaidar, Chubais, Koch, Burbulis did not come up with the idea with which a responsible owner usually begins - what I have in order to copy something.

Politics is not done depending on the state of feelings - either like or not like the level of everyday perception of the world. It is harmful to be in the "political kitchen" with such an approach. Economic policy does not qualify as “good” or “bad”, “effective” or “ineffective”. It has the right to be called either "useful" or "harmful". The price of such a policy is too high, and accordingly, the responsibility is not limited to the professional form. Politics is politics. It is anti-political and unprofessional to make politics a source of one's own income.

Whatever the economic situation develops, it is extremely dangerous to make the meaning of economic criteria in absolute terms, to endow them with the property of universality. F. Engels spoke out sharply against attempts to reduce the teachings of Karl Marx about social development to "economic materialism", "economic determinism." The economic basis is the basis of social organization, but in no way a system-forming factor for its improvement.

The most difficult component of economic reforms is the achievement of social satisfaction with the distribution of the national product. The health of society depends on this satisfaction, and not on the form of ownership. And we have come to an important conclusion - the quality of reforms is assessed not by the changes themselves, but by the ability to impart features of stability to public life.

Integration, globalization is not a panacea for development. They do not cancel the competition, in which there are more than one winner. There are more losers. Hence the relevance of the old truth, the meaning of which became clear in dialectics. Movement in any conditions becomes self-movement. The Chinese closed themselves off rationally and won. The victory was ensured by Eastern caution and skepticism about the unification. They realized before us that integration and globalization are types of "pyramids" and are conditionally useful for national development. From the outside, it might seem that the Chinese reformers have abandoned the curse mentality: "to live for you in times of change." From the inside, everything looked traditional - politicians did not betray with a sharp movement on a national scale, they were in a hurry, but with a constant linking of actions to the state economic order, reforms in the economy subordinated traditional political dominants, did not repent and did not try to please. Nobody seriously thought about any economic shocks. They took finance as the circulatory system of the economic organism into "tight government mittens", introduced toughening for economic and corruption crimes, equating many of them with dangerous actions against the state, did not come up with new parties - they updated the existing one, as before, paid special attention to personnel policy. The Chinese took into account the Soviet party experience of "growing" cadres, which was based on the principle of progressive advancement depending on business efficiency and lifestyle.

Main part

The market for the light industry is also growing due to socio-cultural progress, in particular, thanks to the development of professional sports, an increase in the demand for those who choose sports as a path to a healthy lifestyle. At the end of 2020, the Sport Express newspaper published an interview with the Chairman of the Board of the Russian Outdoor Group A. Grebtsov. “The outdoor market serves mountaineering, tourism, extreme sports, special forces, rescue teams, polar services and troops. These are areas that require heavy-duty, frost-resistant, waterproof equipment that meets the latest world standards of safety and comfort. " A. Grebtsov gave interesting details, in particular, he compared the technological base for the production of quality products in the Russian Federation, Europe and Asia. We are "somewhat behind", according to him, from the Asian potential, but with Europe "We can definitely compete ... in Russia there are about 30 enterprises that know how to sew well." After the introduction of the import ban for state orders and state defense orders, the share of materials from the member countries of the Customs Union supplied to the country's law enforcement agencies increased from 30% in 2017 to 93% in 2020. In 2020, the tendency for an increase in the share of materials produced by the KPEC countries used for the production of clothing should be about 90-95%. The turn of the state order towards domestic production will open up opportunities for the subcontractors of the chemical industry (raw materials for thread, accessories, membranes, insulation). Will increase the production of fabrics, sewing clothes, which will pull the development of equipment. D. Manturov believes that in order to consolidate the achieved results it is important:

- make it clear to large retail chains the importance of purchasing and placing goods produced in Russia, of course, taking into account their proper quality;
- to place, first of all, orders for production from those “who have already got on their feet and know how to sew”. They were able to prove their worth;
- provide assistance to enterprises with obtaining European certification, otherwise foreign companies will not be interested in them, and the goods produced in our country will not get to the West;

▪ actively support enterprises by providing them with collective stands at international exhibitions;
▪ provide such enterprises with subsidies for loans for the purchase of raw materials and supplies. The share of these loans in the total volume of lending should be from 50 to 85%;
▪ to exempt modern imported equipment from import duties and VAT, such as equipment used in sewing shops, is 90% imported;
▪ introduce preferential leasing.

As you can see, D. Manturov's program systematizes the main and primary steps in the direction of the light industry in order to return it to its former importance. However, Heraclitus was right in saying that you cannot enter the same river twice. The rise of the light industry can be carried out on a new technological, economic and legal basis.

The manufacturer is currently not interested in making a quality product. "Sheepskin is not worth the dressing" - the costs are high, the cost of goods will rise, the real price will be significantly increased by the intermediary and the seller. As a result, the market for such a product "will not digest" and the manufacturer will be stricken with the fatal disease No. 1 according to E. Deming. On a limited - obviously scanty scale for Russia, quality things are guaranteed to be made, manufactured, but the above practice has nothing to do with the situation in production, it is exclusive.

The first experience of control intervention in the production process in order to give it stability and a certain increment can be found in the activities of shops, individual industries, schools of craftsmen. Most of the famous sculptors of the Renaissance tried to work in teams of stonecutters, directly in the places where the material was mined. They were looking in the quarries for the texture needed to create the image. It was then that the joke appeared: it is easy to make a masterpiece - you need to remove all unnecessary, unnecessary, but first you need to find the basis. In the workshops, in the interests of quality, the craftsmen carefully checked the products, observed the work of the apprentices during the manufacturing process, actively introduced the students to the secrets of production, selecting the most capable of them. Despite the fact that each product was individual, made by a master, it underwent internal control, which was also external from the city shop organizations. Subsequently, such work was defined as the rejection phase.

In terms of content, it was much richer, synthetic, more like “sampling” than “culling”. Creativity moved the masters, the masters studied not less than the students. They were looking for paint, primer, base, perfect images, and they were wrong. Creativity spares no one - neither the greats nor the beginners. Everyone, especially the masters, had to work with the stick method. The concept of "marriage" is not as simple as it seems from the outside. The marriage is not always in plain sight, the masters got out of its hidden forms, which manifested themselves over time. "Culling" was not an act, as in mass production, but a technology. Today it is difficult for us to look beyond the achieved horizon in the development of mass production. It is only clear that its "prudent" form is still more a direction of development than a phase. However, the logic of progress, built on continuity, does not exclude a return to some part characteristic of the shop organization. Mass character should not be a brake on creativity. Over time, it will surely reveal its diversity under the common “roof” of multiple results. Therefore, it is necessary to carefully study the production process, which has been improved in the workshop form.

Modern culling as an act of standardization dates back to the last quarter of the 19th century. The experience of S. Colt's factories is recognized as the beginning, it is believed that the idea of "standard quality" was born there. If we evaluate in the system of our version "quality - standard", then this was a subconscious embodiment of Hegel's conclusion about the dialectic of the ascent of cognition from the abstract concept of quality to the concrete concept of the "standard" of product quality.

At S. Colt, the assembly went without preliminary fitting of parts. Specially trained inspectors performed pre-calibration and rejected unconditioned, thereby speeding up the main - assembly part of production. The experience of S. Colt at the beginning of the next century was developed in the automobile production of G. Ford and G. Leland ("Cadillac"). G. Ford, introducing conveyor assembly, removed the control of components from the conveyor, logically considering that such work should be done earlier. As a result, the “input control” of compliance with the standard calibers was replaced by “output control” at the adjacent production, which cleared the main production of defects and made it qualitatively cleaner.

Further, the process of standardization went through the improvement of what had been achieved; theorists F. Taylor, A. Fayol., M. Weber joined it. In alliance with managers, they identified the basic principles of a scientific approach to organizing mass production: a systematic approach to management; personnel management; delegation of responsibility; scientific rationing of labor. The developed production management system went down in history as the Ford-Taylor production system. Having indisputable advantages, the Ford-Taylor system also contained serious defects, which for a long time "dormant" in its potential. The development of production in the new socio-political conditions of the activation of social democratic interests inevitably pushed the Ford-Taylor system into a dead end. This was also facilitated by technological progress, the process of transforming scientific knowledge into a direct productive force. The desire by all means to implement the principle of not allowing defective products to reach the consumer could not help but lead production into a technological, structural crisis.

This was also driven by the lack of a clear understanding of quality and standard in management theory. They were changed instead of being considered in development. The most noticeable and sensitive was the identification of quality and standard in the production of consumer goods, where the concept of product quality reflects the dualistic nature of the product.

A product intended for subjective, more precisely, subjective use by a person or a social group should be of high quality objectively, physically and subjectively, and should satisfy the consumer with its physical quality. It is naive to believe that only by advertising the physical perfection of a product can a consumer be attracted to it. Such a consumer should be subjectively none. Interest in the physical quality of a product can be formed by demonstrating its capabilities, but in order for interest to form into a need to buy it, this is not enough. The product should captivate the feelings of the buyer, and this is an irrational process, deeply intimate in nature, expressing the individuality of the consumer. Especially if the consumer is attached to a significant assortment, picky and fastidious.

The quality of consumer goods is not reducible to a system of physical parameters, but in their quality it exists as a kind of core. And just as the atom is not limited to the presence of a nucleus, so the quality of such goods is not limited by the system of physical characteristics. On the contrary, the standard is a purely physical phenomenon and requires a clear description in physical units. One should go to the concept of “quality of goods” through the market, and “standard of goods” should be determined in conditions of scientific and technical creativity.

Subconsciously, we came to the differentiation of the concepts of “quality” and “standard” by the end of the first quarter of the 20th century, when they felt the insidiousness of the absolutization of control over the standard conformity of products. In high-tech, complex production, the share of controllers exceeded one third of those employed at the enterprise, which significantly increased the load on the cost of goods. The price has increased, but the quality has not improved according to the price increase. The buyer had to pay for the previous level of guarantees. Quality began to slow down production efficiency. In fact, the tension was between standardization and efficiency. I had to think about how to improve the physical model of the standard - about new materials, original constructive and technological solutions. The standard is a technical image of the quality of the product. And just as the quality of a product, described in words, depends on knowledge and the ability to use them, the standard is determined by the possibilities of technical modeling of the concept of quality. The understanding of quality is evolving, and the technical model of the quality standard is also changing. Thinking has its own language and technical creativity has its own language, designed to serve as a translator from a scientific language into a technical one that is understandable for production. At the same time, the translator must have a good sense of the organizational and technological capabilities of production, so as not to absolutize the meaning of the idealized model. The image of a model is significant when it fits into the image of production, otherwise the above situation will arise. Good intentions will lead the organization of production to a hellish state.

When the desire for the totality of the organization of quality control came into conflict with the total goal of increasing production efficiency and it became clear that the conflict could not be resolved in the same way, V. Schukhert, who worked in the technical control department of the American company Western Electric, proposed to shift the focus of management quality for the organization of the dynamics of the production process. V. Schukhert's innovation was that he looked at production and the quality of production as a movement and in this context understood the main thing as a movement: firstly, the achievement of stability, and secondly, the inevitability of deviation from the direction of movement.

The task of achieving high-quality production acquired a technical form and meaning by V. Schukhert: it is impossible to avoid variations in the parameters of the obtained quality of products; The quality criterion is the stability of production in a static sense, that is, the convergence of variations with the central line. One of the most important factors in solving the problem V. Schukhert called the restructuring of personal interaction - cooperation, team organization. V. Schukhert was the first to approach the interpretation of the standard in terms of mass production, presenting the quality of production and goods as a statistical form that presupposes a certain fluctuation, which is called tolerance. V. Schukhert did not introduce the concept of a statistical model of a standard, but it was necessarily formed on the basis of his innovative ideas. V. Schukhert tried to give quality management a human face. He emphasized the importance of internal, including personal, motivation. But he did not strive to radically change the position of the worker in production. The alienation of the individual remained fundamentally the same, so the motivation was supported mainly by the financial assessment of the activity. Researchers of V. Schukhert's experience clearly overestimated its content, introducing into the characteristics such a reaction of workers as “the joy of getting results”; “Enjoyment of teamwork, recognition of merit by colleagues and management”; "Feeling of importance", etc. It was more adequate to say that V. Schukhert's method forced managers to learn what is called humanitarian knowledge, which guarantees producers effective results of their work at their enterprises. The reformers of the 1990s were the least worried about the fate of the Fatherland and domestic industrial originality. They built their business on the ease of maximizing profits and placed the walrus away from the land of their ancestors. Light industry has traditionally been a difficult management challenge. Managers must be, above all, patriots, otherwise the light industry cannot be raised. It is also necessary to understand the national importance of “long money”. Resilience of demand would compensate for the difficulties.

What is the essence of the ineffectiveness of politics in the economy of the late last century and the beginning of the new century? This is question number 1, and it is not so much about who is to blame.

We are interested in the essence of the political paradigm developed by those who were "at the helm". Question number 2 - what should be changed and how, apparently, should it be done in order to raise the national industry, the production of clothing, footwear, leather goods, textiles, accessories, not least?

The answer to question # 1 is simple - no one was going to develop a paradigm of economic policy aimed at a radical transformation of the basis. It was decided to choose the method of reforming (not without outside help) from ready-made samples. It was proposed to take the Swedish experience, the Polish "shock therapy", reforms in Portugal and Argentina as a model. Such innovators, bold scientists, wise organizers as Gaidar, Chubais, Koch, Burbulis did not come up with the idea with which a responsible owner usually begins - what I have in order to copy something.

The most difficult component of economic reforms is the achievement of social satisfaction with the distribution of the national product. The health of society depends on this satisfaction, and not on the form of ownership. And we have come to an important conclusion - the quality of reforms is assessed not by the changes themselves, but by the ability to impart features of stability to public life.

In such conditions, it is time to abandon the abstract political ideals of dem-reformers and to work out a roadmap for the revival of the light industry in the expectation that the crisis emphasizes the relevance of the rationality of brainstorming, as opposed to the “economic schools” in the trend. What kind of "map" is this, based on the historical experience of the 20th century, when all the main events took place:

- the priority should be consistently the interests of national advancement. I would very much like to say about the development, however, it cannot be received on a national scale now;
- the rate on the full support of the light industry, like most areas of investment of public funds (financial, legal, political, humanitarian), contains a risk, however, within acceptable values;
- the creative potential of specialists is still high. He is quite competitive;
- make it clear to large retail chains the importance of purchasing and placing goods produced in Russia, of course, taking into account their proper quality;
- to place, first of all, orders for production from those "who have already got on their feet and know how to sew." They have proven their worth;
- to assist companies in obtaining European certification of materials, otherwise foreign companies will not be interested in them, and the goods produced in our country will not get to the West;
- actively support companies with collective stands at international exhibitions;
- provide such enterprises with subsidies for loans for the purchase of raw materials and supplies. The share of these loans in the total volume of lending should be from 50 to 85%;
- to exempt modern imported equipment from import duties and VAT. The machines used in the sewing shops are 90% imported;
- introduce preferential leasing.

The wise Buddha laid down four key steps in the eightfold path: correct understanding; making the right decision; finding the right words and, finally, the right actions aimed at implementing the right decisions. The fate of the light industry now depends on what this last step will be. Its execution is the function of the Government. The political paradigm is extremely simple - we should not compete with anyone in the fight for the world market, especially with the Chinese. The Chinese rightfully want to shoe and dress the whole world. One fifth of the world's population lives in the PRC. Our task is completely different. We need to make sure that the Chinese do not put shoes or clothe us. To transfer purchasing demand to our own Russian production, to interest in goods produced in the country. We are quite capable of such a task, as the manufacturers say. And the Government needs to do its direct work consistently and in a timely manner, and not deceive the public in the light industry, as happened with the sewing of school clothes.

Shoe companies have never found themselves in such a situation as they are now. All markets are divided into many segments. Specialization has reached such a level that you can still hide from competition only in a small space between two adjacent segments of different markets or the same market.

When creating new enterprises for the production of footwear, the five of these subjects of the Southern Federal District and the North Caucasus Federal District in a competitive environment are not attractive due to the successfully developed footwear production.

As a result of segmentation, it was determined that the population of the two districts is unevenly distributed over the territory. The income of the population is much lower than the average in Russia. When forming the range of footwear, one should also take into account the fact that a large share of the population is rural residents. It is also necessary to take into account the national characteristics of the inhabitants, their traditions. What is the main thing today for the success in the market of many new and long-standing firms, small, medium and large enterprises, many of which were not so long ago small, for numerous commercial structures and joint ventures? This is the ability of the firm to provide the consumer with footwear of a higher quality than before, and moreover, for the same or less price.

Modern production or, as it is also called, world-class production must meet the following requirements:

– have greater flexibility, the ability to quickly change the range of products. The life cycle of products has become as short as ever, the variety of product assortments is higher, and the seriality of products, the volume of batch of one-time production is less. Hence, production focused on the release of mass, standardized products (strictly corresponding to standards, specifications, technical conditions), unable to constantly adapt to the needs of real, often small groups of consumers, is now doomed to extinction;

– use new forms of control, organization and division of labor, taking into account the more complex production technology;

– rely on comprehensive quality management. Quality requirements not only increased, but also changed the nature of decision-making: it is not enough to produce good products, it is also necessary to think about organizing after-sales services, about providing additional branded services to consumers who are highly individualized in their requests;

– simultaneously improve product quality and reduce costs. If earlier it was possible to offer the consumer a lower quality product at a lower price and, conversely, a high price always corresponded to high quality, today the situation has changed. The higher quality of the product should be provided at the expense of the same lower price.

Now in our country there is a situation where most of the population has a very modest income, and it is she who is a potential buyer of mass-produced footwear.

Solving the problems of style, marketing, advertising will allow domestic footwear of mass production to be demanded by this wide sector of the population of Russia. Small and medium-sized shoe enterprises should provide shoes for a more profitable part of the population, however, as well as highly automated production complexes.

In recent years, the absolute increase in the production of leather footwear has been constantly increasing, the range of footwear is being updated at shoe enterprises, taking into account the demand of the population, the production of model and insulated footwear, footwear with a top made of white leather and genuine patent leather, smart shoes for children is increasing. The transition of the country's economy to market relations led to a sharp deterioration in the situation in the footwear industry in Russia due to a decrease in the effective demand of the population, deepening inflationary processes, a crisis of non-payments, which, in turn, caused an imbalance in production and circulation.

The footwear market is an integral element of economic relations, the main participants of which are, on the one hand, shoe manufacturers, and on the other, consumers. As a product in this market, footwear is one of the most complex groups of non-food products with a very diverse assortment.

Footwear is one of the most important goods produced by the light industry of the Russian Federation and imported from abroad. The degree of satisfaction of consumer demand, the profitability and profitability of organizations depend on the correct determination of the quantity and quality of models produced by shoe enterprises, on the competitiveness of the assortment. The result of the interaction of the constituent parts of the market (demand, supply, prices for shoes) is the ability of the supply to satisfy the demand for products at a specific price to the maximum.

Thus, the importance of the footwear market lies in meeting the needs of the population. Accordingly, the development of the market leads to an increase in the level of security of an individual member of society. Markets are made up of buyers, and buyers differ from each other in a variety of ways: according to their needs, financial and other capabilities, location, buying attitudes and buying habits. When segmenting a market, businesses divide large, heterogeneous markets into smaller (and more homogeneous) segments that can be served more efficiently, according to the specific needs of those segments. For the successful sale of manufactured products, shoe enterprises first of all need to segment the consumer market and determine the target segment of this market.

In a general sense, market segmentation refers to the process of dividing the market into groups of consumers according to predetermined criteria, which allows you to concentrate funds on the most effective. A market segment is a homogeneous set of consumers who react in the same way to a product and the way it is presented.

Target segment (market) - a segment selected as a result of market research for a particular product or service, characterized by minimum costs for means of promoting goods and providing the enterprise with the main share of the result of its activities (profit or other criteria for the purpose of the enterprise entering this market).

Segmentation of the footwear market in the Southern Federal District and the North Caucasus Federal District can be carried out both on the basis of one or with the sequential use of several indicators, clearly presented in the diagram (Figure 1).

Results of segmentation of the analyzed basic footwear marketThe Southern and North Caucasian Federal Districts can be presented in the form of a table of ratings. The segment with the lowest total seats is the most attractive.

Figure 1. - Criteria for segmenting the footwear market in the Southern Federal District and the North Caucasus Federal District

Criteria for segmenting the footwear market in the Southern Federal District and the North Caucasus Federal District				
Subject of segmentation	Segmenting object	Segmentation by size	Segmentation by profitability	Segmentation by the size of the average salary
All enterprises that manufacture or intend to produce footwear in the territories of the South and North Caucasian Federal Districts	Southern and North Caucasian Federal Districts of the Russian Federation	The larger the population of the segment, the more profitable for the enterprise	The higher the profitability of each resident, the greater the chance of purchasing the company's products	The higher the salary of a resident, the more likely he will spend it on shoes

As a result of the analysis of Table 1, two regions and three regions were identified where the highest segmentation of the consumer market is observed from two districts: Krasnodar region - 2.15%, Rostov region - 2.65%, Astrakhan region - 2.7%, Volgograd region - 3 , 25%, Stavropol Territory - 5.4%.

However, when performing segmentation, it is necessary to take into account the goals of the segmentation.

When creating new enterprises for the production of footwear, the five of these subjects of the Southern Federal District and the North Caucasus Federal District in a competitive environment are not attractive due to the successfully developed footwear production.

As a result of segmentation, it was determined that the population of the two districts is unevenly distributed over the territory. The income of the population is much lower than the average in Russia. When forming the range of footwear, one should also take into account the fact that a large share of the population is rural residents. It is also necessary to take into account the national characteristics of the inhabitants, their traditions.

When organizing the sale of manufactured footwear, one should also remember that in the South and North Caucasian federal districts there were and remain so-called "hot spots", which are territories with a crisis in the economic situation and a negative political situation.

Table 2 - Results of segmentation of the consumer market of the Southern Federal District and the North Caucasus Federal District by the method of the sum of places, taking into account the weighting factors

Territorial unit name	Ranking positions			The amount of points,%
	profitability, score × 0.45	the salary, score × 0.30	number, score × 0.25	
Southern Federal District, v. incl.				
Krasnodar region	1.8	0.6	0.25	2.65
Republic of Adygea	3.6	2.1	2.75	8.45
Republic of Kalmykia	4.95	2.4	3.25	10.6
Astrakhan region	0.9	0.3	1.5	2.7
Volgograd region	1.35	0.9	1.0	3.25
Rostov region	0.45	1,2	0.5	2.15
North Caucasian Federal District, incl.				
Republic of North Ossetia - Alania	2.25	3	2	7.25
Kabardino-Balkar Republic	2.7	3.6	1.75	8.05
The Republic of Dagestan	4.5	3.9	1.25	9.65
The Republic of Ingushetia	5.4	1.8	2.5	9,7
Karachay-Cherkess Republic	4.05	3.3	3	10.35
Stavropol region	3.15	1.5	0.75	5.4
Chechen Republic	5.85	2.7	2.25	10.8

Correct definition of quality, consistency and systematic quality management gives the manufacturer a decisive advantage in the competition for the consumer. It would seem that everything is simple, but simplicity is equally brilliant and deceiving. The general plan for solving the problem determines the vector of movement, sets the factorial priorities of the activity - no more.

A product made by man is dual in nature, it combines the natural properties of raw materials and the characteristics brought into it by human labor. The product has a rental value and added value. In this context, it is not value that is important - it serves as a quantitative equivalent of the quality of a product in general, but the result of labor - in the form of a transformation of the natural state of an object. The product of human activity has a natural, basic, level and a superstructure, introduced. Hence the need for a dualistic perception of the quality of the product, which should not be interpreted primitively as a double quality. The quality of the product is one, but the production duality of the product is associated with it.

Such two-sidedness of the quality of the goods misleads those who, having not yet understood the art of dialectical thinking, strive to sort everything out “on the shelves”, forgetting about the structure of which these shelves are parts. The quality of a product is only determined by a natural basis, but it is built artificially.

The quality of the product has several creators. This is a fashion designer, constructor, technologist, manager; their qualifications, experience are measured without problems. Others are also within reach, only their measurement is difficult, especially when it comes to the consumer.

The economic situation affects both producers and consumers, shakes the market on the waves of its uneven movement, and together with purchasing power and perceptions of quality.

Outwardly, determining the quality of a product produced for sale on the market seems to be an impossible task, because for this it is necessary to combine not converging, but (mainly) diverging views. One involuntarily recalls Krylov's Fish, Cancer and Pike, who undertook to drag the cart. In our case, there are even more subjects.

The designer, technologist, manager develop their understanding of the quality of the goods (they can be combined), they are linked by the common interest of the manufacturer. The buyer has a special approach to quality. As a consumer, he is not sure about the integrity of the manufacturer. In addition, the buyer has his own tastes, reasons, conditioned by the real buying opportunity. There are also the interests of the market, which has become an independent subject of the economy. Speculation is legalized and attracts with its potential. By controlling the market, an intermediary - a speculator - is able to form an image of quality in his own interests, in particular, through advertising, giving priorities, etc. Finally, there is the quality of the product itself, expressed in the totality of properties of natural origin and added by the manufacturer. As a result, we came to the "quality square", combining product quality and quality image.

Anything common exists objectively, but only through a single one: at the end of the process, there is always a separate, concrete buyer Pyotr Stepanovich Sidorov and boots, which Pyotr Stepanovich chose from dozens of different ones. They seemed to him the best in quality and price. The sales assistant professionally explained to Petr Stepanovich that there are better quality boots in the same price range, but, being an independent person, he did not change his mind. This is why pre-sale preparation of products and the culture of the seller are important. The last word belongs to the buyer, his perception of the quality of the product. Everything else only plays up to him.

The most serious contradiction, apparently, remains the discrepancy in the images of product quality between the manufacturer and the consumer. The special importance of a different approach to the quality of the manufacturer and the consumer is natural. They are the main subjects of the system of economic relations, they have a common goal - a product. The former make it, the latter consume it, but they have different motives due to their different position in the system and the culture of target perception.

The manufacturer creates the product, but not the product - the ultimate goal of the manufacturer, but the sale of the product. The direct connection between the producer and the consumer is local because it has a negative effect on the producer. The seller blocks the consumer from the manufacturer, and the manufacturer is forced to focus not on the market, but on the market situation, which is most often artificially formed by a speculator and advertising.

Money, perhaps, does not "smell", advertising policy frankly "stinks", it is so far from objectivity and free from professional honor. Being in a state of irresponsibility for information, advertising serves the market clearly and in any form.

The manufacturer, unlike the seller, is responsible for information both by law and by his professional reputation. The seller manipulates the information as he sees fit - the manufacturer is constrained by responsibility, besides, the market often dictates the rules of relations to him.

What is the solution for the manufacturer? There is only one way out - a direct presence in the market and significant investments in education and education of consumers. It is difficult to overcome such a program alone, uniting is absolutely real. The domestic manufacturer has everything it needs to oust the speculator from the retail market. He has professional experience, qualified personnel, scientific and technical support, a certain trust of buyers returning to the old, pre-reform, priorities, which are actively exploited by unscrupulous manufacturers and to which the authorities shyly close their eyes, which does not want to return to the Soviet experience. Confectioners, meat-makers, wine-makers shamelessly use Soviet brands, replacing them with surrogates. Brands of Vyatka, Orenburg, Ivanovo, some Moscow and Leningrad enterprises are returning to the market. The trend of returning interest is gaining stability. Of course, clothes and shoes are not sausages and vodka or chocolate and confectionery products of natural origin.

Assortment formation - the problem of specific goods, their individual series, determining the relationship between "old" and "new" goods, goods of single and serial production, "high technology" and "conventional" goods, materialized goods and (or) licenses and know-how ". When forming the assortment, problems of prices, quality, guarantees, service arise, whether the manufacturer is going to play the role of a leader in creating fundamentally new types of products or is forced to follow other manufacturers.

The formation of the assortment is preceded by the development of the assortment concept by the enterprise. It is a directed construction of an optimal assortment structure, a product offer, while, on the one hand, the consumer requirements of certain groups (market segments) are taken as a basis, and on the other, the need to ensure the most efficient use of raw materials, technological, financial and other resources by the enterprise from in order to produce products at low costs.

The assortment concept is expressed in the form of a system of indicators characterizing the possibilities of optimal development of the production assortment of a given type of goods. These indicators include: a variety of types and varieties of goods (taking into account the typology of consumers); level and frequency of assortment renewal; the level and ratio of prices for goods of this type, etc.

The assortment formation system includes the following main points:

– determination of current and future needs of buyers, analysis of the ways of using shoes and peculiarities of purchasing behavior in the relevant market;

– assessment of existing competitors' analogues;

– a critical assessment of the products manufactured by the enterprise in the same assortment, but from the point of view of the buyer;

– deciding which products should be added to the assortment, and which ones should be excluded from it due to changes in the level of competitiveness; whether it is necessary to diversify products at the expense of other areas of production of the enterprise that go beyond its established profile;

– consideration of proposals for the creation of new models of footwear, improvement of existing ones;

– development of specifications for new or improved models in accordance with the requirements of buyers;

– examining the possibilities of producing new or improved models, including questions of prices, costs and profitability.

But one thing is true: this is a constant evaluation and revision of the entire range.

In conclusion, I would like to once again draw attention to the fact that all this will become a reality if one main condition is fulfilled, namely, the products of domestic footwear will be produced of high quality and taking into account the interests of this very consumer.

Criteria for a reasonable choice of a package of materials for the production of a suit for servicemen in the Arctic were chosen as the object of the study. At the same time, preferences will be clarified that would guarantee them comfortable conditions in the performance of their official duties.

The environment for a person in clothes and shoes is air, hard soil or snow and water. Individual parts of a person's foot can be in contact with any of these environments. In cold conditions, with a difference between the temperatures of the human body and the environment, there is a continuous heat exchange, the transfer of thermal energy from the human body to the environment. With rapidly changing environmental conditions and physical activity, it is almost impossible to maintain a state of thermal equilibrium. The cooling process of the feet is accompanied by the appearance of various uncomfortable sensations in the wearers.

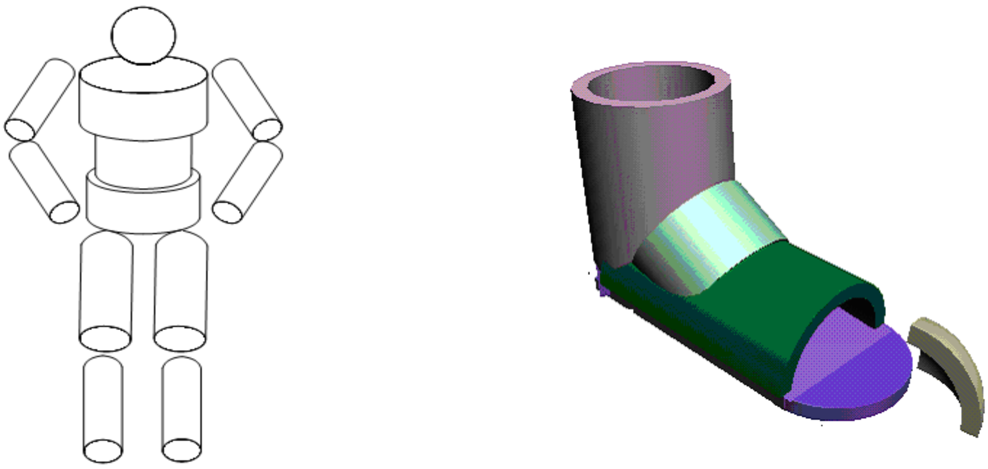
The development of mathematical models of the "man-suit-environment" system, allowing to create algorithms for calculating the initial parameters for personal protective equipment, is an urgent and direct task of mathematical modeling in the development of personal protective equipment for a person in climatic zones with high temperatures.

The figures approximating the human body are considered as systems with distributed or lumped parameters. When the body is approximated by one cylinder, it is possible to speak only about the approximate reproduction of the human thermal regime. A rough approximation is provided by models in which the thermal conductivity, heat production and heat loss of body tissues are taken to be constant throughout the entire thickness of the cylinder or layer. Most authors do not take into account the human physiological thermoregulation system. They consider a person in a comfortable environment, when the thermoregulatory mechanisms are inactive. Our research takes into account the thermoregulation system. Tissue blood flow, metabolic heat production and heat loss by evaporation are considered as functions of average body temperature; brain temperature and average skin temperature;

temperature of the brain, skin and heat flux from the skin surface.

Analysis of the existing mathematical models of the thermal state of a person under the influence of environmental parameters makes it possible to presumably determine the shape of the elements of the human body, which can be divided into the following sections: head - ball; arms, legs - cylinders; the torso is a set of elliptical cylinders - that's a rough approximation.

Thus, a person can be represented as a set of geometric shapes shown in Fig. 1a. The concept of mathematical formation of the foot is based on its presentation for shoes as a set of multilayer packages of materials of various shapes and compositions. Using the 3D Studio MAX 5 software, a geometric image of a human foot was constructed (Fig. 1b).



a) b)

Figure 1 - Geometric image:
but- **human body, b - human feet**

The main factors affecting the temperature inside the suit space when constructing a mathematical model are the ambient temperature, heat generation of the human body, thermophysical properties of the materials that make up the bags, the shape of these bags and heat transfer from the outer surface of the suit to the environment.

The main criterion for a person's comfortable state is the temperature value inside the suit space in the range from 21 to 25 ° C. At the same time, when a person is exposed to low temperatures, as a rule, perspiration of a person is not taken into account due to its small effect on the heat exchange process. At elevated ambient temperatures, the main role in maintaining a constant body temperature belongs to the skin, through which heat is transferred through radiation, conduction and evaporation. When the ambient temperature coincides with the temperature of the human body, heat transfer is carried out mainly due to perspiration (evaporation of 1 liter of water leads to a heat loss equal to 580 calories). Therefore, with high humidity and high air temperatures, when evaporation of sweat is difficult, overheating of the human body most often occurs. Such cases occur when working in tight, unventilated clothing and, especially, in protective chemical suits. In this regard, it is very important to consider perspiration when designing a suit that provides the necessary time for a comfortable stay in high temperatures.

The indicators characterizing the thermal state of a person include body temperature, skin surface temperature and its topography, heat sensation, the amount of sweat secreted, the state of the cardiovascular system and the level of performance.

Human body temperature characterizes the process of thermoregulation of the body. It depends on the rate of heat loss, which, in turn, depends on the temperature and humidity of the air, the speed of its movement, the presence of thermal radiation and the heat-shielding properties of clothing. Performing work of categories Pb and III is accompanied by an increase in body temperature by 0.3 ... 0.5 ° C. When the body temperature rises by 1 ° C, the state of health begins to deteriorate, lethargy, irritability appear, the pulse and respiration become more frequent, attentiveness decreases, and the likelihood of accidents increases. At a temperature of 39 ° C, a person may faint.

The temperature of the skin of a person who is at rest in comfortable conditions is in the range of 32 ... 34 ° C. With an increase in air temperature, it also grows to 35 ° C, after which sweating occurs, which limits a further increase in skin temperature, although in some cases (especially with high air humidity) it can reach 36 ... 37 ° C. It was found that when the temperature difference in the central and peripheral areas of the body surface is less than 1.8 ° C, a person feels heat; 3 ... 5 ° C - comfort; more than 6 ° C - cold. As the air temperature rises, the difference between skin temperature in open and closed areas of the body also decreases.

The software product is written using applied mathematical packages MAPLE and is designed to calculate the distribution of temperature and partial pressure in the process of heat and mass transfer in the system "person - clothes - shoes - environment" for a flat package of materials, in the case when a person is in a climatic environment with high temperature.

Let us introduce the following notation:

$T_c -$ ambient temperature (° C);

$U_c -$ partial pressure of moisture vapor in the environment (mm Hg);

$t -$ time (h);

$x_i -$ coordinate $i -$th layer of the package (m), $l_{i-1} < x_i < l_i$;

$l_{i-1}; l_i -$ boundaries $i-$th layer of the package;

$\hat{T}_i(x_i;t) -$ temperature $i-$th layer of the package (° C);

$\hat{U}_i(x_i;t) -$ partial pressure of moisture vapor for $i-$th layer of the package (mm Hg);

$T_i(x_i;t) = \hat{T}_i(x_i;t) - T_c -$ relative temperature $i-$th layer of the package (° C);

$U_i(x_i;t) = \hat{U}_i(x_i;t) - U_c -$ relative partial pressure of moisture vapor for $i-$th layer of the package (mm Hg);

$\lambda_i -$ coefficient of thermal conductivity $i-$th layer of the package (W / (m · ° C));

$d_i -$ vapor permeability coefficient $i-$th layer of the package (kg / (m · h · mm Hg));

$a_{11}(i) -$ thermal diffusivity $i-$th layer of the package (m2 / h);

$a_{22}(i) -$ vapor diffusion coefficient $i-$th layer of the package (m2 / h);

$a_{12}(i) -$ diffuse thermal conductivity coefficient $i-$th layer of the package (m2 / h);

$a_{21}(i) -$ vapor thermal diffusion coefficient $i-$th layer of the package (m2 / h);

$q(t) -$ heat flux density of the foot (W / m²);

$M(t) -$ the flow density of the mass of moisture released by the human body (kg / (m2 · h));

$\alpha -$ heat transfer coefficient (W / (m² · ° C));

$\beta -$ mass transfer coefficient (kg / (m2 · h · mm Hg));

The system of equations for describing the process of heat and mass transfer in the system "person - clothes - shoes - environment" has the following form

$$\begin{cases} \dfrac{\partial T_i}{\partial t} = a_{11}(i)\dfrac{\partial^2 T_i}{\partial x_i^2} + a_{12}(i)\dfrac{\partial^2 U_i}{\partial x_i^2}; \\ \dfrac{\partial U_i}{\partial t} = a_{21}(i)\dfrac{\partial^2 T_i}{\partial x_i^2} + a_{22}(i)\dfrac{\partial^2 U_i}{\partial x_i^2}, \end{cases} \quad i = 1,2,\ldots n \ldots \quad (1)$$

The following boundary conditions are considered.

The heat flux of the human body entering the inner surface of the suit is equal to $q(t)$

$$\lambda_1 \frac{\partial T_1}{\partial x_1}(0,t) + q(t) = 0; \quad (2)$$

The flow density of the mass of moisture released by the human body is equal to $M(t)$

$$d_1 \frac{\partial U_1}{\partial x_1}(0,t) + M(t) = 0; \quad (3)$$

Heat transfer on the surface of the suit occurs according to Newton's law

$$\lambda_n \frac{\partial T_n}{\partial x_n}(l_n,t) + \alpha T_n(l_n,t) = 0; \quad (4)$$

The sole of the suit is waterproof, which is expressed on its inner surface by the equality:

$$\frac{\partial U_n}{\partial x_n}(l_{n-1},t) = 0; \quad (5)$$

ideal contact is assumed between the layers of the bottom of the shoe, which is expressed by the mating conditions at the joints:

$$T_{i-1}(l_{i-1},t) = T_i(l_{i-1},t), \quad (6)$$

$$\lambda_{i-1}\frac{\partial T_{i-1}}{\partial x_{i-1}}(l_{i-1},t) = \lambda_i \frac{\partial T_i}{\partial x_i}(l_{i-1},t), \ i = 2,\ldots n, \quad (7)$$

$$U_{i-1}(l_{i-1},t) = U_i(l_{i-1},t), \quad (8)$$

$$d_{i-1}\frac{\partial U_{i-1}}{\partial x_{i-1}}(l_{i-1},t) = d_i \frac{\partial U_i}{\partial x_i}(l_{i-1},t), \ i = 2,\ldots n-2 \ldots \quad (9)$$

Initial conditions:

$$T_i(x_i,0) = f_i(x_i) \ldots \quad (10)$$

$$U_i(x_i,0) = g_i(x_i) \ i = 1,2,\ldots n \ldots \quad (11)$$

As an example, consider the theoretical calculation of heat and mass transfer through the sole of a shoe at an elevated ambient temperature of 40 ° C. The characteristics of the package of materials for the bottom of the shoes are shown in table 3.

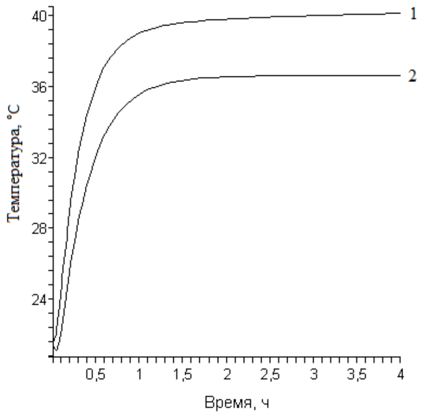
Table 3 - Characteristics of the package of materials for the bottom of the shoe

Layer no.	Layer material	Layer thickness (mm)
1	Cotton sock	2
2	insole	5
3	cardboard	1.8
4	sole	10

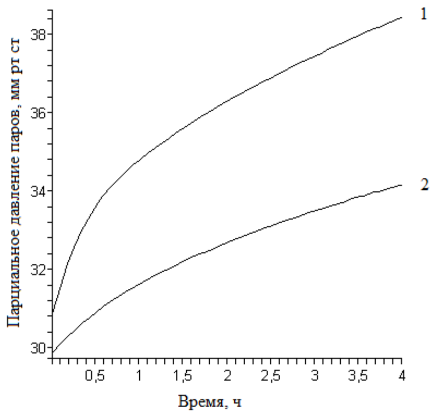
The heat flux density of the foot is 10 W / m2, the density of the mass of moisture emitted by the foot is 0.02 ((kg / (m2 which curve 1 - for bags of materials for the bottom of the shoes used as a sole non-porous waterproof rubber; and curve 2 - for a package of materials for the bottom of the shoes, when as the sole was used a material made by nanotechnology and having the ability to ventilate, i.e. to air exchange in the shoe space.

Thus, the development of a software product for the formation of comfortable conditions for a person when he is in a climatic environment with an elevated temperature will for the first time make it possible to make a reasonable choice of a package of materials for a suit in order to realize these very conditions of comfort and significantly improve working conditions for a person in extreme conditions.

If the software for justifying the choice of packages of materials for clothing and footwear in the formation of comfortable conditions for a person who is in climatic zones with a low temperature is due to the control over a decrease in temperature inside the suit space to 21 ° C for the foot and up to 31 ° C for the human body, which were are incorporated in the developed software with a reasonable choice of a package of materials taking into account thermophysical characteristics, then when developing software for a reasonable choice of packages of materials for a person in climatic zones with elevated temperatures, the problem was solved differently, namely, based on the need to control the body temperature.



a



b

Fig. 2. Characteristics of the shoe space:
***but*- temperature**
***b* - partial vapor pressure**

This is due to the fact that an increase of 0.3-0.5 C0 already forms a person's discomfort, and with an increase over 1 C0, this excludes his being in these conditions. Consequently, packages of materials and a suit made of them must guarantee a person the fulfillment of these requirements during the entire time he is in these conditions.

The software developed by the authors solves this problem and creates the preconditions for a reasonable choice of a package of materials based on the obtained thermophysical characteristics on the stands and devices described in communication 2. Hence, the availability of modern means for determining thermophysical characteristics and packages of materials and the developed software guarantees manufacturers with a high degree of reliability to make a suit that creates comfortable conditions, during the entire time they perform their official duties. The entire list of works offered to the reader should not mislead him, that there is no longer the need for experienced wear. Of course not. Experienced wearing in real conditions confirms the

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validity of the conclusions drawn or rejects them. But the availability of highly efficient methods for studying the thermophysical properties of materials and software for a reasonable choice of packages of materials significantly reduces the cost of developing and producing overalls for military workers both for conditions with low temperatures and for conditions with low temperatures. But what is also very important, the formation of requirements for materials, if possible, for their use for the production of workwear is also in demand by the developers of the materials themselves, including with the use of nanotechnology, and this all together will solve the problem of protecting servicemen from the effects of external negative conditions.

Criteria for a reasonable choice of a package of materials for the production of a suit for servicemen in the Arctic were chosen as the object of the study. At the same time, preferences will be clarified that would guarantee them comfortable conditions in the performance of their official duties.

When choosing packages of materials for the study, we took into account the physical and mechanical, thermophysical characteristics of materials, information about the specifics of the operation of this clothing, which were obtained by us from open literature sources.

A feature of a reasonable choice of packages of materials for a suit for servicemen in the Arctic is the fact that they must provide him not only with a comfortable state due to a guaranteed temperature regime under the clothing space of at least 340 ° C, but also meet all the requirements for the manufacture of heat-protective clothing.

For the study, packages of both imported polymeric materials for the production of jackets and packages of domestic polymeric materials were considered, which were evaluated for their satisfaction with the requirements for heat-protective clothing when military personnel are in climatic zones with temperatures of -200C, -30C and -400C. The results of earlier studies using a software product developed by the authors for a reasonable choice of a package of materials in the manufacture of a suit for servicemen in the Arctic showed that at the initial weighted average surface temperature of a soldier of + 360C for all packages of materials using both domestic polymer materials and imported polymer materials, a sharp drop in body temperature is observed at an air temperature of -200C, -30C and -400C, provoking a feeling of discomfort within the first hour of their stay in these conditions, which involves the search for new materials that would guarantee them a comfortable state for at least two hours. Table 4 shows the characteristics of the package of imported polymer materials for the production of jackets, and Table 5 shows the characteristics of the package of domestic polymer materials.

Table 4 - Characteristics of a package of imported polymeric materials for the production of a jacket

Model	Package materials	Thickness, mm	Coefficient of thermal conductivity λ, W / m · °C
1	2	3	4
Model 1	Synthetic fabric (100% PE)	1.6	0.042
	Insulation Promaloft (main) Gasket materials: 1. TKPM “Picardy” 1242 \ 17 2. TKPM “Kufner” R171G57 3. TKPM "Kufner" B141N77 4. TKPM AKR-622 \ AKR218	12.0 1,2 1,3 2.1 3.5	0.034 0.041 0.031 0.021 0.009
	Lining fabric	0.76	0.039
Model 2	Synthetic fabric (100% PE)	1.6	0.042
	Insulation "Hollofan" 2 layers basic Gasket materials: 1. TKPM "Picardy" 1242 \ 17 2. TKPM "Kufner" R171G57 3. TKPM "Kufner" B141N77 3. TKPM AKR-622 \ AKR218	12.0 1,2 1,3 2.1 3.5	0.036 0.041 0.031 0.021 0.009
	Lining fabric	0.76	0.039
Mod	Synthetic fabric (100% PE)	1.6	0.042

	Insulation "Kombisherst" "250 + 150" basic Gasket materials: 1. TKPM "Picardy" 1242 \ 17 2. TKPM "Kufner" R171G57 3. TKPM "Kufner" B141N77 3. TKPM AKR-622 \ AKR218	12.0 1,2 1,3 2.1 3.5	0.33 0.041 0.031 0.021 0.009
	Lining fabric	0.76	0.039

The packages of materials were selected in accordance with the requirements for thermal protective clothing and the materials used for its manufacture. When compiling the packages, the purpose of each layer and the thermophysical characteristics of the materials were taken into account. Domestic hot-melt cushioning materials (TKPM), the characteristics of which are given in Tables 4 and 5, will find the greatest application in the manufacture of a suit for servicemen in the Arctic.

Table 5 shows the characteristics of a package of domestic polymeric materials for the production of jackets.

When forming a package, each material must meet the requirements for the manufacture of heat-protective clothing.

The difficulty in compiling the package was the lack of information on a number of materials. Therefore, packages of materials for models No. 1-No. 3 are made up of the most famous imported materials, and packages No. 1 - No. 3 are made up of materials of domestic production.

Table 5 - Characteristics of a package of domestic polymeric materials for the production of a jacket.

Model	Package materials	Thickness, mm	Coefficient of thermal conductivity λ, W / m ºC
1	2	3	4
Model 1	Membrane fabric	3.5	0.06
	Sintepon (100% PE) basic Gasket materials: 1. TKPM "Picardy" 1242 \ 17 2. TKPM "Kufner" R171G57 3. TKPM "Kufner" B141N77 4. TKPM AKR-622 \ AKR218	15 1,2 1,3 2.1 3.5	0.035 0.041 0.031 0.021 0.009
	Fleece	1,2	0.039
Model 2	PE fabric (art. 06617-kv)	2.1	0.040
	Insulation Termofinn Micro basic Gasket materials: 1. TKPM "Picardy" 1242 \ 17 2. TKPM "Kufner" R171G57 3. TKPM "Kufner" B141N77 4. TKPM AKR-622 \ AKR218	15 1,2 1,3 2.1 3.5	0.036 0.041 0.031 0.021 0.009
	Viscose complex lining fabric	0.6	0.044
Model 3	Blended fabric (67% PE + 33% CL)	1.8	0.041
	Wool stitched fabric 2 layers (80% PE + 20% wool) main Gasket materials: 1. TKPM "Picardy" 1242 \ 17 2. TKPM "Kufner" R171G57 3. TKPM "Kufner" B141N77 4. TKPM AKR-622 \ AKR218	20 1,2 1,3 2.1 3.5	0.038 0.041 0.031 0.021 0.009
	Lining fabric art. 32013	0.69	0.049

The difficulty in choosing a package of materials also lies in the fact that when choosing the materials used for a specific product, it is necessary to take into account the region in which these products will be operated, since specific products will be subjected to different operating conditions in relation to climatic zones. This is especially true of thermal protective clothing used in the Arctic.

Let us repeat and name the main criteria for the comfort of clothes: the temperature of the skin, which should not be lower than 33.3 ° C, and the temperature of the underwear space should not be lower than 34 ° C, that is, the microclimate of the underwear space is an indicator of its comfort, including when exposed to low temperatures. It is not indifferent for a person which part of the body cools more while maintaining the total heat transfer, for example, strong cooling of the legs cannot be fully compensated by heating another part of the body without disturbing the person's sense of comfort. Therefore, it was so important to develop a mathematical model to justify the choice of a package of materials in order to create comfort for a serviceman, taking into account the duration of exposure to low temperatures.

The concept of the mathematical model is based on the representation of clothing as a set of multilayer packages of materials of various shapes and compositions.

To calculate the temperature distribution, the authors used the Maple mathematical packages.

The solution to the problem was reduced to finding such a combination of materials for the package, which would realize a minimum of heat flux from its surface while limiting the volume of the package. Thus, it can be concluded that using the proposed mathematical model, it is possible to optimize the choice of materials for the manufacture of a thermal protective suit.

Consider the temperature distribution problem T_i $i-$th layer in the details of the suit, which is a cylindrical multilayer surface. The ambient temperature is kept constant, equal to T_0 ... A heat flux of density comes from the body to the inner surface of the garment q ... On the outer surface of the garment, heat exchange with the environment takes place according to Newton's law with the heat transfer coefficient α.

Let us introduce the following notation for the basic criteria:

t - time; $T_i(r,t)$ - temperature i -th layer; λ_i - coefficient of thermal conductivity i -th layer; α_i - coefficient of thermal diffusivity i -th layer; R_{i-1}, R_i - inner and outer radii i -th layer; $i = 1,2\dots n$.

Now consider $n-$layered hollow cylinder and boundary value problem

$$\frac{\partial T_i}{\partial t} = a_i \frac{1}{r}\frac{\partial}{\partial r}\left(r\frac{\partial T_i}{\partial r}\right), \quad R_{i-1} < r < R_i, \; i = 1,2\dots n. \quad (12)$$

With boundary conditions:

$$\lambda_1 \frac{\partial T_1}{\partial r}(R_0, t) + q = 0;$$

$$\lambda_n \frac{\partial T_n}{\partial r}(R_n, t) + \alpha(T_n(R_n, t) - T_0) = 0; \quad (13)$$

Ideal contact is assumed between the layers:

$$T_{i-1}(R_{i-1}, t) = T_i(R_{i-1}, t);$$

$$\lambda_{i-1}\frac{\partial T_{i-1}}{\partial r}(R_{i-1}, t) = \lambda_i \frac{\partial T_i}{\partial r}(R_{i-1}, t), \; i = 2,..,n. \quad (14)$$

Initial conditions

$$T_i(r,0) = \varphi_i(r), \quad i = 1,..,n. \quad (15)$$

Solving the problem, it is possible to find the temperature distribution in the layers of the suit and, in particular, the change in the temperature of the underwear space depending on time.

The passage of heat through a multilayer spherical wall is described by a system of heat conduction equations:

$$\frac{\partial T_i(r_i,t)}{\partial t} = a_i \frac{1}{r_i}\frac{\partial^2 (r_i T_i(r_i,t))}{\partial r_i^2}, \quad (16)$$

$R_{i-1} \le r_i \le R_i$, Where $R_{i-1}, R_i -$ inner and outer radii $i-$th layer,

$t-$time, $a_i -$thermal diffusivity $i-$th layer, $(i = 1,\dots,n)$.

The heat flux of density arrives on the inner surface of the spherical segment from the foot q:

$$\lambda_1 \frac{\partial T_1}{\partial r_1}(R_0, t) + q = 0. \quad (17)$$

On the outer surface of the body, heat exchange with the environment occurs according to Newton's law with the heat transfer coefficient α :

$$\lambda_n \frac{\partial T_n}{\partial r_n}(R_n, t) + \alpha(T_n(R_n, t) - T_c) = 0. \quad (18)$$

We will assume that there is an ideal contact between the layers, which is expressed by the following relations:

$$T_{i-1}(R_{i-1}, t) = T_i(R_{i-1}, t),$$
$$\lambda_{i-1}\frac{\partial T_{i-1}}{\partial r_{i-1}}(R_{i-1}, t) = \lambda_i \frac{\partial T_i}{\partial r_i}(R_{i-1}, t), \quad (19)$$

$i = 2,\dots,n.$ At the initial moment of time, the temperature of the telp is set

$$T_i(r_i, 0) = \varphi_i(r_i), \; i = 1,\dots,n\;... \quad (20)$$

Thus, the process of heat passage through the spherical segment from the body to the outer surface is described by the boundary value problem with the initial conditions given above.

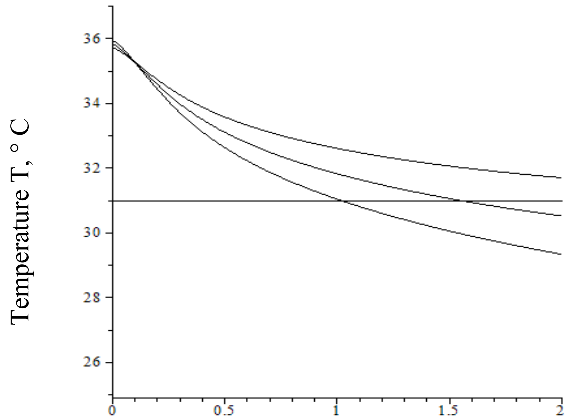
When calculating, we took into account the following criteria:

- the thickness of the layers of materials in the package;
- coefficient of thermal conductivity and thermal diffusivity of package materials;
- the density of the heat flux coming from the body;
- ambient temperature;

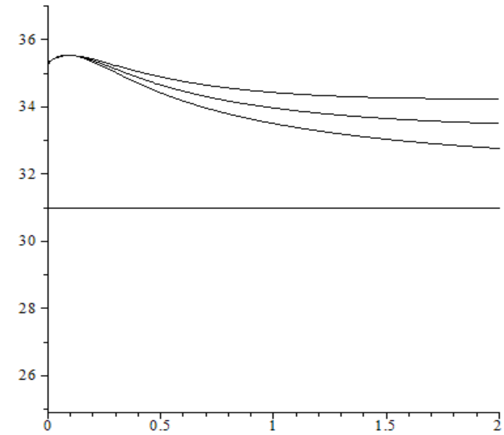
- the initial temperature of the package of materials;
- coefficient of heat transfer from the outer surface of the package to the environment;
- the presence of an additional layer in the form of heat-protective underwear and a woolen sweater.

When calculating, it was also taken into account that a person has guaranteed thermal protection of legs, arms and head, that is, he is dressed in accordance with climatic conditions.

Model 1 without additional gasket

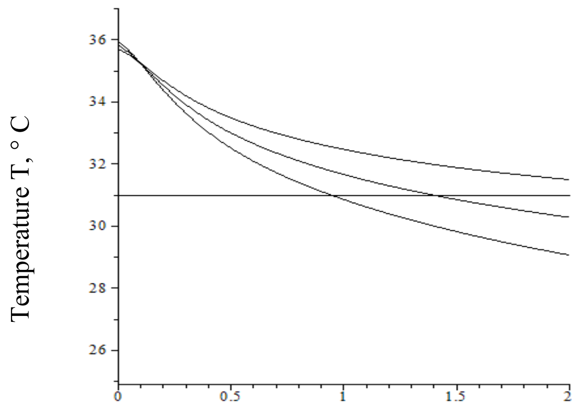


Model 1 with extra gasket TKPM AKR-622 \ AKR218

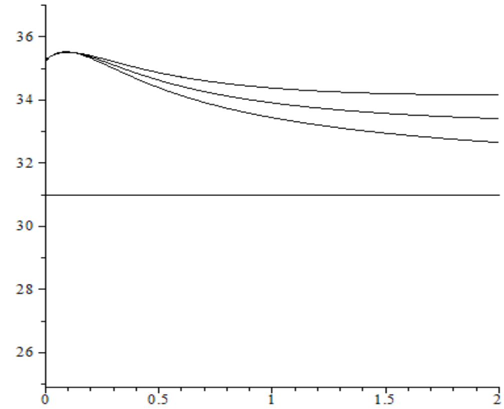


Time, h

Model 2 without additional gasket

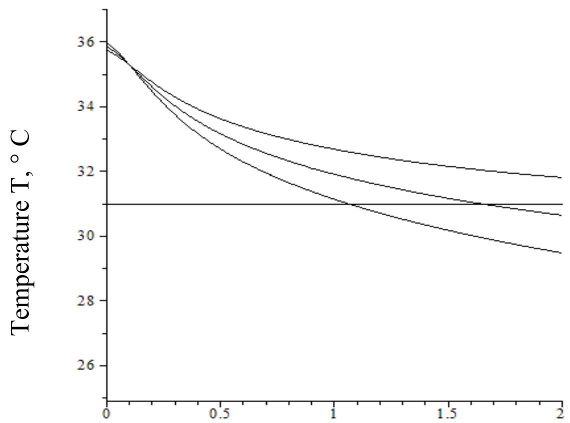


Model 2 with extra gasket

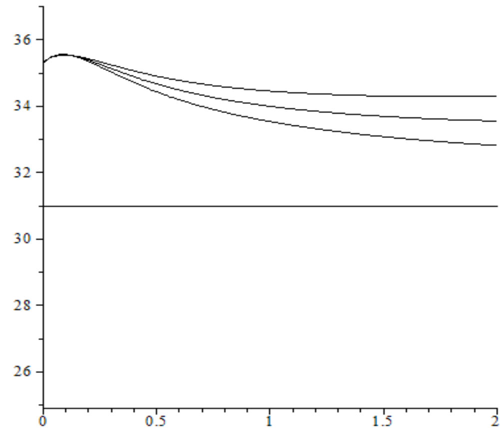


Time, h

Model 3 without additional gasket



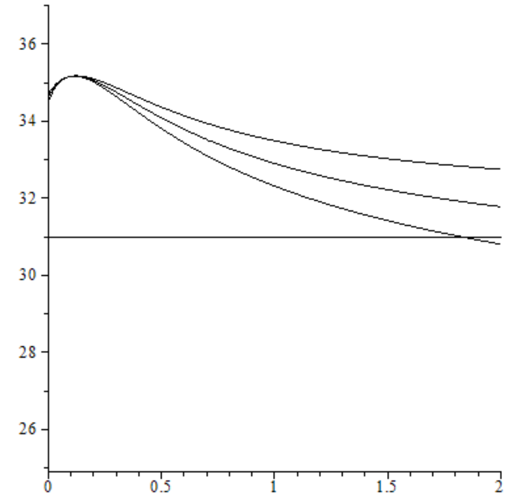
Model 3 with extra gasket



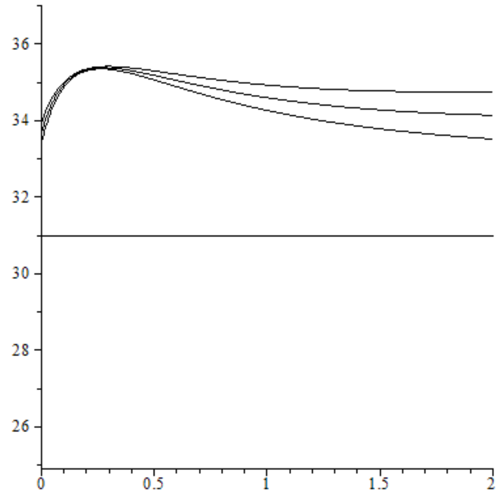
Time, h

Figure 3 - The results of calculating the weighted average skin temperature for bags consisting of imported materials at ambient temperatures: curve 1 -20 ° C, curve 2 - 30 ° C, curve 3 - 40 ° C.

Model 1 * without additional gasket

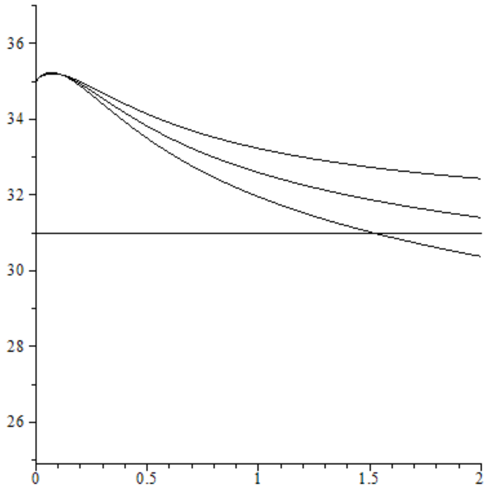


Model 1 with extra gasket

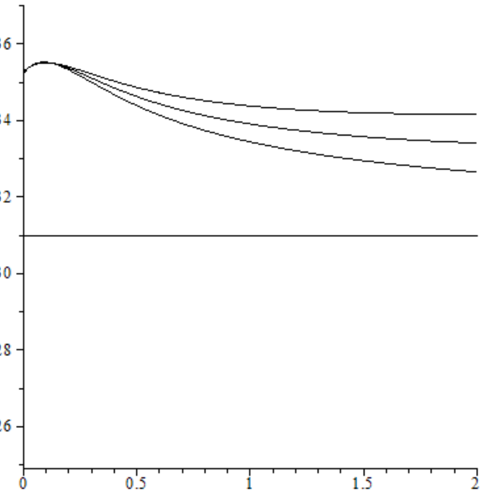


Time, h

Model 2 * without additional gasket

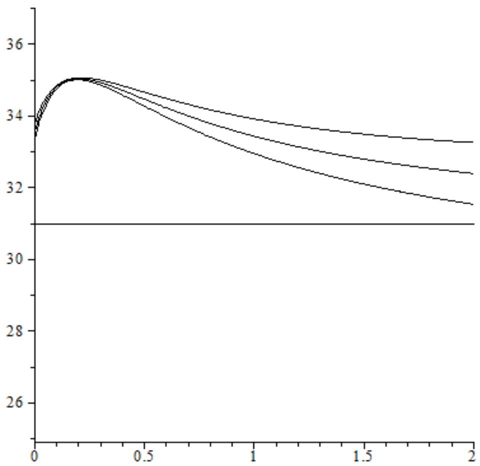


Model 2 with extra gasket

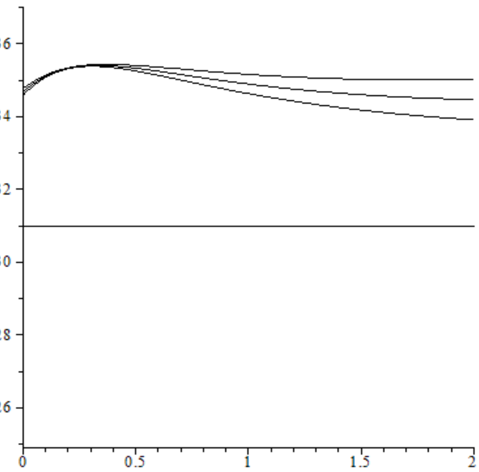


Time, h

Model 3 * without additional gasket



Model 3 with extra gasket



Time, h

Figure 4 - The results of calculations of the weighted average skin temperature for bags consisting of domestically produced materials at ambient temperatures: curve 1 -20 ° C, curve 2 - 30 ° C, curve 3 - 40 ° C.

The calculation results are presented in Figure 3 for imported materials and in Figure 4 for domestically produced materials. These figures show the dependence of the weighted average temperature of the human body on the time spent at low temperatures (-20 ° C; -30 ° C; -40 ° C). The figures show that at the initial weighted average skin temperature of + 36 ° C for all packages of materials, there is a sharp drop in body temperature at an air temperature of -20 ° C, -30 ° C, -40 ° C.

Analysis of the research results confirmed the justification of using TKPM as cushioning materials in the manufacture of a suit for servicemen of the Arctic, since with all TKPM, the comfort of a serviceman is provided for 2 hours of his stay in climatic zones with an ambient temperature of -20 ° C and -30 ° C, but comfortable conditions when it is in the climatic zone at -40 ° C is provided only with the use of TKPM AKR-622 / AKR218, the thermal conductivity coefficient of which is the smallest, namely λ = 0.009W / m · ° C.

- it has been proven that the main criterion for the comfort of a suit of servicemen in the Arctic when they are in different climatic zones is the coefficient of thermal conductivity;
- the possibility of using the software product to justify the choice of material packages for the suit of the Arctic military personnel in various climatic zones was confirmed;
- a high coincidence of the calculated values of heat loss from the surface of the tested jackets with experimental data was achieved, which confirms the legitimacy of using the software product developed by the authors for a reasonable choice of material packages for a suit of Arctic military personnel located in different climatic zones;
- it has been proven that the use of domestic nanomaterials and nanotechnology as linings for a suit for servicemen in the Arctic during the period of the need for import substitution due to sanctions, has confirmed their high quality and efficiency, which makes it possible to expand research and their production with the presence of basic criteria that form a comfortable state within two hours in any climatic zone.

If for shoes and clothes the software developed by the authors allows formulating requirements for a package of materials and ensuring a comfortable state of servicemen for the performance of their official duties, then for the face, hand, big toe, they guarantee comfortable conditions without additional research on the selection of packages of materials for now. fails.

The characteristics of materials for gloves, the use of which would be justified, is given in table 6.

The analysis of foreign experience showed that the so-called mitts are used together with gloves.

There are different types of mitts: ordinary mitts without fingers; mitts with a clip-on mitten; "Pipes" without compartments for fingers and palms.

The peculiarities of the choice of materials for gloves for servicemen in the Arctic are provoked by the climatic conditions of this zone in order to guarantee him comfortable conditions during the entire period of use or his military duties. At the same time, special attention was paid to ensuring the comfort not only of the soldier's hand, but especially the index finger of the right, if he is right-handed, and of the left hand, of course, if he is left-handed. This need is dictated by the specifics of the performance by the military personnel of their duties, namely, to carry out shooting, in which a more intensive cooling of the index finger is provoked.

The use of mitts provides the serviceman with additional protection for the hand, and, most importantly, for the index finger, while the main protection is provided by the glove, and here the authors test not only different wool, but also yarn, forming it from one or double thread.

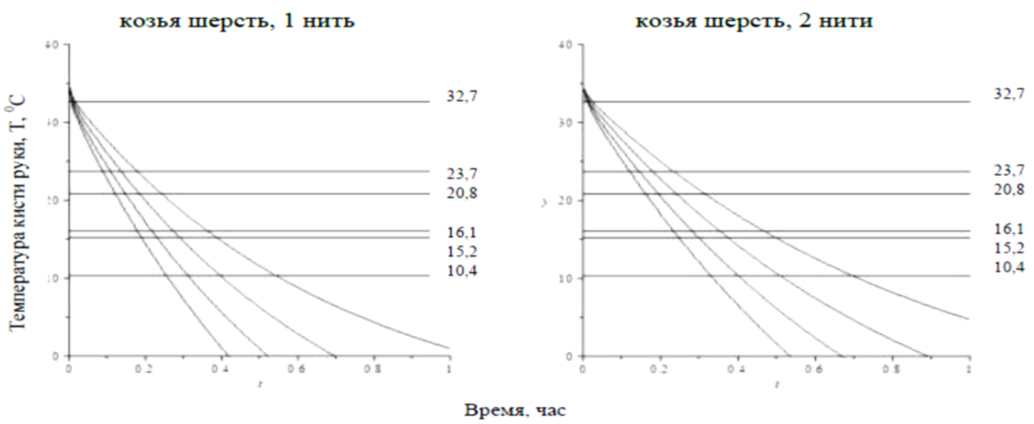
Possibilities of using nanomaterials capable of thermoregulation and providing the skin of the hand with a comfortable temperature, namely, not lower than 32 ° C. Such studies are possible using the same software that the authors developed and used for materials, the characteristics of which are shown in Table 6.

Table 6 - Characteristics of materials in the manufacture of gloves for military personnel in the Arctic

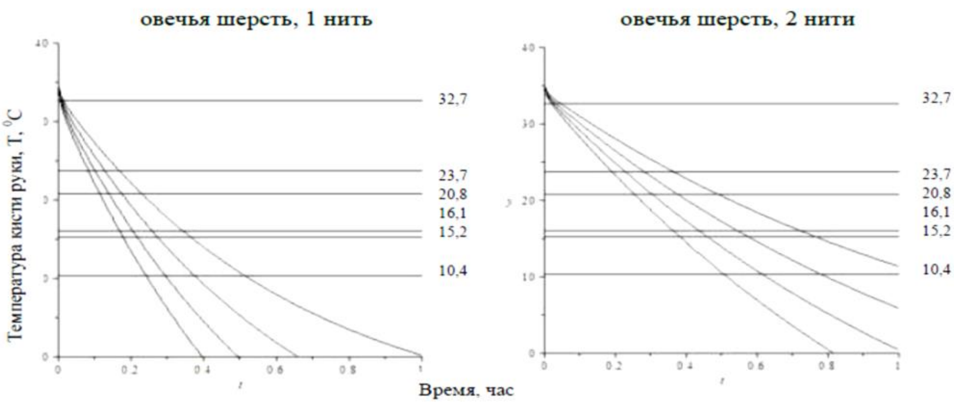
Materials used to make gloves	Thickness mm	Coefficient of thermal conductivity, λ, W / m ° C
1 Single strand yarn:		
1.1 From goat hair	0.7	0.015
1.2 Sheep wool	0.8	0.020
1.3 Camel	0.9	0.005
1.4 From dog hair	0.8	0.010
2. Two-strand yarn:		
2.1 From goat hair	1.4	0.015
2.2 Sheep wool	1.6	0.020
2.3 Camel	1.8	0.005

2.4 From dog hair	1.6	0.010
3. A package of materials for the index finger of the hand, suede + yarn from one strand		
3.1 when using goat hair	1.7	0.02 / 0.015
3.2 when using sheep's wool	1.8	0.02 / 0.020
3.3 when using camel hair	1.9	0.02 / 0.005
3.4 when using dog hair	1.8	0.02 / 0.010
4. A package of materials for the index finger of the hand, suede + yarn of two strands		
4.1 when using goat hair	2.4	0.02 / 0.015
4.2 when using sheep's wool	2.6	0.02 / 0.020
4.3 when using camel hair	2.8	0.02 / 0.005
4.4 when using dog hair	2.6	0.02 / 0.010
5 Material for the fingertip of the index finger of the soldier's hand - "natural suede leather" and for mitts	0.8	0.020

With the help of the software developed by the authors, graphs were constructed characterizing the condition of the skin of a soldier's hand for four ambient temperatures, namely: - 100C, -200C, -300C, -400C from the time he spent at the post, but not less than 1 hour. The figures show the temperature values of the skin of the hand, characterizing the various heat sensations of a serviceman, namely, comfort 32.7 ° C, slightly cool 23.7 ° C, cool 20.8 ° C, cold 16.1 ° C, very cold 15.2 ° C, pain 10.4 ° C (frostbite). At -10 ° C, a comfortable state is provided only by a suede-dog hair package (double thread), and for -20 ° C, -30 ° C, - 40 ° C, none of the materials under study and their packages together with natural fur "winter" do not guarantee comfortable conditions for servicemen.

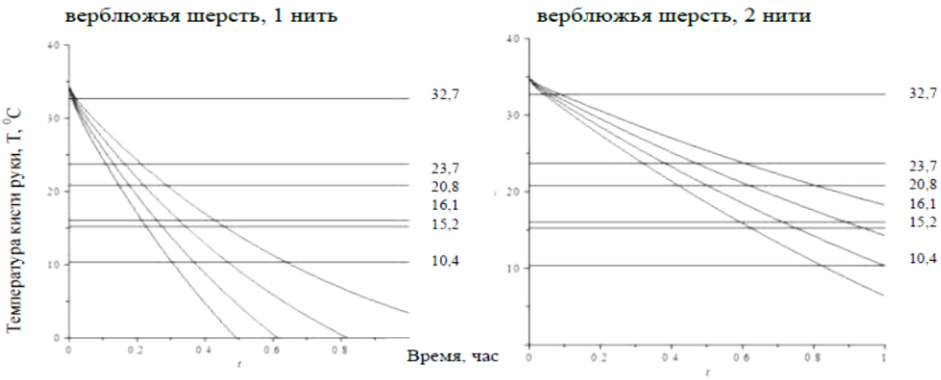


a) Change in the temperature of the skin of the hand when using goat wool yarn from 1 strand and 2 strands for gloves

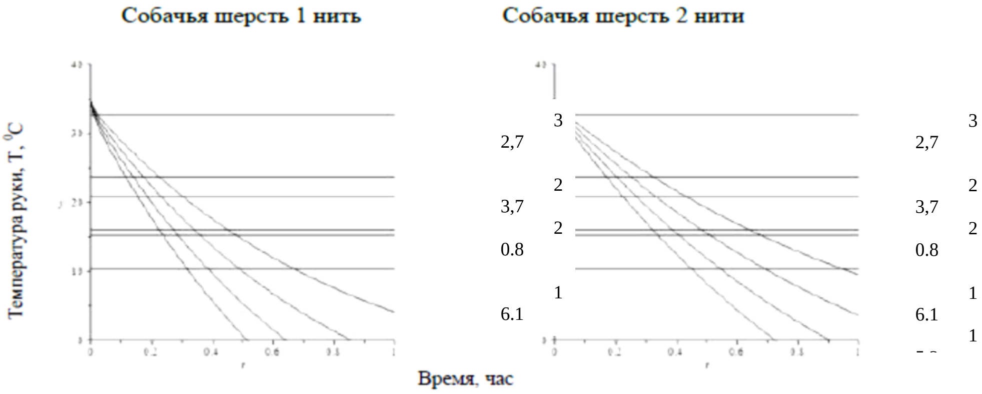


b) Change in the temperature of the skin of the hand when using sheep wool yarn from 1 thread and 2 threads for gloves

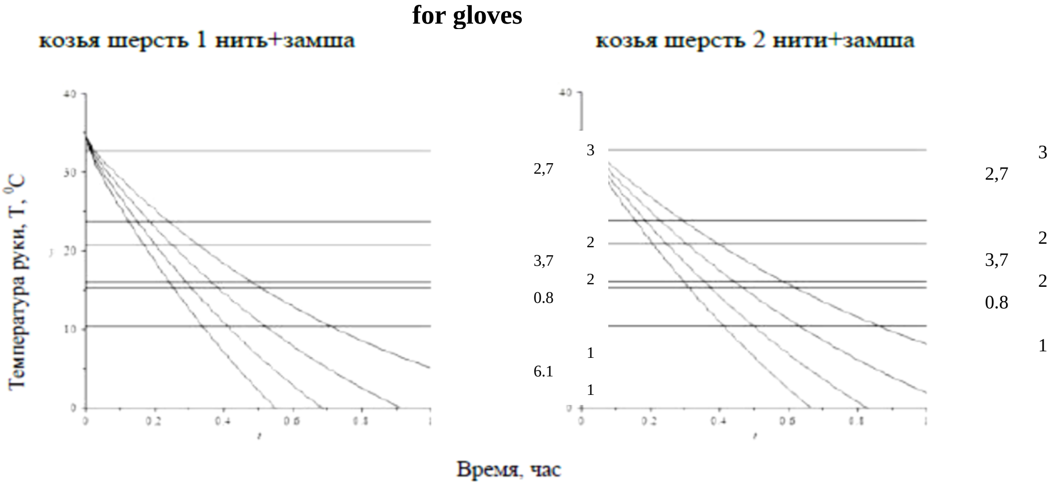
Clarivate Analytics indexed



c) Change in the temperature of the skin of the hand when using camel wool yarn from 1 strand and 2 strands for gloves

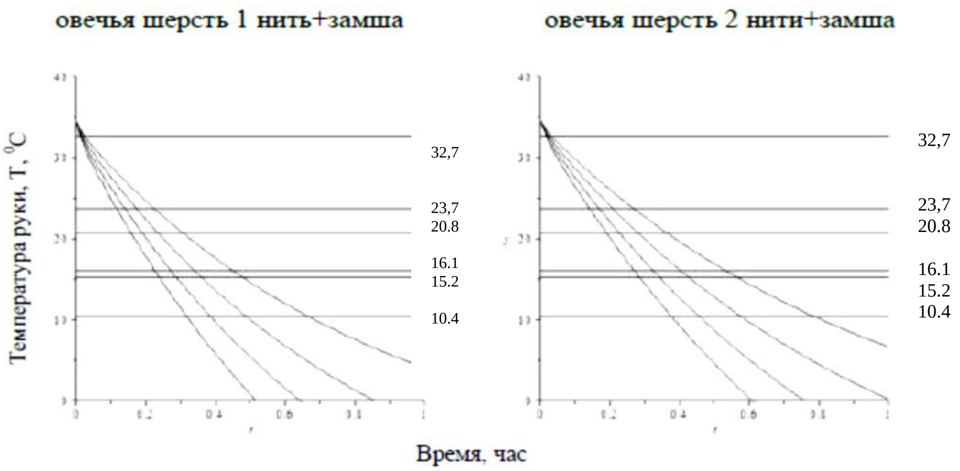


d) Change in the temperature of the skin of the hand when using dog wool yarn from 1 strand and 2 strands for gloves

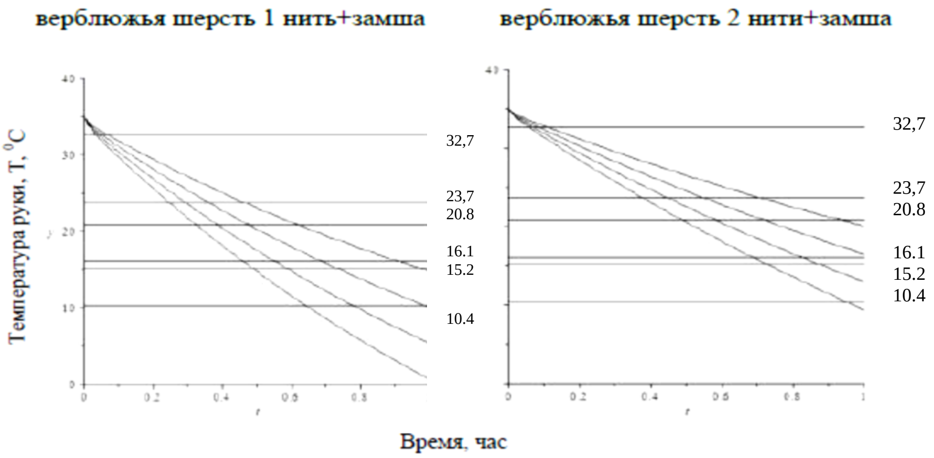


e) Change in the temperature of the skin of the hand when using goat wool yarn from 1 thread + suede and 2 threads + suede for gloves

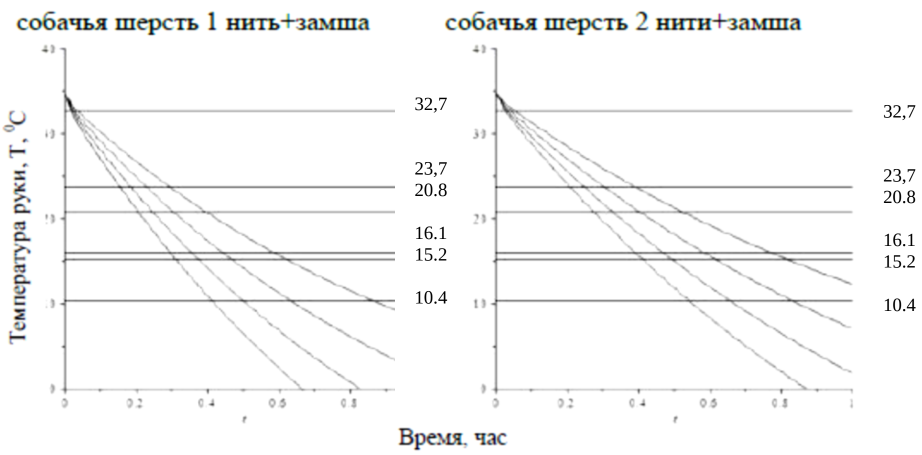
Clarivate Analytics indexed



f) Change in the temperature of the skin of the hand when using sheep wool yarn from 1 thread + suede and 2 threads + suede for gloves



g) Change in the temperature of the skin of the hand when using camel wool yarn from 1 thread + suede and 2 threads + suede for gloves



h) Change in the temperature of the skin of the hand when using dog wool yarn from 1 thread + suede and 2 threads + suede for gloves

Figure 5 - Characteristics of the state of comfort of the hand (skin) of a serviceman when he is in various climatic conditions: curve 1 - at -10 ° C, curve 2 - at -20 ° C, curve 3 - at -30 ° C, curve 4 - at -40 ° C

Consequently, the results obtained substantiated the high efficiency of using the software for a reasonable selection of packages of materials for gloves and other sets of suits for Arctic servicemen and confirmed the need to continue research on the selection of such materials that would provide them with a comfortable state in a given temperature regime for at least one hour.

For the packages and materials shown in Table 7, curves are plotted characterizing the state of comfort of the serviceman's hand for the following ambient temperatures, namely, curve 1 at -10 ° C, curve 2 at -20 ° C, curve 3 at - 30 ° C, curve 4 - at -40 ° C (Figure 5).

The software developed by the authors allows the manufacturer to have a tool for making an informed decision on the choice of packages of materials for the suit of the Arctic military personnel, including in the production of gloves to protect the hand from the effects of low temperatures in the performance of their statutory duties.

Confirmation of these conclusions is the analysis of the properties of the most effective from the point of view of comfortable conditions of the skin of the hand, carried out by the authors, providing a constant temperature within 32.5 ° C.

Unfortunately, gloves made from wool yarns of various animals, made from both one and two threads, do not guarantee servicemen such a comfortable state even at a temperature of -10 ° C, not to mention that the air temperature may be lower. In this case, the surface of the skin of the hand is cooled below the critical value, i.e. below 10.4 ° C and can lead to frostbite and irreversible processes.

The use of mitts to protect the hand also does not guarantee servicemen protection from the effects of low temperatures, suggesting the search for such materials and the formation of bags from them for the manufacture of gloves that would provide them with comfortable conditions, which is possible when using nanomaterials capable of thermal regulation within the limits, allowing servicemen to fulfill their statutory duties within the required time period.

If for shoes and clothing, the software developed by the authors makes it possible to formulate requirements for a package of materials and ensure a comfortable state of servicemen for the performance of their official duties, then for a person, a hand, for a big toe, it guarantees comfortable conditions without additional research on the selection of packages of materials. fails.

The characteristics of materials for gloves, the use of which would be justified, is given in table 7.

The analysis of foreign experience showed that the so-called mitts are used together with gloves.

There are different types of mitts: ordinary mitts without fingers; mitts with a clip-on mitten; "Pipes" without compartments for fingers and palms.

The peculiarities of the choice of materials for gloves for servicemen in the Arctic are provoked by the climatic conditions of this zone in order to guarantee him comfortable conditions during the entire period of use or his military duties. At the same time, special attention was paid to ensuring the comfort not only of the soldier's hand, but especially the index finger of the right, if he is right-handed, and of the left hand, of course, if he is left-handed. This need is dictated by the specifics of the performance by the military personnel of their duties, namely, to carry out shooting, in which a more intensive cooling of the index finger is provoked.

The use of mitts provides the serviceman with additional protection for the hand, and, most importantly, for the index finger, while the main protection is provided by the glove, and here the authors test not only different wool, but also yarn, forming it from one or double thread.

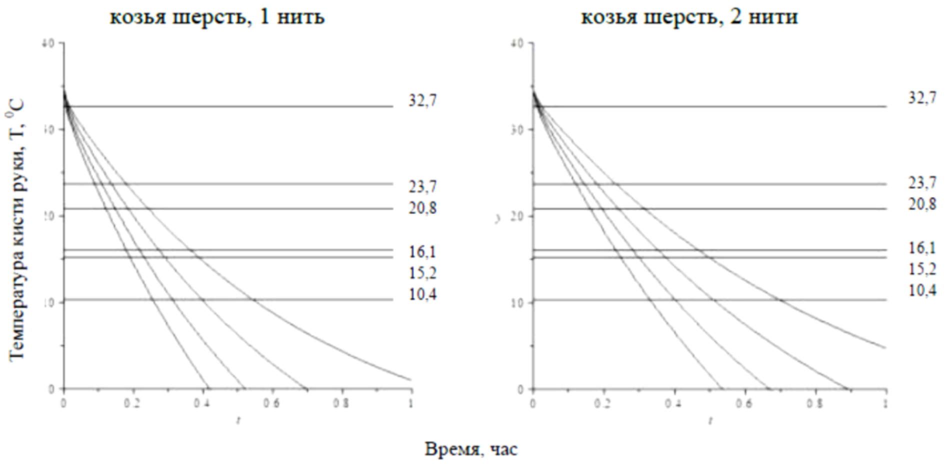
Possibilities of using nanomaterials capable of thermoregulation and providing the skin of the hand with a comfortable temperature, namely, not lower than 32 ° C. Such studies are possible using the same software that the authors developed and used for the materials, the characteristics of which are given in Table 7.

Table 7 - Characteristics of materials in the manufacture of gloves for military personnel in the Arctic

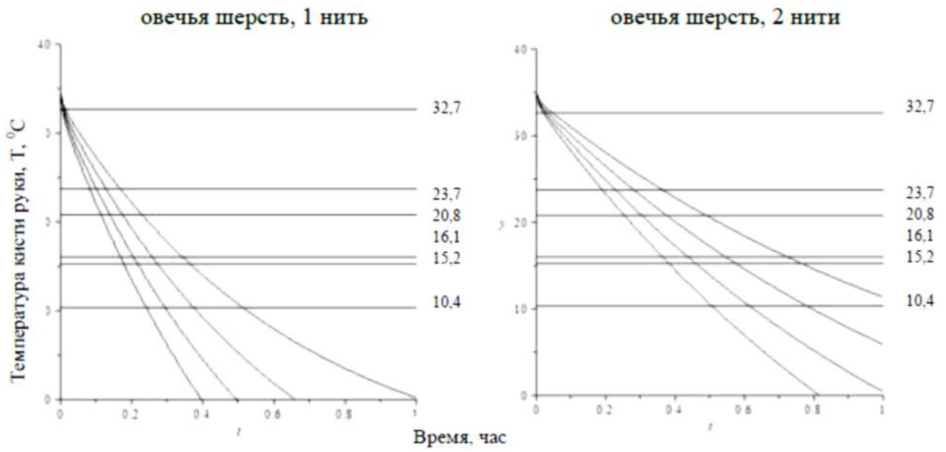
Materials used to make gloves	Thickness mm	Coefficient of thermal conductivity, λ, W / m ° C
1 Single strand yarn:		
1.1 From goat hair	0.7	0.015
1.2 Sheep wool	0.8	0.020
1.3 Camel	0.9	0.005
1.4 From dog hair	0.8	0.010
2. Two-strand yarn:		
2.1 From goat hair	1.4	0.015
2.2 Sheep wool	1.6	0.020
2.3 Camel	1.8	0.005

2.4 From dog hair	1.6	0.010
3. A package of materials for the index finger of the hand, suede + yarn from one strand		
3.1 when using goat hair	1.7	0.02 / 0.015
3.2 when using sheep's wool	1.8	0.02 / 0.020
3.3 when using camel hair	1.9	0.02 / 0.005
3.4 when using dog hair	1.8	0.02 / 0.010
4. A package of materials for the index finger of the hand, suede + yarn of two strands		
4.1 when using goat hair	2.4	0.02 / 0.015
4.2 when using sheep's wool	2.6	0.02 / 0.020
4.3 when using camel hair	2.8	0.02 / 0.005
4.4 when using dog hair	2.6	0.02 / 0.010
5 Material for the fingertip of the index finger of the soldier's hand - "natural suede leather" and for mitts	0.8	0.020

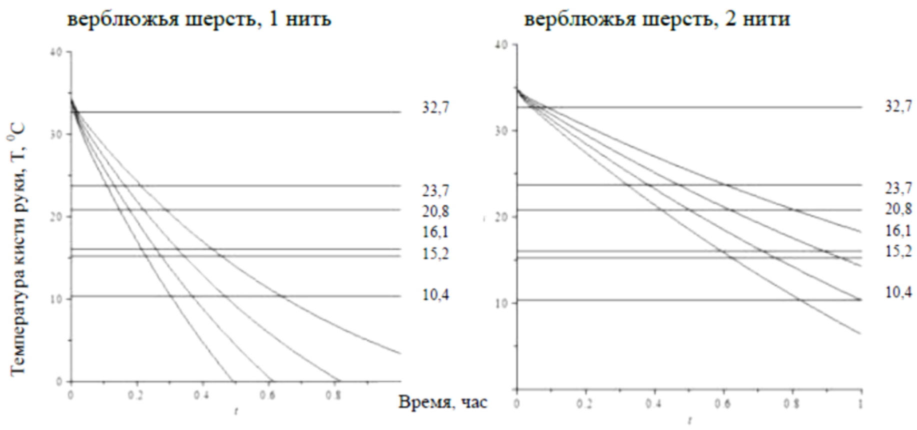
With the help of the software developed by the authors, graphs were constructed characterizing the condition of the skin of a soldier's hand for four ambient temperatures, namely: - 100C, -200C, -300C, -400C from the time he spent at the post, but not less than 1 hour. The figures show the temperature values of the skin of the hand, characterizing various heat sensations of a serviceman, namely, comfort 32.7 ° C, slightly cool 23.7 ° C, cool 20.8 ° C, cold 16.1 ° C, very cold 15.2 ° C, pain 10.4 ° C (frostbite). At -10 ° C, a comfortable state is provided only by a package of suede-dog hair (double thread), and for -20 ° C, -30 ° C, - 40 ° C, none of the materials under study and their packages together with natural fur "winter" do not guarantee comfortable conditions for servicemen.



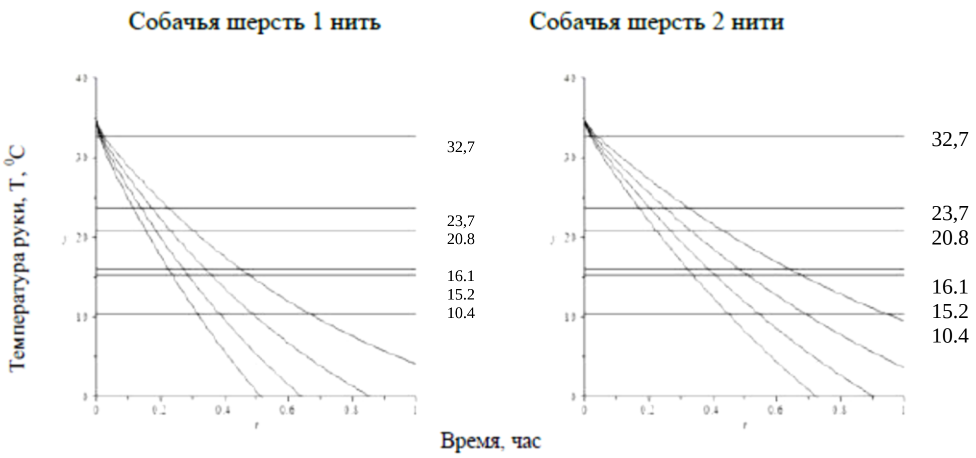
a) Change in the temperature of the skin of the hand when using goat wool yarn from 1 strand and 2 strands for gloves



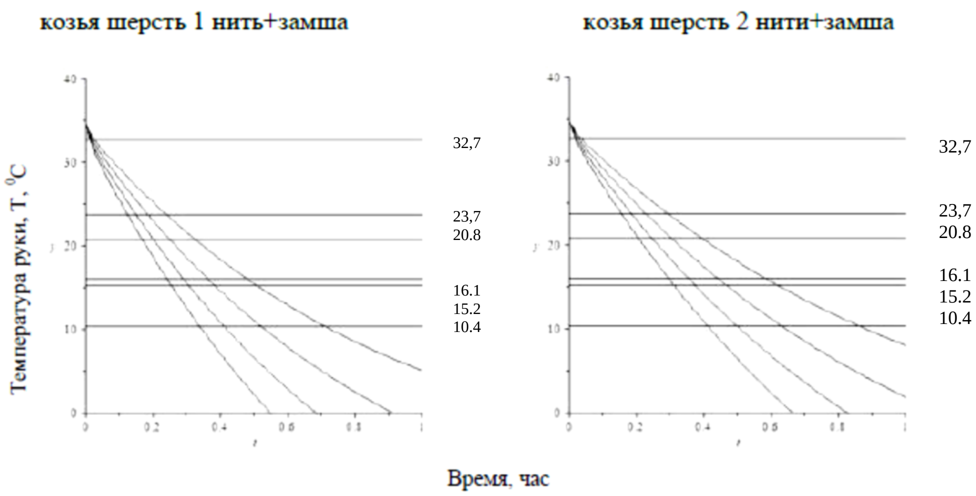
b) Change in the temperature of the skin of the hand when using sheep wool yarn from 1 thread and 2 threads for gloves



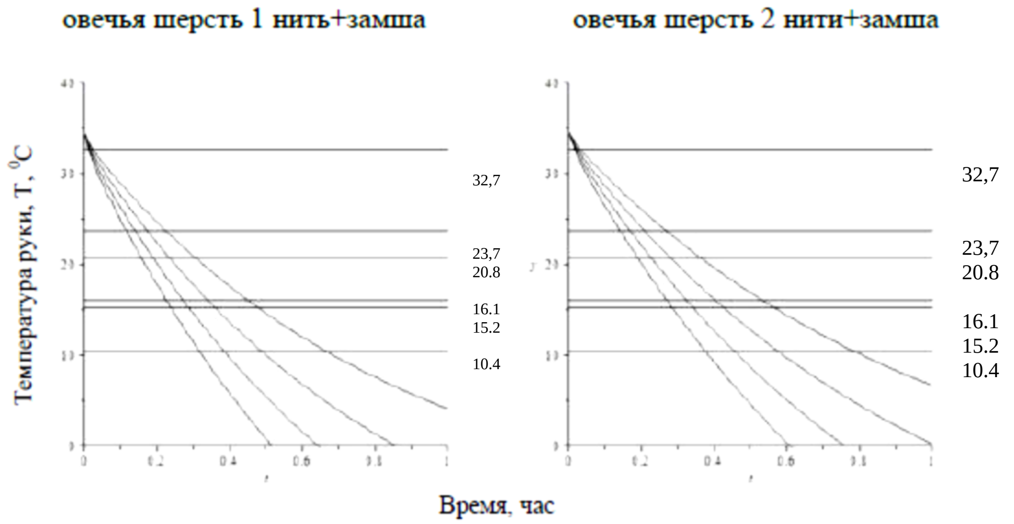
c) Change in the temperature of the skin of the hand when using camel wool yarn from 1 strand and 2 strands for gloves



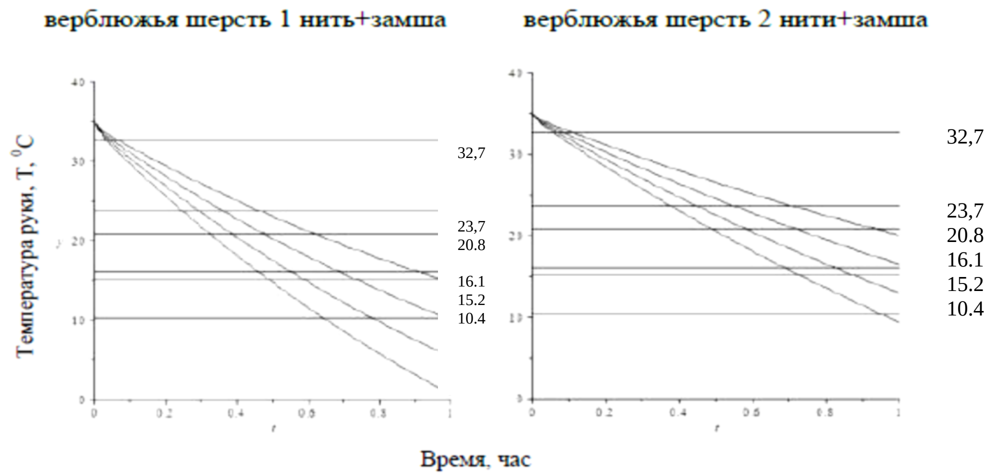
d) Change in the temperature of the skin of the hand when using dog wool yarn from 1 strand and 2 strands for gloves



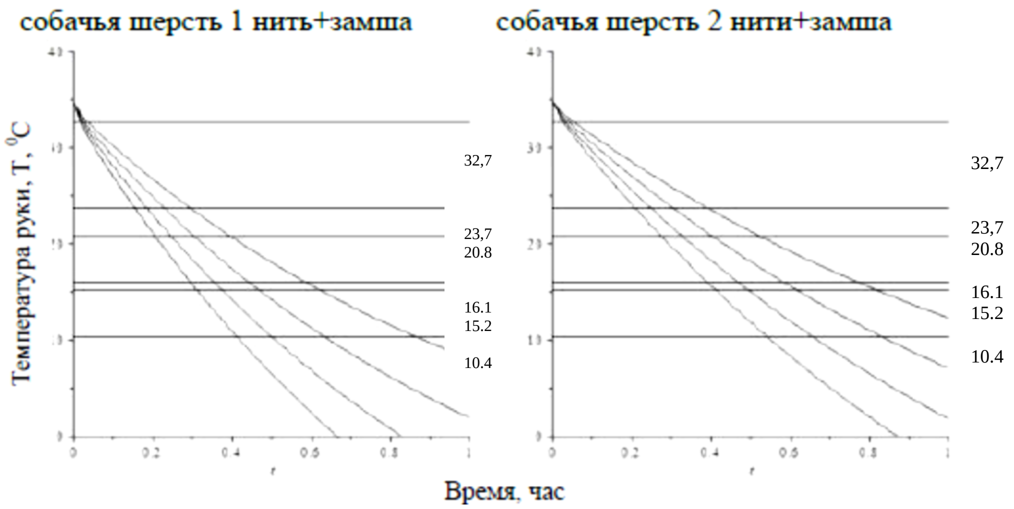
e) Change in the temperature of the skin of the hand when using goat wool yarn from 1 thread + suede and 2 threads + suede for gloves



f) Change in the temperature of the skin of the hand when using sheep wool yarn from 1 thread + suede and 2 threads + suede for gloves



g) Change in the temperature of the skin of the hand when using camel wool yarn from 1 thread + suede and 2 threads + suede for gloves



h) Change in the temperature of the skin of the hand when using dog wool yarn from 1 thread + suede and 2 threads + suede for gloves

Figure 6 - Characteristics of the state of comfort of the hand (skin) of a serviceman when he is in various climatic conditions: curve 1 - at -10 ° C, curve 2 - at -20 ° C, curve 3 - at -30 ° C, curve 4 - at -40 ° C

Consequently, the results obtained substantiated the high efficiency of using the software for a reasonable selection of packages of materials for gloves and other sets of suits for Arctic servicemen and confirmed the need to continue research on the selection of such materials that would provide them with a comfortable state in a given temperature regime for at least one hour.

For the packages and materials shown in Table 7, curves are plotted characterizing the state of comfort of the serviceman's hand for the following ambient temperatures, namely, curve 1 - at -10 ° C, curve 2 - at -20 ° C, curve 3 - at -30 ° C, curve 4 - at -40 ° C (Figure 1).

The software developed by the authors allows the manufacturer to have a tool for making an informed decision on the choice of packages of materials for the suit of the Arctic military personnel, including in the production of gloves to protect the hand from the effects of low temperatures in the performance of their statutory duties.

Confirmation of these conclusions is the analysis of the properties of the most effective from the point of view of comfortable conditions of the skin of the hand, carried out by the authors, providing a constant temperature within 32.5 ° C.

Unfortunately, gloves made from wool yarns of various animals, made from both one and two threads, do not guarantee servicemen such a comfortable state even at a temperature of -10 ° C, not to mention that the air temperature may be lower. In this case, the surface of the skin of the hand is cooled below the critical value, i.e. below 10.4 ° C and can lead to frostbite and irreversible processes.

The use of mitts to protect the hand also does not guarantee servicemen protection from the effects of low temperatures, suggesting the search for such materials and the formation of bags from them for the manufacture of gloves that would provide them with comfortable conditions, which is possible when using nanomaterials capable of thermal regulation within the limits, allowing servicemen to fulfill their statutory duties within the required time period.

Cold is one of the harmful environmental factors affecting humans. Reactions to the effects of cold can be both functional and pathological in nature: disease, defeat, death.

At low temperatures, a person can experience cold stress. Cold stress can be caused by the cooling of the body as a whole or part of it, most often the face and respiratory organs, hands, feet. At the same time, different types of cold stress are formed due to a combination of climatic factors, physical activity, clothing, etc. The main types of cold stress are:

- cooling the whole body;
- cooling of the limbs;
- skin cooling (convective);
- skin cooling (conductive);
- respiratory cooling.

The combinations of climatic factors are as follows:

- air temperature, average radiation temperature, air mobility, physical activity, relative humidity of air, clothing;
- air temperature, air mobility;
- the surface temperature of the clothing;
- air temperature, physical activity.

The effect of cold stress on humans is due to the intensity of cold stress (tissue cooling).

Hypothermia is a result of extreme cold stress intensity.

The results of the intensity of cold stress of the 1st degree will be:

- local cold damage - frostbite, numbness;
- cold damage without freezing;
- pain;
- functional damage;
- acute cardiorespiratory effect;
- deterioration in performance;
- discomfort;
- heat balance.

Discomfort can cause a decrease in activity, especially in relation to solving problems associated with neuro-emotional stress, with the need to concentrate, and also increase the risk of occupational accidents and injuries. Moreover, cooling of tissues can lead to decreased physical activity, which contributes to the risk of accidents.

Cooling of a person, both general and local (especially of the hands), contributes to a change in his motor activity, disrupts coordination and the ability to perform precise operations, causes the development of inhibitory processes in the cerebral cortex, which can cause injury. With local cooling of the hands, the accuracy of the combat mission is reduced; activity decreases by 1.5% for each degree of decrease in the temperature of the fingers.

A drop in body temperature, muscle and skin temperature leads to a decrease in the ability to perform physical work due to a decrease in the level of metabolism.

These changes reduce coordination and can lead to an increase in accidents, especially when performing a combat mission in the cold. The sensitivity of the receptors also changes with a decrease in skin temperature. So, at a skin temperature of 20 ° C, it is 1/7 of normal.

The above means that a set of thermal protective clothing intended for work in open areas, in particular in climatic regions IA and IB ("special" and IV climatic zones), must include protective equipment for the face and respiratory system.

The hands and feet play an important role in thermoregulation, being specific heat exchangers between the body and the environment. The state of thermal comfort is provided at a foot skin temperature of 29-31 ° C and a heat flux of 52-87

W / m2. The thermal resistance of the tissues remains within the range of up to 0.3 clo.

Studies by a number of authors have shown that with an increase in the thermal insulation of shoes, the weighted average temperature of human skin increases (from 32.0 ± 0.30 to 33.5 ± 0.32 ° C) and the weighted average heat flux decreases (from 90.3 ± 4.0 to 57.0 ± 0.32 W / m2 (≈ 40%)). A decrease in total heat loss as a result of an increase in the thermal insulation of shoes can be 17.1 ° C.

Heat loss by convection and radiation from the surface of various areas the human body when it is cooled:

a) head 19.0 W (12%);
b) hands 44.4 W (31%);
c) trunk 36.0 W (25%);
d) legs 49.0 W (32%);
e) whole person 148.4 W (100%).

The amount of insulation in a shoe can have a significant impact on a person's overall heat loss and body surface temperature. This means that when developing thermal protective clothing, the requirements for thermal insulation of all areas of the body must be met. With an increase in the thickness of the package of materials for insulating clothing, almost only the temperature of the skin of those areas of the body that are protected (trunk, shoulder, thigh) rises... ABOUTthere is only a slight increase in skin temperature in the area of the hands. A change in temperature, depending on the degree of warming of the surface of the body, is practically not observed.There is a definite relationship between the general thermal state of the body and the degree of cooling of a particular area of the body, in particular, the feet and hands. At the same time, the thermal insulation of the latter has a significant effect on the general heat exchange of a person.

The basis for the creation of thermal protective clothing for operation in the Arctic should be based on a scientific principle that takes into account the physiology of heat exchange between humans and the environment.

Requirements for materials and construction thermal protective clothing in the Arctic:

- the heat-shielding ability of clothing for protection from cooling is determined by the thermophysical parameters of the package of materials from which it is made, by design, type (jacket, jacket and trousers, overalls, etc.);
- a package of materials for heat-protective clothing is formed from a base material, an insulating pad and a lining. If necessary, to reduce the air permeability of the package of clothing materials, a windproof pad can be used, which should be placed between the base material and the insulation pad;
- the main material (cover, outer layer) determines the appearance of clothing and performs protective functions. It must have protective properties that correspond to the conditions of activity, be resistant to mechanical stress, precipitation, light, various types of pollutants, and be easily cleaned of contaminants. It must be able to conduct moisture from the clothing space into the environment and have adequate air permeability to the wind speed.

The work considers the process of cooling the surface tissues of the knee and elbow of a person when exposed to low temperatures (table 8).

Table 8 - Characteristics of the package of materials for the protection of the elbow and knee joints

Model	Package materials	Thickness, mm	Thermal conductivity coefficient λ, W / m ºC
1	2	3	4
Model 1	cotton linen	0.9	0.044
	Wool sweater or pants	2.4	0.027
	Nylon lining	1.6	0.042
	Thinsulate insulation (1 layer)	6.0	0.044
	Arctic-tech - outer layer (85% PE + 15% cotton)	1.8	0.041
	Arctic-tech (knee pad or elbow pad)	1.8	0.041
Model 2	Thermal underwear	1.76	0.039
	Wool sweater ooze pants	2.4	0.027
	Nylon lining	1.6	0.042

	Thinsulate insulation (21 layers)	12	0.036
	Arctic-tech - outer layer	1.8	0.041
	Porous rubber - damper	2.2	0.027
	Arctic-tech (patch pocket)	1.8	0.041

For the description, a mathematical model is built in the form of a boundary value problem:

$$\frac{\partial T_i}{\partial t} = a_i\left(\frac{\partial^2 T_i}{\partial r_i^2} + \frac{2}{r_i}\frac{\partial T_i}{\partial r_i}\right) + \frac{q_{iv}}{c_i \rho_i}, \qquad (21)$$

$$i = 1,2, \ldots n,$$

$$T_1(0,t) \neq \infty;$$

$$\lambda_n \frac{\partial T_n}{\partial r_n}(R_n, t) + \alpha(T_n(R_n,t) - T_c) = 0; \qquad (22)$$

$$T_{i-1}(R_{i-1}, t) = T_i(R_{i-1}, t); \qquad (23)$$

$$\lambda_{i-1}\frac{\partial T_{i-1}}{\partial r_{i-1}}(R_{i-1}, t) = \lambda_i \frac{\partial T_i}{\partial r_i}(R_{i-1}, t),$$

$$i = 2, \ldots n.$$

Initial conditions, where $T_i(r_i, 0) = f_i(r_i)\, t -$ time; - temperature of the i-th layer; $T_i\; i = 1, \ldots n$; - ambient temperature; - coefficient of heat capacity of the i-th layer; - coefficient of thermal diffusivity of the i-th layer; - the density of the i-th layer; - coefficient of thermal conductivity of the i-th layer; volumetric heat flow density of the i-th layer; heat transfer coefficient from the surface of the skin or protective layer (hair, hat); $T_C c_i a_i \rho_i \lambda_i\, q_{iv} - \alpha - f_i(r_i) -$ initial temperature of the i-th layer.

The solution to the problem is in the following form

$$T_i(r_i, t) = \sum_{k=1}^{\infty} D_k(t) X_{k,i}(r_i), \qquad (24)$$

Where

$$X_{k,i}(r_i) = \frac{1}{r_i}\left(A_i \sin\left(\frac{\mu_k r_i}{\sqrt{a_i}}\right) + B_i \cos\left(\frac{\mu_k r_i}{\sqrt{a_i}}\right)\right) -$$

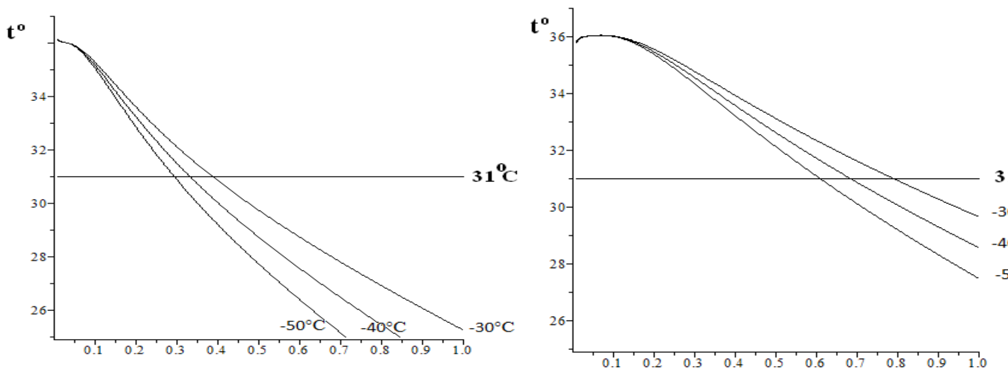
eigenfunctions of the corresponding boundary value problem:

$$\frac{\partial^2 X_i}{\partial r_i^2} + \frac{2}{r_i}\frac{\partial X_i}{\partial r_i} + \frac{\mu^2}{a_i} X_i = 0, \qquad (25)$$

$$X_1(0,t) \neq \infty;\; \lambda_n \frac{\partial X_n}{\partial r_n}(R_n) + \alpha X_n(R_n) = 0; \qquad (26)$$

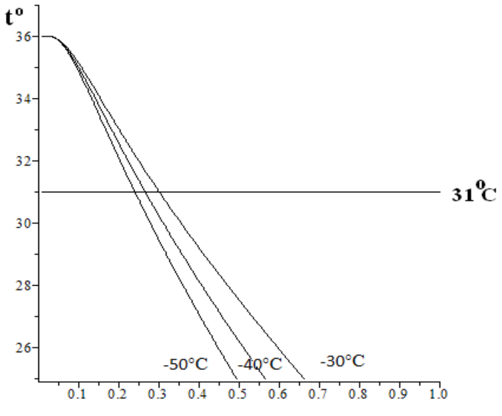
$$X_{i-1}(R_{i-1}) = X_i(R_{i-1}); \qquad (27)$$

$$\lambda_{i-1}\frac{\partial X_{i-1}}{\partial r_{i-1}}(R_{i-1}) = \lambda_i \frac{\partial X_i}{\partial r_i}(R_{i-1}).$$



a) **b)**

Figure 7 - knee:
a) model 1; b) model 2



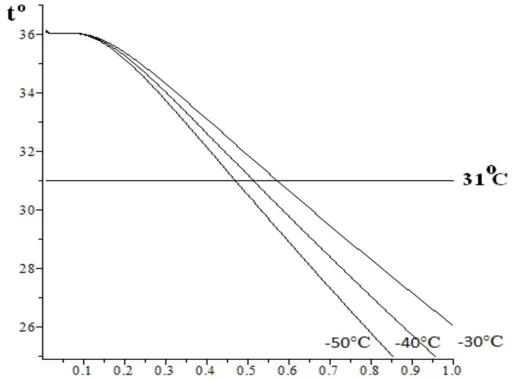


Figure 8 - Elbow:
a) model 1; b) model 2

The article presents the results of studies on the reasonable choice of packages of materials for knee and elbow pads in order to ensure comfort for servicemen in the Arctic during the entire time of his stay in climatic zones with low temperatures. The approbation of the software product has confirmed its high efficiency.

Conclusion

To select the optimal capacity, the authors have developed software that allows manufacturers, based on an innovative technological process using universal and multifunctional equipment, to produce the entire assortment of shoes with minimum, average and maximum costs, which creates the basis for varying the price niche, including through a gradual increase in the share of domestic components in the production of leather goods with a significant reduction in the cost of its manufacture. At the same time, as the criteria for a reasonable choice of the optimal power when forming the algorithm, it was justified to choose exactly those criteria that have the greatest impact on the cost of the finished product, namely:

– load factor of workers,%;
– labor productivity of one worker, a couple;
– losses on wages per unit of production, rubles;
– specific reduced costs per 100 pairs of shoes, rub.

Of the four given criteria, in our opinion, the main ones are labor productivity of 8 workers and unit reduced costs.

Labor productivity of 1 worker is the most important labor indicator. All the main indicators of production efficiency and all labor indicators, to one degree or another, depend on the level and dynamics of labor productivity: production of products, number of employees, expenditure of wages, level of wages, etc.

To increase labor productivity, the introduction of new equipment and technology, widespread mechanization of labor-intensive work, automation of production processes, advanced training of workers and employees, especially when introducing innovative technological processes based on universal and multifunctional equipment, are of paramount importance.

Specific reduced costs - an indicator of the comparative economic efficiency of capital investments, used when choosing the best option for solving technological problems.

The given costs are the sum of current costs, taken into account in the cost of production, and one-time capital investments, the comparability of which with current costs is achieved by multiplying them by the standard coefficient of efficiency of capital investments. Tables 9 and 10 show the calculations of the optimal power for the range from 300 to 900 pairs for men's and women's shoes for the entire range of footwear. Analysis of the characteristics obtained for three variants of a given technological process in the manufacture of the entire assortment of footwear confirmed the effectiveness of the software product for evaluating the proposed innovative technological process using universal and multifunctional equipment. So with a range of 300 - 900 pairs, the best according to the given criteria is the volume of production of 889 pairs (for men) and 847 pairs (for women). If the production areas proposed by the regional and municipal authorities of two districts - the Southern Federal District and the North Caucasus Federal District, according to standard indicators, do not allow the calculated production volumes to be realized, then the option of the optimal capacity is chosen that is acceptable, for example, the production volume of 556 pairs, which corresponds to the standard indicators for the proposed production areas and is characterized by the best values of the designated criteria, which form the cost of the entire assortment of footwear. The authors have developed summary technological processes for assembling a shoe upper and assembling shoes for 12 models of men's and 12 models of women's shoes, respectively. The summarized volumes of the main costs are shown in Table 9.

Table 9. - Calculation of the optimal power with a range of 300-900 pairs using the example of men's shoes

Power	Equipment type	Optimal power, steam per shift	Labor productivity of 1 worker, steam	Worker load factor,%	Losses on wages per unit of production, rub	Specific reduced costs per 100 pairs of shoes, rub.
300-500	1	500	28.09	61.39	13.68	6735.36
500-700	1	556	27.73	69.14	9.83	6404.71
700-900	1	889	28.09	77.20	6.42	5236.17
300-500	2	500	28.09	61.39	13.68	6728.68
500-700	2	556	27.91	68.70	9.97	6083.28
700-900	2	889	28.09	77.20	6.42	5240.72
300-500	3	500	28.09	61.39	13.68	7533.95
500-700	3	700	28.12	67.28	10.56	6734.02
700-900	3	889	28.09	77.20	6.42	5876.59

To assess the effectiveness of the production activity of a shoe company, it is necessary to analyze the annual results of the enterprise for the production of men's and women's shoe assortment.

Table 10. - Calculation of the optimal power with a range of 300-900 pairs using the example of women's shoes

Power options	Type of equipment	Optimal power, steam per shift	Performance labor of 1 worker, couples	Workers load factor,%	Losses on wages per unit of production, rub	Specific reduced costs per 100 pairs of shoes, rub.
300-500	1	500	27.73	62.18	13.40	6980.5
500-700	1	700	27.73	69.14	9.83	6277.43
700-900	1	847	27.73	74.50	7.54	5673.49
300-500	2	500	24.45	63.90	14.11	7630.92
500-700	2	556	27.73	69.14	9.83	6404.71
700-900	2	812	25.64	75.40	7.77	6060.55
300-500	3	500	27.00	61.74	14.02	7827.12
500-700	3	556	29.32	68.21	9.71	6607.65
700-900	3	847	27.00	74.70	7.66	6341.05

These calculations indicate that with 100% of sales of men's and women's shoes in the specified period of time, not only the costs of production and sales of products are covered, but also a profit of 3,697.4 thousand rubles remains. This testifies to the effective operation of the enterprise, as well as the correct marketing and assortment policy. The product profitability is 14.9%.

Shoe enterprises should focus both on external (consumer enterprises, competition, market conditions, etc.) and on internal factors such as sales volume, profitability, coverage of basic costs, etc. However, it is impossible to take into account and foresee all situations that may arise when selling shoes, i.e. some shoe models are no longer in demand at a certain stage.

Thus, the regions on the territory of which the territories of advanced socio - economic development, including footwear, are organized, become leaders in economic development, determine the competitiveness of the economy of these regions, and provide social protection to the population of these regions.

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QR – Issue QR – Article

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ON THE COMMUNICATIVE AND FUNCTIONAL PROPERTIES OF ANTHROPONYMS IN DIALOGICAL DISCURSE

***Abstract**: This article analyzes the specific communicative-functional features of anthroponyms in dialogic discourse.*

***Key words**: dialogic discourse, anthroponyms, speech relevance, addressee, addressee, Uzbek communication behavior, forms of address.*

***Language**: English*

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***Scopus ASCC**: 1203.*

Introduction

The character, mood, mental nature of the addressee and the addressee, who are the active elements of the communication system, play an important role in determining its direction in the dialogic discourse. After all, one of them, the addressee, uses its external and internal capabilities in the performance of the communicative influence function. At the same time, the recipient of the impact will have to adapt to it. In this sense, in ensuring the quality of communication, both internal and external coordination of the addressee and the addressee, the balance of mental character plays an important role [1; 150]. In dialogic discourse, a number of factors determine the quality and direction of communication. These include intuitive accuracy, specific outcome goals, adherence to communication traditions, and so on.

The main part

In anthroponyms, the identity of the participants in the dialogue, their social characteristics, and general information about them will be coded as relevant to the dialogic discourse. For example, let's take the example of Zelikhon, one of the heroes of Tahir Malik's novel "Shyatanat":

Zelixonning laqabi «akademik» edi. Bunga sabab - u paxta uylab olib, sung ishga kirishi. Unning boshqalaridan farqi - odamlar ruhiyatini albatta, ularni ulardi. Lozim bo'lganda katta boshqarilishga boshka bir boshqaruv boshligiday bemalol kirib chiqaveradi. Eshik ochzidagi sochiga kiborlik bilan so'z tashlab, «ha, o'tiribsanmi» deb kirib ketaveradi. Elchin uning bu «fazilati» ni shaharda yaratishda bildi. Bir kuni Zelixon mashinasini kirishi mumkin bo'lgan juda katta kuchga burdi. Milisa tayog'ini ko'chalarga, tugadi-yu, tushmadi. Milisa lapanglab kelib, engasishi bilan oynani tushirib:

- Xa, turbansanmi, - dedi. Milisa javob qaytarishga ulgurmay yangi savol berdi: - Leytenant qani?

- Sobirovmi? - dedi milisa yigit talmovirsab.

- Xa, usha, nimaga lallayasan, qayoqqa ketdi?

- Xozir keladi.

- Menga qurashsin.

Zelixon shunday deb mashinani yurgizdi. Milisa esa gardanini qochib kolaverdi.

- Sobirov degeningiz kim? - dedi Elchin.

- Qayoqdan bilaman, - dedi Zelixon kulib. - Senam milisaga noxshagan laqma ekansan-ku.

- Leytenantligini bildingiz-ku?

Zelixon qah-qah otib kuldi:

- Bularda nima ko'p, letenant ko'p ... (Tohir Malik)

At this point, the addressee, realizing that the name of the position of lieutenant meant the leader for the policeman, was able to achieve his goal, that is, he was able to use as a speech relevant the word that had a psychological burden in the discourse.

Discursive relationships involving anthroponyms are often related to people's place in society and self-esteem, which is often individual in nature, and in a work of art, creators also use the pronunciation of their names by others to more clearly reveal the character's character. For example:

"How are you, Clarabaycha?" How are you, Clarabaycha? Are you just playing and laughing, Clarabaycha?

"Baycha?" Kakaya baycha? He said. "I'm Clara Khodjaevna!" (Uncle Murad).

Klara Khodjaevna, the protagonist of Tog'ay Murad's "Fields Left by My Father," was educated in Moscow and forgot her dialect. That is why he did not understand Dehqonqul's address as baycha or did not want them to call him that. (Note: In Surkhandarya dialect, women are often referred to as baycha.)

Or:

–... aytganday, «bizniing kuylar» yaxshi yuribdimi, o'rtoq Qurbonov? - dedi.

- Men bir amaldormidimki, diplomim bormidiki, "O'rtoq Qurbonov!" deysiz? El katori Ziyodulla kal, deyi bering (Tog'ay Murod).

In the above examples from Uncle Murad's "Horse Kishnagan Okshom", the protagonist of the work, Ziyodulla Kal, reveals the special features of the person through a form of self-address. It is clear from the text that Ortok Kurbanov, who had an affair with the protagonist of the work, did not feel any remorse. Because, according to his social views, the official is treated in the same way as people with two diplomas. The form of Ziyodulla Kal's appeal to him was convenient because the hand burned him.

The analysis of the above two situations in the dialogue of the address and the addressee - in the process of discourse served to clarify the mutual diversity of forms of appeal, the sociological-linguistic conclusions of anthroponyms based on what factors.

Analysis of anthroponyms has shown that in our national mentality they are associated with speech phenomena such as taboo and euphemism. It is known that in the Glossary of Linguistic Terms these terms are interpreted as follows: Taboo. Restricting, prohibiting the use of a particular word under the influence of religious beliefs, superstitions, fears, etc .; The use of such a restricted, forbidden word. For example, in Russian (in the speech of hunters) the word *medved* is not used, instead the words *khozyain, lomaka, moxnach, lesnik* are used, in Uzbek the word *chayon (scorpion)* is not used, instead the words *eshak, oti yo'q (donkey, horseless)* are used [2; 86]. A. Omonturdiev, who conducted a special study on this topic, writes in his dictionary: The word taboo (taboo, tabo, taboo) is derived from the Polynesian language Tonga, ta - "to separate, limit", pu - "completely, completely", tapu - " completely restricted, forbidden. Its opposite poa - means "ordinary, common" [3; 4] ..

The lexical units that are used in place of tabooed words and replace them are called euphemisms. "The word euphemism is derived from the Greek word euphemo, which means' I speak softly ',' I speak politely '" [3; 4]. "The phenomenon of taboo and euphemism is inextricably shaped and developed with the emergence of language and thought, and has gone through evolutionary stages, such as language itself, on the basis of the need for human communication, the requirement of eloquence" [3; 3].

Apparently, while the taboo forbids the use of certain words and phrases, the euphemism is aimed at making our speech more beautiful by using its civilized version instead of the rough, crude word. Such a prohibition can also be seen in anthroponyms. Linguist E. Begmatov's pamphlet "Names and People" states that in ancient Turkic peoples, respect for one's name was considered a sign of respect and esteem for the individual. The main way to express such respect is not to call a person by name. Accordingly, in most Turkic peoples, rituals have emerged that young people are older than themselves, and couples cannot say each other's names. In Uzbeks, a child usually does not address his or her parents or older relatives by name, but instead uses one of the words father, grandfather, grandmother, mother, mother, sister, brother, grandfather [4 ; 29]. It is narrated on the authority of Abu Hurayra that he saw two men and asked one of them, "Who will this man be to you?" He said, 'This man will be my father,' and Abu Hurayra advised, 'Then do not call out your father's name, do not walk before him, and do not sit on a higher place.' "[5; 29].

In Khorezm, if a woman calls or addresses her husband by name, people will have a bad opinion of her. She has not called her husband's name since the time of the bride. Otherwise, she is considered inferior to her husband. Basically, words like "grandfather", "master", "brother", "brother", "grandfather" are used instead of the name. At the same time, the husband also uses words like "momoy", "kampir" (even if the groom is young) towards his wife.

Also, in Khorezm, children whose grandparents are alive are taught to address their father as "brother". If children call themselves 'fathers', it is considered disrespectful to the young father to his father, i.e. the children's grandfather.

In the Turkic peoples, treating one's name with respect is accepted as a sign of respect and esteem for that person. The main way to express such respect is not to call a person by name. That is, the wife does not call out the name of the husband, and the wife does not call out the name of the husband. For example, in the past and in some families, it is still common for a woman to call her husband by the name of one of her children (mostly the eldest child) or to use expressions such as "my son's father", "my daughter's father", "my boss", "our father".

It is common for a man to use words and phrases such as “bride”, “daughter”, “sister”, “family”, “spouse” when talking about his wife. This is because of the couple's respect for each other.

«Abdulla Qahhor ota nozik ta'b, madaniyatli odam edilar. Men u kishining biror meni tabobamni yoqib, baland tovush bilan chaqirilganlarini eslolmayman. Bozor-ucharaga yordam qo'lsak, yozuv: «Qaniisiz, qanisiz?» deb orqamdan yurar edilar ...

Uydagi ikki telefonning bittasi u kishining ish stolida, boshqasi mening stolimda turadi edi. Agar biror zarurat tug'ilib qolsa, «Kibriyo!» deb chaqirishdan, stoldagi telefonning g'altagini aylantirib yuborish, "Labbay!" deb telefonning gushagini ko'charar edim [6; 21].

In the past, in some Chuvash families, such habits were carried to such an extent that some couples forgot about each other's work and waited. It is a very good thing to utter a person's name, to express oneself as an obscenity, and to mention another person's name as a very good thing that has a mental meaning that is defined as awkward, unpleasant, a quality use of euphemistic means of very popular words remains.

It is very common in many nations of the world, including Shore and Abkhazia, to address a person without fear of his name. From ethnographers NTDirenkovo, IIIbrokhimov, SIAba.nob.Mo.noBo, Yu.V.Ionova, S.Sh.Tajjieva, E. Begmatov and other twins struggled to ignite curious ideas.

Our observations in the framework of various works of art show that in recent years, in Uzbek families, couples address each other in more than a dozen ways: 1) using the words father, mother, mother; 2) by their own names: a) saying their full name: (like Silver Bibi, Rano, Robiya, Salima); b) abbreviating the name: (such as Guli, Dili, Mino, Foti); 3) using the words azizim, khanim, begim; 4) gender, taking into account social relations: such as wife, wife, husband, husband; 5) women add the word aka to the name of their husbands: (such as Azim aka, Sharof aka, Homid aka, Sobir aka); 6) profession, indicating the position (such as Teacher, Comrade Director, Chairman Uncle, Bankerim, Kindergarten Sister, Teacher); 7) using different pronouns: (he, this, that person, like this person); 8) name, father's name: (such as Sabir Abdullaevich, Iroda Karimovna, Anora Nabievna); 9) using exclamation and modal words: hoy, hey, ey; 10) boss, friend, comrade, acquaintance, etc.

Turkmen and Kazakhs, as well as Tajiks and Kyrgyz, have a tradition of not mentioning their names. Also, when referring to her husband, a Korean woman uses words such as “father of so-and-so” instead of her name, an Arab, a Ukrainian woman using “u”, a black woman and a Russian woman use “father”, “mother”, “hey”, “home” [4; 28]. Addressing a person anonymously is very common in many nations around the world, including the Shores and Abkhazians, Armenians and Koreans, Georgians and Azerbaijanis, Kumyks, and Turkmens. Abkhaz couples refer to each other not as “my husband” or “my wife” in the first person, but as “our wife” and “our husband” in the plural.

Communication cannot be imagined without reference forms. Therefore, this topic has been studied in detail in linguistics from the linguistic aspect. In particular, in the doctoral and candidate dissertations of S.Muminov, Sh.Iskandarova, Z.Akbarova special attention is paid to the social significance of application forms [7; 8; 9].

In a discourse, words that are an expression of the person being addressed, motivated, are the form of the appeal. The speaker or writer sometimes transfers the qualities present in man to living objects, such as animals and birds. Words that are expressions of these living objects become forms of reference. Application forms will focus on individuals, animate and inanimate objects. Forms of reference based on human names are more common than forms of reference focused on animate and inanimate objects. Anthroponymic appeal is more commonly used in oral speech than in written speech, in contrast to forms of reference to animate and inanimate objects. The frequent use of address forms in oral speech depends on the speaker’s relationship with the listener. Forms of appeal are mostly used in conversational, artistic, journalistic discourses, in part in the formal-administrative style. Forms of reference in the scientific style are almost non-existent. In formal discourse, the forms of reference represent the person to whom the speaker is speaking. In the process of artistic, journalistic, and conversational communication, the focus of forms of appeal on animate and inanimate objects serves for the emotional-expressiveness of speech. Modern sociolinguistics is synchronous, that is, a phenomenon that exists at the same time and is diachronic, that is, it changes over time [10; 42] has been emphasized by linguists. The same phenomenon is typical of anthroponymic forms of communication in Uzbek communication. Diachron in reference forms (diachron is a Greek word meaning "dia" - through, "chronos" - time) appearances [10; 48], more so in the sources or historical works that have come down to us. Such person-oriented application forms are applied in accordance with the period of reality. In particular, historically, such forms of address as "hoji bobo", "boy ota", "boy buva", "taqsir", "botam", "hazrat", "eshon pochcha", "mulla aka".

Today, Uzbek families have a habit of adding names to personal names in addition to the meanings of respect, affection, and contempt. In particular, in relation to the adult male addressee -jon, -xon, -khoja, -hoji (for those who went on pilgrimage), -bek, -boy, -tora; for younger addressees, -toy, -sher, -cha, -chik are added. Female addressees are addressed by adding suffixes corresponding to the name: -xon, -oy, -gul, -niso. Sometimes these indicators take on different forms depending on the age difference between the female addressee and the addressee. When a minor addressee addresses an addressee, the addressee adds -xon, -oy, -gul to the addressee and adds words to the addressee, such as mother, aya, aunt, ama, ena, momo: Oygul aya, Rano opa, Nigor aunt, Fatima ama, Qumri momo, like Khadija ena.

Dialectal differences are also observed when addressing strangers through words denoting position, duty, profession. In particular, in Fergana, in addition to people in high school and higher education, a stranger is known as a "teacher", while in Samarkand and Kashkadarya, the word is used to refer to female teachers. While in Margilan it is natural to address a stranger over the age of 25-30 as "qori aka", "taqsir", in other parts of the country such an appeal may seem unnatural, and even the mood of some addressees may be disturbed.

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The military is notable for being more formal than national in the forms of address in speech. These professionals often refer to the addressee by adding a comma to the name of the military title:

- *Yo'rtoq generator, murojaat kilishgaga ruhsat eting!*

Or they apply by adding their last name to the title:

- *Sergeant Orzuqulov!...*

Forms of communication in the military conduct are carried out in the manner prescribed by the "Regulations". The culture of reference to the "Charter" is supplemented by paralinguistic means. In other words, the speaker takes a step in the order specified in the "Regulations", holds the palm of his right hand flat and touches his right temple (giving a "chest") and addresses the listener with his eyes wide open.

Nonverbal means of appeal, which are typical of Uzbek communication behavior, are generally not observed in military appeal forms. The construction of speech in the forms of appeal of these professions is short, concise, with a clear meaning, and is distinguished by the peculiarity of the formal style of literary language:

"We'll do it!" Comrade Lieutenant!
"Let me go, comrade captain!"
"You can go, soldier Kholmatov!"

In command forms in the military speech, the command tone is more pronounced. It is also a tradition in the military speech that the tone of voice in the address is said aloud.

Conclusion

If we observe the professional orientation of the forms of application, each person chooses a profession based on his interest and tries to improve his skills in the way of this interest. Develops knowledge and skills related to their profession. He also prepares himself spiritually. The references in the characters 'speech can include forms such as profession names, labor tool names, national name.

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UZBEK NATIONAL WORD GAMES

Abstract: *This article focuses on the Uzbek national word games, their types and their specific features. In particular, such types as "phonostilistic game", "phonographic game", "lexical-semantic game", "morphological game", "syntactic game", which are manifested in the language levels of word games, are subject to analysis from a linguistic point of view.*

Key words: *uzbek national word game, wordplay, askiya, pun.*

Language: *English*

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Introduction

The word game is a combination of the game character of words in which an artistic-aesthetic task is assigned. The word game is a linguistic phenomenon with wide coverage; a formal and meaningful game aimed at understanding, interpreting and interpreting in different ways. The word game is an interesting derivative, attracting the attention of the listener with its expressiveness-aesthetic aspects. Its occurrence is associated with the spiritual world of man, his concepts and linguistic skills.

The main part

The Uzbek language is rich in vocabulary games. The fact that the creator Temurbek Turabayev wrote a whole-headed work using only one letter "T", attracted the attention of many. According to literature scientist Suyun Karimov: "in his novel, the word 1571 was used 6166 times in the form of 15146 words. In five volumes of the Explanatory Dictionary of the Uzbek language, we encountered 2684 words beginning with the sound" t". Here the sentence is not in the case when the ratio of words comes or does not come equal. It is clear that the author does not use all the words in the dictionary, beginning with "t" in our native language. The sentence is about how the author uses existing words, to what extent they are able to bring out their artistic and aesthetic possibilities. At the same time, when he took the words not found in the"Explanatory Dictionary" from our ancient language, dialects and brought them to the field of artistry and was able to impose on them an artistic and aesthetic task in a certain sense" [1].

An example of this work based on the word game: "Tepalayotgan to'pni tutolmasligini tushungan to'po'rar *to'pni tutishga tutinmadi. Tili-tiliga tinmay tushuntirardi, tili-tilila tillashardi. Tugunni tushuraverdi... Tutamlari tugunni tutolmadi. To'xtabuning tutamidan tungan tutun tumaladi. To'xtabu tugunni tutishga tutinmadi*".

Uzbek national word games were studied by Kh.Dusmatov on the example of the askian genre. [11;12;13]

The Uzbek national word games can initially be divided into 2 types: a) word games related to the form; B) meaningful word games.

Crossword, skanvord, rebus, muvashshah, etc.for word games related to the form.the G.feasibility can be entered. Meaningful word games will consist of multivalued information related to the semantics of the text, and they are a derivative of the colloquial combination. According to the nature and function of the word games like this: a) word games based on the principle of "think, seek, find" (riddle, chiston, problem, history genres); b) word games loaded on an expressively-aesthetic task (in different speech manifestations: artistic, popular, speech of soldiers and comedians, etc.the G.) can be divided into such types as.

Also, word games can be divided into the following types within the framework of language levels: "phonostilistic game", "phonographic game", "lexical-semantic game", "morphological game", "syntactic game".

"Phonostilistic game" is a word game that is performed using phonetic means. With a deliberate change of the sound of a particular speech, it is possible to express different goals: **YASHASIN DIMAKRATIYA!** (*the vowel i and a in the word democracy are changed, and the information that the authority of the blogger Dima Qoyum is expressed: Dima-Dima Qoyum, kratia-power*)

Alliteration is a kind of word game in this direction, it is used in artistic, colloquial and popular speech styles:

*Ali: **B**ugun **B**ahodir **b**oqqa **b**ormay **b**obosinikiga **b**ordimi, **b**ozorga **b**ordimi?*

*Vali: **B**ugun **B**ahodir **b**obosinikigayam **b**ormadi, **b**ozorgayam **b**ormadi. **B**ahodir **b**olalar **b**ilan **b**irgalikda **B**og'dodga **b**ordi.*

*Ali: **B**ahodirga **B**og'dodda **b**alo **b**ormikin?*

*Vali: **B**alo **b**ormi **b**ilmadim-ku, **B**ahodir **B**og'dodga **b**ot-**b**ot **b**oradigan **b**o'ldi.*

*Ali: **B**ir **b**alosi **b**ordirki **b**ot-**b**ot **B**og'dodga **b**oradi. **B**ilmadingmi?*

*Vali: **B**ilmadim. **B**olalardan **b**irgina **B**obur **b**ilarkan.*

Ali: Boburdan so'rab ko'r-chi.

Vali: Yutqazding!

In our classical literature it is known that everyfiy arts (problem, istichroj)" is used as a means of artistic image, in which the importance of phonostilistic means is great.[4] Word games based on this art are also available in other languages. French scientist M.Bernasso says that there are seven genres that are based on finding the hidden word (M.Bernascani, "Histaire des enigmes", Paris: POF, 1964). They are related to the connection of one word with another, its harmony, etymology, the number of letters and sounds. This word game in French is called" griphos " – a logotype derived from the word of the letter. The logo is a known literary game from ancient times, when a new word is formed by adding a letter to a word or subtracting a letter from it. Remi dor of frantism, who published the book" problems of Alisher Navoi " (Paris, 2006), cites the logo in his letter to a friend of an Italian man: "mitto tibi navem prora puppique carentem"– "I'm sending you a ship without a beak and a tail". In Latin, the ship is called navem. If we remove the letter-N from his tumshug, and the tail-m, the ave – Hello suffix is formed.

The problem, which is considered a complex form of the word game, is that the art of Remi dor was compared to a complex, mavhum, vague universe. Her cuttings are numerous-She, however, looks dimly on the eye. In this genre, the poet expresses his ideas so short, laconic that he can not understand any meaning from dabdurust. The author shows more problem - solving, he keeps the methods of solving a secret. Bunda brings a thorough knowledge and a broad outlook to both the reader and the translator. Therefore, in the Navoi era, the problem was considered as a criterion for assessing the skill of poets, and for members of society it was a means of sharpening the mind, improving the thinking.

"Phonographic game" - combinations based on phonetic and graphic means.

***T**azarru*
***O**ngimda **qo**'zg'algan **o**'ylardan*
***Y**ig'layman **i**ngranib **n**etayin,*
***R**ohatni **i**stadim **m**aylardan,*
***T**opmadim **i**linjlar **q**aytmayin [9].*

In the poem Phonographic tool: from the bottom to the top, a hidden instruction "destroy the continent" is generated by dialing the capital letters of each of the four syllables. Apparently, the speaker can sometimes also use the word game to convey secret information, realizing its secret purpose.

Word games like this are referred to as tavshih, muvashshah. Tavshih is an art name that refers to the beginning of the poem Egyptians, either bringing a few letters or words in between, when it is read with the addition of letters or words, the name of a person, any word, one or more lines, bytes or poetry is formed. And such an artistic work is called muvashshah [10]. This traditional art member is also three in my heart's" action" poemraydi:

Qarshilik. **Q**amoq. **Q**iynoq. **Q**asos. **Q**ilich. **Q**alqon. **Q**uyiladi **q**on **q**aynoq. **Q**attol. **Q**attiq. **Q**atag'on.

O'lar. **O'**kirar. **O'**ylar. **O'**pirilar. **O'**rtanar. **O'**nglanar. **O'**qir. **O'**ynar. **O'**sar. **O'**tar. **O'**rganar.

Quvonch. **Q**ahat. **Q**otadi. **Q**ora **q**ismat. **Q**ayg'u. **Q**on. **Q**adim **q**udrat **q**aytadi, **q**aytadi **q**achon, **q**achon, **q**achon?

Olish. **O**tish. **O**bodlik. **O**g'ir **o**jiz **o**lamga. **O**monligu **o**zodlik **o**monatdir **o**damga.

Notoqlar **n**omard, **n**okas. **N**echun **n**olish, **n**asihat? **N**ajot-**n**orozi **n**afas. **N**afrat-**n**asiba **n**e'mat.

In this prose poem one can see that the term "Kokand" is hidden. This is evident when reading by adding the first letters in the beginning of each line.

In the above poem, The Art of rabbit was formed on the basis of alliteration and assonances. It should be noted that the poet's goal from the application of this art is not only to become a game of words, but also to try to overestimate the meaning by using the inversion method of words, sentences or simple sentences under one subject. The composition of the words in the dictionary system of the Uzbek language and the diversity in the semantic field ensured the success of the poem based on the art of tavshih. The art of Tavshih was widely used in Uzbek classical literature. By this method, poets secretly expressed in artistic Egypt the names of their beloved, a historical person or a friend someone and others.

Three main aspects of the word game should be taken into account. These are the hidden expression, the aesthetic aspect of expressiveness, as well as the comic feature. In some types of word games, the expression "hiding" is the leader. To these, as noted above, the problem is a vivid example of muvashshah vs chiston.

From the Phonographic word game in the headlines in the field of publicism is played fertile. Because the titles are half-articles, in which, with the help of a few words, separate skills of expressing the main information, attitude are required, and for this, most often, different colors, Phonographic work are used:

«**O'zbekistonda er sotiladimi**?».

AVTORITET

Word games like these are three in many languages:

UROLOGiYA.

I ♥ Fergana. I ♥ Kamalak.

"Lexical-semantic game" is a word game, formed with the help of lexical means. There are a number of types:

"Polysemantic game" - is the pryome of making word games with the help of many meaningful words. Alim H.Razzakov particularly emphasizes that polysemic, homonym words actively participate in word games, this subtle virtue in words allows you to "play" words as much as you want, change the place of words and logical accents in a sentence, produce several different meanings by forming inversion [8]. Apparently, many meaningful words are considered a means of facilitating the possibilities of speech expression kengaytirishga. For example, to the question of

- *Qizlar kelishdimi?*
- *Kelishgani kelishdi.* – our teachers who answered.

"Homonymic game". The phenomenon of homonymy has been studied very widely in linguistics, and the formation of word games with the help of homonyms words is considered the most viable method. It is emphasized by linguists that omonyms and omoforms provide a characteristic manifestation of the askian genre, give tenderness to the artistic work as a methodological tool, their appropriate use is considered the skill of the soldiers [3]. These thoughts are the people's poet of Uzbekistan E.Vahidav, laced tilshonas Alim A.Nurmonovs also recognized separately: "the main feature of the Uzbek language – its richness of formative, plural words creates an opportunity for the development of the word game, the art of Askia, the genre of chicken (tuyuq) in poetry» [2;6]. For example:

Bo'rini tep, tishlab ot,
Toychog'im, sen otsan, ot! (Bola tarbiyasi. Iqbol Mirzo)

Ota-onam tinmay yer,
Tugab qolomasmikin Yer. (Chuvalchangning hayrati. Iqbol Mirzo)

Davraga eldan burun
Suqilib kirdi burun. (Turna. Iqbol Mirzo)

Since chicken is based on homonyms, it is considered a lyrical genre characteristic of Turkic literature, since Turkic languages are distinguished by richness of homonyms, as Alisher Navoi correctly proved in the discussion ul-lugatayin. Therefore, the basis of the word game on homonyms acquires national originality. Through such a word game, a certain idea is expressed in a compact form, impactful, goho yumoristic.

"Dialectal game" - the use of accent words for word games. For example:

– Qatta Rustaveli?
– Shotta Rustaveli!

In this communication, the pronunciation of the word Shota in the name of the writer Shota Rustaveli, similar to the word Shota (here) in the word of the Tashkent dialect, was the reason for its use as a colloquial tool.

"Antonymic game" - make a word game through contextual antonyms. For example, the word master Gafur Gulom uses the word ukademik as a rhyme to the academic word in one place, and as a result an okkazional ontonymic derivative is formed.

Raydi this type of word matchinnig much three as a methodical – poetic tool - "***game using Paronim words***". The pronunciation of Bunda is derived from similar units in the word game. It is possible to form unique word games by pronouncing words distorted with a specific purpose. As a result of this, in the speech situation, such phenomena as hemination (tiling vowels), graphon occur:

Rejissor tag'in elkam qoqdi.
*– **Barra kalla, barra kalla!** – деди.*
Rejissor yelkam qoqa-qoqa meni mashina taraf jo'natdi.
Men yo'l-yo'lakay raisimizdan so'radim:
– Rais bova, rejissor nima deyapti?
– Barakalla deyapti, barakalla.
– Barakallani shunday deydimi?
(T.Murod, "Otamdan qolgan dalalar" romani).

"Morphological game" - the use of suffixes in the formation of word games pryomi. There are a number of methods of morphological game combination: a) the method of the colloquial verb; b) the use of NOUN nouns; C) the method of terms; d) the method of suffixes.

A. By the method of the colloquial expression, the linguistic unit is transformed into another occasional unit. For example, "MAGISTRAxalTURA" the negative attitude in the title of the article is expressed on the basis of the word game. In this situation, sometimes a new conversational unit is invented, based on the task that the thing performs:

Clarivate Analytics indexed

Ushbu rasmni ***BASHARABUK****dan (Fasebook) yuborishibdi. Hoy tinib-tinchimagan odamlar-ey. Nimalarni o'ylab topishmaydi-ya. ("Rais buva" telegram ijtimoiy tarmog'idan)*

B. The use of possessive nouns is called antonomasia. Antonomy is the use of possessive nouns for special purposes, this type of word game is manifested in different ways. One of them is the integration of the names of the works into the composition of the text:

Salom, "Sevgilim-sevgilim", "Yulduzli tunlar"da oromimni o'g'irlagan "Sarviqomat dilbarim"! Sizga maktub bitishimga "Bo'rondan kuchli" bo'lgan otashin "Muhabbat" sababchi bo'ldi. Mana, "Qirq besh kun"dirki, tunlarim bedor. Nihoyat adog'siz "Hijron kunlari"da sizga ilk bor noma bitayapman... (Oshiq kitobxon maktubi, ijtimoiy tarmoqdan olindi)

Person names can also be used for word game purposes. For Example, Oldi Sottiyev.

Sometimes writers and poets give the names of the works, the names of the heroes of the work in the style of the word game: Otabek – Kumush, Anvar – Ra'no (Otabek – Kumush: ending with the letter k, beginning with the same letter; Anvar – Ra'no ending with the letter r, beginning with the same letter. Y.Solijonov); or "Ikki karra ikki – besh" (komediya, Komil Avaz);

"Game of terms" is a word game, which is carried out with the terms of one sphere:

Ishoqjon: Keling, birovning ***ko'chirma gapi****ga* mojaro qilib o'tirmaylik, yana sizning ***fe'l****ingiz* buzilib qolmasin.

G'anijon: Qiziqsiz-a, mening ***fe'l****im* har narsaga buzilaveradimi? Nima, mening ***fe'l****im* ***o'tgan zamon fe'li****midi*!

«Til» payrovi.

If we pay attention to the fact that the word games are expressed in word categories, then we also meet word games related to the word category: one and a half rabbits, three foxes, nine cows, five goats, twelve moths, ten years old. In this riddle genre word game our imagination is occupied by numbers. Why do we think that the rabbit should be one and a half or tuya twelve. Then we want to add the numbers and get a result. In fact, the problem is solved by determining the month: we will find out how many months the recorded animals give birth. Or" Aychinor " friendonida the girl from Nazarboy who wants to marry a young Aychinor thick evazi "ten Lamb, yigirmata Wolf, thirty Lion, forty Tigers, fifty bears, sixty-five ax, eighty sarka, ninety boards..."requires. The Wolf, The Lion, asks Bobur for help – one of the heroes of the rich saga, who did not afford to find the Tiger. Nazarbayev tells Bobur that a widower wants to marry a wife. Then the Babur reasoned the boy's words and told him that he was lying, that the woman he wanted to marry was a girl, not a widow. To prove his point, the young man proves by examples that at the age of ten he will be a Lamb, a wolf in a snake, a lion in a thirtieth, a tiger in forty, a stallion in Fifty, an axtaday in sixty-five, a pendulum in Eighty, a throne in ninety. Then Nazarbayev confesses both his old age and the fact that the girl wanted to marry Oychinor.

Apparently, in this text, a solution based on analogy and metaphor is given in the style of the word game. And this motivates listeners to resourcefulness, dullness.

"Syntactic game" is a speech game based on syntactic connection.

There is also a word game "method of inserting a link to the text", the types of this method are as follows: 1. In speech, the terms (Work, Song, film, show names, etc.) are used.the G.) to apply as a link. 2. The introduction of stable compounds (phrase, proverb, metals)into the text. 3. Adding an event to the text. For example:

Yodgor aka: Yaxshimisiz, *«Muqaddas»*xon?

Muqaddasxon: Keling, Yodgor aka, *«Men qishloqda yashayman »*, deb ko'rinmay ketdingiz?

Yodgor aka: «Nur qidirib» yuribmiz-da.

*Muqaddasxon: «Opa-singillar»*ingiz tinchmi?

«Asarlar» payrovi.

The most productive type of reference to the text is the "game of terms". Taking into account the fact that the terms "game opportunity" (linguistic unity predisposition, originality to the word game) and the fact that more than one information can be expressed, the appropriate use of it as a methodological tool requires observation, reasoning, linguistic experience and creativity from the speaker. Example:

Oxunjon: Erkinboy aka, hamma sizga nazar solyapti, ha deb ***shoh****ona* yurishlar qilaverasizmi, biror marta ***piyoda*** yurib qo'ysangiz-chi!

«Shaxmat» payrovi.

"Syntactic homonymy game". The introduction of syntactic integrals into the homonym relationship is explained by the term syntactic homonym in linguistics. Researchers of the Uzbek language Stylistics E.Kılıchev touched on the role of syntactic homonymy in the military text: "forms are the same, but different in meaning, word combinations and sentences are used in the artistic image to create word games, hangers, sometimes laughter," he says. Syntactic homonyms are also lexical, phraseological and morphological homonyms, such as the emergence of stylistic meaning in speech – within the framework of one form it is possible to express the sides of different content. For example:

Ko'rdim ikki tog' ora,
Suv lim to'la tog'ora.

(Shaharlik kaptar samovar haqida. Iqbol Mirzo)

There is also a word-game, which is formed on the basis of a word, in which there is a probability in the composition of different words one word is formed as a basis, and in the basis the text is formed:

Til yoxud tilsimlangan nasihat

Nima **til**a yoki **til**ama **til**ingdan topadirsan! **Til**ingdan tu**til**asan! Hozir shularni o‘qiyotgan bo‘lsang, boshqacha **til**da gapirsam ham, boshqacha is**til**oh ishlatsam ham, Senga **til**moch orqali o‘qi**til**sa ham **til**dan xoli bo‘lolmaysan! Avval ye**til**asan, keyin **til**la topganday unga qarab o**til**asan!

...Sening bu ahvoling ko‘rib ko‘ksim **til**im-**til**im bo‘lib **til**indi, qalbim si**til**di, yuragim **til**ka pora bo‘ldi. Sen shular uchun yara**til**ganmiding?! Ay**til**adigani ay**til**di, tuga**til**di.

(Shukur Jabbor, http://m.factbook.com>permalink).

Such a method is also used by comedians, and as a result, a word match is formed, which is formed on the basis of a word:

Ayniddin aka: Tark etmasdan dorda «ha, ha» deb tursangiz o‘sha ham tuyaga madorda.

Foziljon: Sotvoldi aka, xalq ichida yurishingizni ko‘rganlar baho berishyapti: «Bu juda taqvo**dor**!» deb.

Jaloliddin: Yuqoriga chiqmasa chiqmasin. Bilasizlar-ku bu juda jahldor. Yana birortasini ustiga langarni tushirib yuborib, ayb**dor** bo‘lmasin.

Sotvoldi: Foziljon, boshqalar dorda o‘yin namoyish qilsa, bir chekkada o‘ynamaysizmi, sizda iqti**dor** bor-ku.

Foziljon: Ayniddin aka, Jaloliddinni taklif qilsak, ikkita toshni qo‘lida, bittasini og‘zida tishlab, bir o‘yin ko‘rsatsin-a, ishimiz juda samara**dor** bo‘lardi-da.

“Dor” payrovi.

There is also a" word game based on analogy", in which the speaker puts a solution for the listener in the meaning of the riddle:" wear a talisman at night " (the moon climbed into the night sky).

Chiston puzzles are also considered to be a word game based on resourcefulness. The artistic art that is used in the riddles is a metaphor (metaphor). For example: a bag, a lump in a bag, a column in a bag. Three signs of what is hidden in this text are given on the basis of three metaphors. The one who finds out that the text is talking about the niece is the winner in the intellectual competition. Only the appearance, features of what is hidden, information is given, but the name of anything is not recorded. In this situation, the person who is looking for a word game solution will find a solution only by remembering the characters inherent in what he knows.

Conclusion

Well, the fact that the word game is based on a variety of stylistic primes, the color is expressive and interesting, it differs from other types of speech as the appearance of speech related to different levels with its contextual aspects. And this requires a special study of this type of speech.

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THE STUDIES ON THE ISSUE OF THE SEMANTIC AND FUNCTIONAL FEATURES OF NICKNAMES IN KHOREZMIAN DIALECTS

***Abstract**: This article reveals the collection, classification, the semantic and functional features of nicknames used by people, the Uzbeks living in the Khorezm region of the republic of Uzbekistan speaking in ughuz and Kipchok dialects of the Uzbek language. Moreover, the lexical-semantic features of the nicknames developed from English, French and German words are analyzed.*

***Key words**: Khorezm diallects, ughuz dialect, kypchok dialect, anthroponym, nickname, the nicknames developed on basis of the borrowings from European languages, the study of nicknames, Uzbek words, English words, French.*

***Language**: English*

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Introduction

The linguists have always been in search of effective methods of a language study in the world. Significant success has been achieved in this process. So far, one of such achievements is undoubtedly the emergence of an anthropocentric paradigm in linguistics and its rapid development in various forms and directions [1.3-16]. The anthropocentric approach to the study of nicknames in Khorezm dialects in the direction of paradigm also provides valuable information about the history of the Uzbek language and people.

The Uzbek language is one of the oldest and richest languages in the world, a symbol of national identity and independent statehood, invaluable wealth of enlightenment of the nation, a great value that plays a very important role in the political, social, spiritual and educational development of Uzbekistan [2]. Linguistic units provide information about the national thinking, way of life, customs and traditions of the people. In particular, the proper nouns are the units that carry the most part of information. However, some types of the proper nouns in the Uzbek language have not been studied or analyzed much so far. Such issues include the problem of studying nicknames [3]. Indeed, in today's era of globalization, it is natural that every nation, every independent state should give priority to ensuring their national interests, in this regard, first of all, the preservation and development of their culture, ancient values, mother tongue [4].

The President of the Republic of Uzbekistan Shavkat Mirziyoyev spoke about the peculiarities, dialects, historical development of the Uzbek language, the need to increase the effectiveness of research on its prospects, radically improve the quality of training, and for this we should invest all possible financial resources.[5] Therefore, the study of Khorezm dialects can give great results for linguistics,as it is rich for lexical fund and is one of the unique sources for the development of the Uzbek literary language. Studying the nicknames in Khorezm dialects reveals the essence of nomination rules specific to this dialect and provide valuable information about the different linguistic aspects of the dialect.

Materials and Methods.

The old language the word ‘laqab’ meant ‘penname, surname’. In the past, nicknames also meant surnames. Therefore, the word ‘*laqab*’ from

Arabic is defined as in followings according to the "Explanatory Dictionary of the Uzbek language: 1. An additional name given to a person as a joke or ridicule, according to a feature. 2. *Old form*: penname 3. *Old form*: surname 4. The name given to animals [6.492]

According to E. Begmatov a nickname is a name given to a person, according to a certain sign or feature of his appearance or character, according to his social status or lineage. Nicknames are also proper nouns.[7.12] Indeed, a nickname is a name that expresses different characteristics of a person. A nickname is a word used to call a person at different stages of a person's life to refer to different traits and qualities of a person. A person is known and distinguished by a circle of people with the same name. A nickname is an informal additional name that serves to distinguish one person from another in society or to express different personality traits of an individual.

Among the current problems of Uzbek anthropology is the study of nicknames. Because as we turn to ancient times, the difference between names and nicknames diminishes and their role as a means of naming nicknames in general increases.[40.80]

The fact that nicknames belong to the category of the proper nouns and the onomastic scale, is reflected in the following: 1) The nickname serves to distinguish the individual from others and is associated with the individual concept. In this respect it presents the features of the proper nouns; 2) Sometimes the nickname is used without the name of a person by itself. For example,the following lines from *Boburname* by Zahiriddin Babur can be an example of calling people by their nicknames: "Robiya Sultanbegim was the eldest of all, they call him Korakozbegim (Boburname, 75); The second was Saliha Sultanbegim. They used to call her Okbegim (Boburname, p. 76; 3). The nickname is often acquire the feature of the proper noun used with the name of a person adjacently: Avazmurod *Soqov(mute), Qulmat kor(blind), Badal novcha(thin)* and etc. [8.10].

It is expedient to study the language problems in the region, including dialects and their various features for the linguists in the Khorezm region. There are hundreds of nicknames, sucha as *küll(i)kçi// güll(i)kçi* - "hired worker", *nalçi* – "seedling grower", *ya:rimçi- "a* farmer working on the basis of partnership", *elt(i)* - "an woman who is active in social life of the ethnic group, a woman leading women in social ceremonies, i.e. weddings and funerals; mourner a woman who washes the dead women", *taläkçi* – "a storekeeper or barmen at weddings who provides and distributes food and drinks" that are available only in Khorezm dialects. As they reflect the dialects of the region, the local experts are usually well aware of them. For example, the nickname *ko`za (jug)* is used for fat, stout, "insatiable" people, e.g. *Kadam ko`za*. The word "*ko'za*" (a large jug) defined, as usual, a vessel with a voluminous jorum and narrow neck, intended for storing liquids, which, like the word "hum". It was probably used to determine the meaning of "a hole, groove". Moreover there are some expressions as "*buloqning ko'zi", "derazaning ko'zi*" in the Uzbek language which the metaphorical use of the word "*ko'z*" (eye) is observed in. This feature confirms the hypothesis. [9.27].

The nickname *khurmacha(urn)* is also used as a synonym to the nickname expressed by the word *ko`za(jug)* in Khorezmian dialects,. E.g. *Davlat Khurmacha (urn).The nickname is given for the person's obesity.*

In most cultures, the rooster has become a symbol of the Sun and pride. The rooster is also a fighting fowl.[10.159]. A polygamist, as well as a warlike man are given the nickname *kho`roz(rooster)* in Khorezm dialects: *Shokir kho`roz, Boqqi kho`roz*.

It is no coincidence that the issue of "focusing research on innovative solutions to existing problems in the social sphere and the economy, including at the regional level, and extensive research on the integration of sciences" [11] was set by our government.

It is important to study the principles of naming people by the nicknames which are an integral part of the richness of our language, the factors that cause linguistic changes, the functional features, the motives for the formation of names belonging to a semantic group, the relationship of regional nicknames, the statistical and areal studies of nicknames, and the linguistic models typical of regional dialects in Khorezm. The need to study these aspects is very pressing.

To study the basis for the emergence of nicknames in Khorezm dialects, the identification of existing motives and other linguistic factors, the study of structural-semantic and functional features identify the role of nicknames in the formation of the semantic structure of anthroponyms existing in the dialects of Khorezm region. It is important to classify and describe nicknames, and determine the impact of nicknames on the onomastic level of the Uzbek language and Khorezm dialects as well.

The purpose is achieved by performing tasks such as, collecting materials of nicknames specific to Khorezm regional anthroponyms, determining their specific features; collecting the nicknames in Khorezm dialects and giving their scientific description; determination of the degree of nicknames from Oghuz and Kipchak regional dialects in the onomastic system of the Uzbek language; showing different structural and semantic features of nicknames; grouping nicknames according to naming motives; studying the linguistic and non-linguistic factors in the formation of nicknames; determining the relation of the semantics of nicknames to the concepts of denotative, nominative and motivational meaning.

It is necessary to collect them from the materials of the regional anthroponymy of Khorezm region, as well as from sources, dictionaries, scientific and artistic texts, lists and pages of other publications reflecting the nicknames of the region for the study of nicknames in monographic plan. It is also necessary to classify and analyze the lexical-semantic and structural features of nicknames found in the materials of dialectological expeditions and recorded in the language of dialects and in field practice, to study the role and importance of nicknames in the onomastic system.

Discassion.

Anthroponymy is also a linguistic unit of onomastics, just like a toponym or zoonym, which includes specific units. For instance, N.V. Podolskaya, thinking about the term anthroponym, noted that it includes *a name, patronymic, surname, nickname, pseudonym, kryptonym (nickname, first name, name), andronym, hyneconym, patronymic* [12.31].

In E. Begmatov defines the name as the main category of anthroponyms, and the nicknames, preudonym and surnames the "additional nominative category" in his thesis of dissertation for candidacy of science.[13.] Because a name is the main means of naming a person, while others perform additional functions that complement it in the anthroponymic nomination.

E. Begmatov's dissertation on "Anthroponymy of the Uzbek language" was the first study of the historical-ethnographic, linguistic features of anthroponyms in the Uzbek language [13]. Although the study is devoted to the linguistic study of anthroponyms, it also examines the history, ethnolinguistic and sociolinguistic features of anthroponyms. It also provides an extensive analysis of Uzbek nicknames, pseudonyms, surnames and patronymics. The nicknames are classified into 10 groups according to their meaning and motive in the dissertation. [13.13-14].

While studying Khorezm regional anthroponyms, S. Rakhimov analyzed the occurrence of nicknames in the language of the Khorezm population into 5 groups [14.22-23]. R.Khudoyberganov's research also contains some comments on the nicknames in the names of Khorezm people [15.26].

There are also a number of studies on nicknames in Uzbek, for instance A.Ishaev [16.76-77], R.Sapaev [17.78-80], M.Rashidova. In particular, M. Rashidova was engaged in collecting Uzbek nicknames. As a result of these studies, a single pamphlet was published by her [18].

E. Begmatov includes nicknames among several other types of anthroponymy and explains the term nickname as "a name given to a person by those around first name, expressing the character and characteristics of the person, mainly used together with the name of the person" [19.44].

Ya.Avlokulov notes that the units of anthroponymic micro-scale are initially formed by names, nicknames, pseudonyms [20.19]. He also published an article on the characteristics of nicknames [21.133-137].

Nicknames have long been of interest in Russian linguistics as well [22.526-528; 39,40]. In recent years, nicknames have been studied in almost all of the works on the anthroponymy of Turkic languages [14, 23, 24, 25,26].

There are also works in which the nicknames are the object of a special anthroponymic research. The research outcomes achieved by the Azerbaijan linguist A.M.Pashaev [27.10] and Yu. N. Khojalepesova are the most referred among them [14,28]. According to A. Pashaev, nickname is an additional name attached to a person's name that refer to a person's character or profession.

In addition to above mentioned, there are a number of books, numerous articles on nicknames in the languages of different peoples. The observations of A.M. Selishchev [29.136-141], VK Chichagov [30], GV Tropin [31], VA Gordlevsky [32.153-161] in Russian linguistics and the Uzbek linguist A. Ishaev [33.229-234] are noteworthy among these investigations. In general, the linguistic status of the nickname and its study are described in detail by E. Begmatov [34.49-70].

It should be noted that no dissertation on the nicknames as an object of research has been conducted in Uzbek linguistics to date even it has been considered as an important research field while studying the anthroponyms in Turkology and Uzbek linguistics. One of the urgent tasks today is to take measures to create a national corpus of Uzbek language in electronic form, which will contain all the scientific, theoretical and practical information about the Uzbek language [35.5]. Surely, in order to create a perfect national corps, it is necessary to study in depth the dialects of the people, their nicknames, and its results will contribute to the improvement of the national corps.

Result.

About half of the word stock of the Uzbek language consists of Turkic words and in this condition, the rest contains Iranian, Arabic, Mongolian, and over the last century, Russian and Western European languages through Russian, even if in small numbers, Hindi, Urdu, Pushtu, Chinese words and words from other languages [36.268]. Therefore, in Khorezm dialects there are many nicknames formed on the basis of words from these languages. Below we focus on the semantic and functional features of some nicknames formed on the basis of borrowings.

Nemis is a word in a nickname *Hasan nemis*. The word *nemis* is a dialect version of the word *немец* from Old Russian which means German, while as a nickname it means "muttering, vague speaker", "dumb", or "foreigner". The word *немец* is also used in Russian to name "the people who make up the indigenous population of Germany." The word *немец* was transferred from Russian into Uzbek in the form of *nemis*. The word *nemis* not only means the name of the nation, but also means "harsh", "cruel", "merciless" in Uzbek dialects, This meaning was formed in our language as a result of the savage actions of the Nazis during World War II. The word *nemis* in the anthroponymic unit *Baqqi nemis* (actually *Bahodir nemis*) is the given nickname for this person for his harshness and cruelty. The word *nemis* in the anthroponimic unit *Jummi nemis* is a nickname for a man whose name is *Jumanazar*. The nickname is based on the anthropological similarity or the appearance of the person to the people belonging to German nationality. Another case is that the word *nemis* is used in the sense of a professional nickname *Hasan nemis* for a German language teacher named *Hasanboy*.

It should be noted that the nicknames based on the name of the nation are common in Khorezm dialects: *Samandar Yapon* (nicknamed because his brain worked as well as the Japanese), *Rustam Tojik* (nickname given for his nationality), *Bozorboy Kazakh* (nickname given for his nationality), Ozod Kazakh (whose nationality is Uzbek, but took the nickname because of his resemblance to the representatives of the Kazakh nation).

Fransuz is a word which originally means "French people, the main, indigenous people of France". It is commonly used as a nickname for a teacher of the French language in the dialect: *Shokir Fransuz*. In contrast to the moral traditions of the East, some places acquired unofficial names such as *Fransya, Malenkiy Parij(small Paris)* with negative meaning in terms of the number of prostitutes in the places. There is a need to determine the linguistic status of these unofficial names of places. Whether they are descriptive expressions or nicknames for place names will be determined in a special research process.

Paghdon is a word in nominative construction *Paghdon amaki*, a name of an Uzbek film character in the film *Yoz kunlarining birida* (One Summer Day) can also be interpreted as a nickname. The children called him by this nickname in their own language, as he was distinguished from others being known as a French teacher who has been to France and used French words and phrases in his speech.

Shlyapa is a word derived from German and means "hat", "cap", "a hat protecting from the sun". The word has always been used as a nickname in the form of ***shlapa***, in accordance with the phonetic laws of the dialect without sound *y*, in relation to a person who always wears a hat: E.g. *Shommi shlapa*

Galstuk is a word derived from German *halstuch*, which actually means "neck-scarf", "a cloth or ribbon that is passed under the collar of a shirt and tied with a knot on the front",or "tie". Mainly intellectuals, educated staff, people working in government agencies, or the officials wear ties in accordance with the Uzbek culture. In remote villages where there are few educated people, the fact that one intellectual always wears a tie even outside the workplace has earned him the nickname of *galstuk* which means tie: *Kadam galstuk.*

Vokzal It is common for village people to call a person by a nickname that lives in rural places but work in the city on basis of the place of work or occupation. For example, the word "*vokzal*" in the *Hakim vokzal* unit is derived from the English word ‘vauxhall’, which means "a building, a set of buildings designed to serve passengers and transport" [37.467]. A man named Hakim acquired the nickname *vokzal* because he worked at the Urgench railway station in the 70th of the last century.

‘Velosiped’ (bicycle) is a word from French and transferred to other languages, [fr. velocipede <lot. Velox fast + pedis - foot] means “two- or three-wheeled vehicle driven by pedals”. the word ‘bicycle’ is used in the form of *velosiped* in Khorezm dialects which undergoes sound changes and occurs in the forms *valasapit, valsibit, velik, valli*. It is also the name of the *shayton arva/shayton arava(Devil’s chariot)* in the language of the older generation. For this reason the man who has ridden a bicycle all his life is nicknamed *Norvoy valli*. While in some parts of Khorezm it is common for women to ride bicycles, in some of our villages it is not allowed for people of this gender to ride bicycles. The cycling of some violent women in such areas led to the formation of nicknames such as *Kurvan valli, Gavar valli*.

Shpion The lexeme from German word *spion <spahen* means "observe", “spy”, “scout”, or a person who secretly steals state and military secrets and transfers them to another country, to the enemy, detective. The word *shpion* is also used as a nickname for a person who learns someone's secret and passes it on to another person. There is another nickname with this meaning ‘quloq’(ear). For example, *Otti shpion* is represented Said Ahmad's comedy *The Bride's Revolt*, the protagonist Sotti asks "What are you talking about?" and the other sister-in-laws answer ‘Shpionlar haqida’(About spies) It is not difficult to guess that the word is actively used in the Uzbek literary language and dialects as a means of nicknames and satire.

Kompyuter *[Eng.* computer < *Lot.* computare – calculate, count out] lexeme means “electronic computer with a complex device [38.397]”, and has been used as a nickname for people with well-functioning brains, knowledge, and strong memory: *Odil kompyuter*

Doktor/dokhtr *[Lot.Doktor - teacher, teacher]* lexeme which denotes a medical professional with a higher education who treats patients, doctor, candidates of science who have defended their doctoral dissertations or represents the higher academic degree awarded to professors and the scholar who received that degree and in Khorezmian dialects this word is used as a nickname for doctors // doctor in the form of *doktor*: *Ergash doktor, Odil doktor*.

Some nicknames refer to a person's character, and over time the anthroponym used with that nickname acquires a typical feature, that is, the same nickname is used to describe people who have a certain character trait or have created a situation. The nicknames are used to describe the person figuratively as the phrases. For example, the nickname *Hasan qayghuchi* is used for a person who worries about something insignificant, who gets depressed in everything; *Matchon suqilish(interfere)* a man who interferes in everything as he "sniffs something with his nose", *Kodir lofchi* means a man who exaggerates, overstates, and hyperbole the events; the nickname like *Karim bangi* is used in relation to a person who drinks a lot of tea.

People who are known among the people in some respects often have nicknames in Khorezm dialects. For instance, the study of nicknames of artists such as *Jummi Shikh, Anash Holpo, Bi:ka no's, Matrasul surnaychi*, *Maqsud ge:chi* also provides interesting information about the names.

Entrepreneurs operating in trade, production or services in Khorezm are often called by their nicknames: *Amin Mulla, Nazar Sori, Arslan O'shshi, Boqqi Gimjimo, Alyosh Kraskachi, Latif Kalta, Polvon Kalta, Madirim Kal, Ilhom Biznes, Botir Market*.

There are nicknames that are used alone, without a person's name: *Khurmacha*, *Chovit*. We can come across with similar cases in the language of some of the characters in a famous novel 'Satan' by Tahir Malik as *Kesakpolvon, Chuvrindi*. In general, criminal authorities have always had their own nicknames as *Khuddi razbor, Kadam krakh, Nemmi qora*

Conclusion.

The semantic structure of nicknames, the types of motivational meaning that make them up, is unique. Therefore, when the meaning of nicknames is compared with the appellate lexicon, it should be proved on the basis of analyzes that they are mainly encyclopedic meanings. More information about nicknames can be obtained by analyzing them in terms of anthropocentric paradigm trends, particularly in terms of lingvoculturology and sociolinguistics.

Theoretical inference, scientific analyzes on the motivational meanings, structural-semantic and functional features of nicknames in this article can be widely used in research on Uzbek lexicology, textbooks and manuals on Uzbek onomastics, as well as ethnographic and ethnolinguistic, sociolinguistic research. At the same time, the collected and under research materials will serve as a basis for the creation of an annotated dictionary of regional nicknames.

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DEVELOPMENT OF INNOVATIVE THINKING SKILLS IN HIGHER EDUCATION STUDENTS

Abstract: *The article examines the role and place of modern interactive methods in the development of creative thinking of students, increasing requirements for the use of interactive methods, innovative technologies, pedagogical and information technologies in the educational process. The organization of the stages of the didactic process in a certain sequence describes the organization of the educational activities of students using the selected teaching methods in accordance with the tasks set for the topic.*

Key words: *creative thinking, humane communication, active interaction, interactive method, educational goal, independent thinking, science, technology, technology.*
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Introduction

Today the education of young people in our society is one of the most pressing problems. Almost all of the tasks set in principle create new requirements, and when solving them, it is not enough for society to act only on the basis of existing experience. “Another of the most important and enormous tasks facing us today is to educate a new generation that will replace us with their ideas, worldview, modern knowledge and thinking. [one] "

One of the main issues in the field of education is the development of creative thinking in students - one of the criteria for their development into full-fledged human beings. In addition, the formation of creative thinking in students is one of the important factors in their development into devoted, independent and creative thinkers, moral, conscientious and strong-willed people.

The main part

The national training model, developed, recognized and implemented in our country by the First President I.A. Karimov, makes it possible to train creative and competitive specialists as an integral unit of the individual, state and society, continuous education, science and industry [1].

Today, interest in the use of interactive methods, innovative technologies, pedagogical and information technologies in the educational process in the educational process is growing day by day. One of the reasons for this is that while traditional education has so far been focused only on obtaining ready-made knowledge by students, modern technologies allow them to find, independently study and analyze the knowledge gained and even draw conclusions. to produce them ourselves [3].

Innovative technologies are a pedagogical process, as well as innovations and changes in the activities of teachers and students, the full use of interactive methods in its implementation. Interactive methods are a community, that is, they are methods of pedagogical influence and are an integral part of the educational content. Their peculiarity is that they are realized only through the joint work of teachers and students. [5].

The choice of technology to achieve the desired result remains with the teacher, depending on the amount of knowledge of the students, the nature of the group and the current situation.

The construction of the stages of the didactic process in a certain sequence means the organization of the educational activities of students using the selected teaching methods in accordance with the tasks set for the topic. When considering their effectiveness, it is important to see how the school achieves the goal set by the society through the interaction of teacher and student, which can regulate and guide the learning process. Or teaching methods is a concept that is directly related to a specific practice [4].

Interactive learning allows you to solve several problems at once. The main thing is to develop students' communication skills, help establish emotional connections between students, teach them to work in a team, listen to the opinions of their peers, and complete educational assignments.

An innovative approach involves not only the creation of a new creative product, but also effective thinking and its development during its implementation. Each student who sets a goal and looks for ways to achieve it is based to some extent on their own worldview, thinking, thinking, imagination and understanding, as well as on needs that represent personal or social interests. At the same time, his goals, desires, aspirations, interests and needs are revealed, and, most importantly, these tools are considered important factors in the development of innovative thinking skills. It is based on the integration of education with science and production in the development and improvement of students' innovative thinking skills. Involving them in real innovative thinking (in the process of writing master classes, seminars, conferences, open laboratories, term papers and theses) brings educational activities as close as possible to the future career direction, which leads to their adaptation throughout their careers. In the educational process, which is carried out directly in higher education, it is important to focus on the integrated use of new innovative educational technologies.

Let us consider which educational technologies are most effective for the formation of such competencies. Educational technologies are understood as reproducible methods of organizing the educational process that allow achieve diagnostically set goals. Explanatory and illustrative teaching is considered a traditional educational technology, and those technologies that have been developed and become actively applied in the education system since the middle of the 20th century, are usually referred to as innovative (although their novelty is relative: for example, the origins of problem learning technology are still in the dialogues of Socrates with his students). Many innovative educational technologies over the decades of their existence have proven their effectiveness and acquired a certain flexibility, Bulletin of the FGOU VPO MGAU No. 4 / 1'2012 27

General problems of vocational education having managed to adapt to changing socio-economic conditions.

As one of the most effective directions of development of innovative thinking of students can be modeling educational and professional activities based on the technology of contextual learning [3]. This technology provides, first of all, a solution to the problems of full-fledged professional training a competent specialist. It is integrative in nature and can include elements of a wide variety of educational technologies, for example, problem learning, project learning, modular learning, etc.

A specific feature of the technology contextual learning is a professional-activity orientation, which provide the following factors:

• orientation of the training material to the solution tasks of professional training of a specialist;

• the complex nature of profiling, covering all links of the course with the relevant disciplines, coursework and diploma design and other types of research activities of students;

• preferential solution on practical and laboratory and practical classes of applied problems that are necessary for the student to master the chosen profession;

• orientation towards mastering a profession by a student according to an optimal individual program, taking into account his cognitive characteristics, motives, inclinations and other personal qualities;

• focus on the development of a specialist's creative personality, capable of independent professional activity;

• creation of conditions for the professional and personal self-determination of the student: development of professional and value orientations, the formation of a professional position, the formation of needs and readiness to professional and personal self-improvement.

The main purpose of using this technology in an agricultural engineering university is to provide conditions for the professional development of the personality of a modern, competitive, competent specialist, ready for a full-fledged professional activity in the field of agricultural production. Within technology contextual learning, the content of a student's educational activity is selected not only in the logic of science, but also through the model of a specialist - in the logic of future professional activity, which gives integrity, systemic organization.

The role of creativity in human life can hardly be overestimated. In addition to the practical benefit to mankind from the innovations that appear as a result of the creative process, it is important to emphasize the axiological significance of creativity: its main value is that it is a necessary condition for the self-actualization of the individual in his professional activity. According to the humanistic theory of personality (A. Maslow), self-actualization is understood as a person's realization of his potential, the use of his talents and abilities, the desire to achieve the peak of his capabilities [2]. The ability to carry out creative activity is called creativity, which includes flexibility, fluency, originality of thinking, the ability to “see” a problem, to develop a hypothesis, etc. Creativity is inherent in each person to varying degrees, and, as you know, creativity is not formed, but released. Therefore, one of the most important priorities of university didactics in modern conditions is precisely the release of students' creative abilities.

An important step in the modernization of the vocational education system was the introduction of a competence approach, according to which professional competence is an integral characteristic of a graduate, and the structure is distinguished by a number of competences - general cultural and professional. Under the competence not only the totality of knowledge and skills is understood, but also the experience of a person, her value orientations, positions, responsibility and readiness to realize her professional potential in practice, i.e., competencies include not only cognitive and operational and technological components, but also motivational, ethical, social, behavioral aspects. In the Federal State Educational Standards higher professional education, including number in the direction of training "Agroengineering", requirements for the results of the development of basic educational programs are presented in the form of a set of competencies, many of which require developed innovative thinking (although this relevant mostly for masters, but so no less, the preparation of bachelors requires the ability and willingness to solve professional.

The pedagogical process takes place in the pedagogical system. The pedagogical system consists of several components (student, teacher, student, goal, results, learning content, teaching aids, methods, techniques and technologies of the educational process). The relationship between the formation and development of innovative thinking skills among students is mainly carried out in the educational process. The effectiveness of this process is determined by the reliance on the sound system. Because through a systematic, planned, targeted, organizational and integrative approach, students develop and improve the ability to think innovatively. As a result of this process, the possibilities for the implementation of the assigned tasks will be expanded. [6].

Conclusion

In conclusion, it can be noted that the use of interactive methods in the educational process is the formation of creative thinking in students, the achievement of the unity of teaching and upbringing, the development of students' interest and responsibility for the educational process, and an increase in cognitive ability. activities. Formation of the need for education and further increase the effectiveness of moral education.

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ANTHROPONYMS IN FOLKLORE AND THEIR ETHNOCULTURAL FEATURES

***Abstract**: This article deals with examples of anthroponyms and their ethnocultural features in folklore based on the materials of the Uzbek language. It is argued that the emergence and change of people's names or famous horses is directly related to the historical development of the language and the socio-economic life of the nation.*

***Key words**: folklore, anthroponym, ethnoculture, language, fairy tale, epic, hero.*

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Introduction

From time immemorial, people have sought to name them with specific and appropriate words to denote, recognize, and express not only themselves, but everything around them. This has become a necessary and important need for human life activities. Today, the horses of men and of all beings, and especially of famous horses, are among the essential features of every language.

The emergence and change of people's names or famous horses is directly related to the historical development of the language and the socio-economic life of the nation.

The main

Every country, ethnic group and even every region in the world has a custom of giving a unique name, in harmony with its language, cultural and social system. Therefore, horses in the language of each nation reflect the lifestyle, level, ethnicity of that nation, as well as their image and traditions. This aspect is evident in the structure of anthroponyms of folklore.

In folk tales and epics, the names of heroes who defend the interests of the people always carry a positive meaning. For example, *Muqbil Toshotar, Kilich Batir, Odilkhan, Dono, Sahibjamol*. On the contrary, the notion that the people express their anger and hatred towards negative heroes is also imposed on the names: such as *Maqotil, Mudbir, Egri*.

Usually in fairy tales the characters are not fully described in the exposition. Their unique names mean pictures and biographies. That is, the appearance, social status, spiritual world of the protagonist are understood by name. Accordingly, we classified them as follows:

1. Names representing the image of the hero: *Karasochpari, Zumrad, Marjona.*
2. Character-name names: *Egri and To'g'ri, Malikai ayor, Aldarko'sa.*
3. Profession and profession names: *Yulduzsanar, Daryoboglar, Eshmurod shepherd, Muqbil toshotar.*
4. Names denoting nation and territory: *Like Momir and Samir* (names of Turkmen boys).

Emphasis on names, thereby promoting the main idea, revealing the inner world of the heroes is a characteristic feature of folklore. In particular, the folk tale "Odilbek and Khurrambek" describes that the king had two sons from two wives, Odilbek was always a just man who cared about the welfare of his people, and Khurrambek was a self-interested young man. At the end of the story, it is said that Khurrambek was a victim of his own desires, and Odilbek was chosen by the people as his king. The episodic characters of the fairy tale, Gulparizod and Dilorom, are also very well described in their own names.

The fact that the protagonist of the fairy tale "Zafarshah" Zafarshah's father Zamonshah (the harmony of the names of parents and children), the protagonist Zafarshah at the end of the fairy tale (Zafar - victorious) also shows that our wise people pay special attention to the names of their heroes.

Names are widely used as discourse relevance in works of folklore other than fairy tales. In particular, in Uzbek, Kazakh, Kyrgyz, Uyghur and other Turkic peoples, names with the words "day" and "moon" are widespread, and through them certain goals are set. Among them are Oysulu and his son Kunbotir in “Oysuluv” and Kuntugmish, the protagonist of “Kuntugmish”; Kunkhan and Aykhan in the epic "Yusuf and Ahmad", the epic "Aymon-Shulmon" in the Kazakh folklore, the names of the Moon and the Sun in the "Kunekey Kyz"; images of Kyrgyz Oychurek, Oykanish, Tolgonoy in Manas; Oysanam (“Strange Lover”), Oysulu (“Forty Girls”) and others in the Karakalpak folklore can be a clear proof of our opinion.

The main name of the protagonist of the epic "Alpomish", the heroic epic of the Uzbek people, is Hakimbek, who is called Alpomish (Alp - "hero") for his bravery and courage. The names of the negative heroes in the epic are called by ugly, unpleasant names like themselves (such as Surkhayil kampir, Boybori).

If we look at the origins of the people’s sheriffs, their origins go back to ancient Rome. It is known from history that mostly place names were attached to sheriffs. As a result, our ancestors left their names in history with the Khorezmi, Hoqandi, Fergani, Tashkent sheriffs. Later, during the Russian regime, sheriffs changed surnames. In the middle of this millennium, the surname became a tradition in all European countries. After the abolition of serfdom in Russia in 1861, all citizens had their own names.

In ancient times, according to the traditions of the Turkic peoples, man had to know his 7 ancestors, that is, his family tree. Those who did not know their seven grandfathers were considered misguided, that is, misguided, and discriminated against as slaves. For example, every Turkmen carried a document with the names of his seven fathers next to it. In fact, it is a very good habit, and modern genetic science confirms that the biological characteristics of each person (ability, talent, temperament, hereditary disease, etc.) are certainly repeated in one of the seven pinks. Our ancestors knew this fact 1.5-2 thousand years ago, created their own family tree (the origin of people belonging to a particular lineage) and reflected it in the records. In such genealogies, the names of individuals belonging to the same ancestor who lived for centuries were written one after the other and passed on to future generations. These inscriptions are stored in special leather boxes. These genealogies are still kept in some families, as well as in the manuscript fund of libraries. These served as specific surnames and were used as legal documents only when necessary. In everyday life, and in conversation, people are addressed by adding different interpreters to their names. Like Eshmat aka, Rizvon aunt, Ergash butcher.

It is also important to note here that the commentators, such as ‘khan’ (lady), ‘bek’ (begim), which are now added after the names of some women and men, were in fact dynastic words. Because we know from history that our great ancestor Amir Temur married Bibikhanim (Saraymulkhanim), a descendant of Genghis Khan, and some of his children and grandchildren also married Mongol daughters of Genghis Khan. Thus, in the Timurid dynasty, there were brides from the Genghis Khan dynasty and brides from the Timurid dynasty, as well as children from the Genghis dynasty whose mothers and children inherited from the Timurid dynasty. In this way, both father and mother gave birth to sons and daughters of the Timurid dynasty. As a result, there was a need to distinguish the nobles of the Palace from each other. Thereafter, it became lawful for women of the Genghis Khan dynasty to be called "ladies" and to have a "lady" interpreter in their name, since they were of the khan dynasty. The word "begim" (bek means "amir" in Arabic) was added to the names of women of Timur's generation.

Even in our modern language, the "khan" part of the word "lady" is added to women's names. The suffix "khan" is also added to the names of the descendants of sayids and khojas, regardless of gender, and in some places, especially in the Fergana Valley, to the names of men in the sense of respect, each of which has its own history.

Among the Uzbeks and other eastern peoples, knowing the seven Pashtuns and creating a family tree served as a surname. In this case: name-father name-grandfather-grandfather-grandfather-grandfather-grandfather-grandfather-grandfather - the eldest grandfather (sometimes a nickname, place name) is expressed in the order of lineage. For example, the genealogies of Zahiruddin ibn Mirza Miranshah ibn Amir Temur Koragon or Hotam bin Tay bin Qahlon bin Rasan bin Nahshab bin Qahtan bin Hud and others are fully recorded in official documents. In oral speech, only names and nicknames are used: Zahiriddin Muhammad Babur, Hotam is sometimes called Hotamtoy (the name of a tribe in Thai-Yemen, Hotam Toyi belongs to this tribe).

Until the 50s of our century, the documents proving the citizenship of people (marriage, birth certificate, passport, etc.) were almost never kept. In conversations, the words "son" and "daughter" are given after the name and father's name (sometimes the title): Mirsobir Mirsadiq is the son of Haji, Ominahon is the daughter of Ismail Qori.

At the beginning of the century, in the 20-30s, the surnames of Uzbeks were mainly in the form of Kamil Balikul oglu, Ozoda Ahmadjon qizi. It was also common for intellectuals to make names by the suffixes - zoda (Hamza Hakimzoda), iy - viy, -iya, -viya (Abdullah Qadiri, Muzayyana Alaviya). Sometimes there are cases of application without any additives: Osman Nasir, Sultan Jora, Ghafur Ghulam.

As a result of the spread of Jadidism (innovation) in Central Asia in the early twentieth century, Islamic culture began to be enriched with elements of secular culture. Another important innovation was the introduction of national expressions representing genealogy. It was a transition to a surname common to the whole dynasty by adding Persian -zoda and Arabic -iy suffixes to the father's name. It is not surprising that Sufizoda, Laziz Azizzoda, Hamza Hakimzoda Niyazi were brought up under the influence of progressive ideas of Jadidism. Or the Uzbek surnames such as Abdulla Qodiri, Sherkon Qodiri, Yunus Rajabi, which are still going on, are a bright proof of our opinion.

Conclusion

The formation of the surname from the addition of the suffixes -zoda, -iy to the lineage is a proof that all Turkic peoples (Uzbek, Azerbaijani, Uyghur), as well as the Tajik people have the same culture, customs and historical roots. Hakimzoda, Shaykhzoda, Tursunzoda, Sofizoda, Azizzoda are the children of one nation, which has always been blood relatives. Unfortunately, the Turkic peoples, who had a common history, culture and language, were significantly separated from each other by the Soviet government.

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THERMAL STERILIZATION AND STORAGE TIME OF CULINARY MEGONO LACTOGENIC SAFETY

***Abstract**: The traditional culinary heat test of megono lactogenic cans has been carried out. This study aims to determine the optimal temperature, sterilization and storage time. Sterilization was carried out at 100°C and 121°C for 5 minutes, 10 minutes, 15 minutes and 20 minutes on two samples (A and B). The results showed that both samples had solid properties, but required different sterilization times (F^o) to achieve sufficient heat. Sample A was at 121°C in 16 minutes and reached F^o in 7.48 minutes. In sample B the temperature was 121°C in 18 minutes and reached F^o in 7.94 minutes. These results confirm that the two lactogenic megono products are declared to be commercially safe. Expiration test of sample A with the addition of 1% Sauropus androgynous leaf powder for 12,550 months. While sample B with the addition of 2% Sauropus androgynous leaf powder has an expiration date of 10,374 months.*

***Key words**: Thermal; time sterilization; storage time; megono lactogenic; safety.*
***Language**: English*
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INTRODUCTION

Megono is one of the typical foods of Pekalongan, Central Java, Indonesia which is made from young jackfruit mixed into small pieces, added with grated coconut and spices, shaped like a cone of rice. Around the North Coast of Java Island, megono is an offering for Dewi Sri, so that the harvest is abundant and the people live in prosperity [1,2,3]. Since Islamic teachings entered Pekalongan City, megono rice has been one of the dishes in tahlil events at mosques [1,2,3].

Megono Lactogenic is a typical Pekalongan megono mixed with katuk leaf powder which is useful in increasing breast milk production and spurring baby growth [4]. This Megono has a short shelf life of only a few hours and a maximum of 12 hours. Due to the large number of requests from immigrants or tourists to be brought home as souvenirs and brought home to families for the people of Pekalongan who migrated, a canned lactogenic megono was made. In addition, canned packaging can increase the opportunities for small and medium businesses, as well as preserve local as a batik city, and is located in the middle of the distance from Jakarta to Surabaya or East Java, so that many pedestrians rest while enjoying Pekalongan specialties.

One method of food preservation is canning with thermal sterilization. This method is the most widely used and has made a real contribution to the nutritional well-being of most of the world's population [5]. Thermal processing is also a cost-effective processing and preservation technique, so that many food industries use it [6,7]. This technique is very important because it can extend shelf life, improve food quality and increase food availability, safety and affordability [8,9]. This canning technique can stop spoilage by unwanted microorganisms by heating food for a certain period of time [9].

Several studies on thermal processes have been carried out by Holdsworth and Simpson, examining theoretical and experimental evaluations of energy consumption models and practices at the laboratory scale of thermal processing. These studies include: the adequacy of the sterilization process for edible mushrooms [10]; Effect of Temperature Bonding and Sterilization on Fo Value and Physical Condition of Gudeg Cans [11]; Empal gentong and empal tamarind cans are typical Cirebon food packaging [12].

The tools used in the heat adequacy test refer to research conducted by [13], namely: 1) TOMMY Brand Retort S=325 with a voltage specification of 220V 50/60 Hz, 10 A, maximum pressure 2.3 kgf/cm^2, capacity of 0.053 m^3; 2) data storage for the ELLABCTF9004 brand with a maximum temperature specification of 350^{0}C, accuracy 0.1^{0}C, T-121.1^{0}C; 3) universal testing machine (UTM) brand Zwick model Z005; 4) AMD Atthlon TM IIX260 specification 3.20 GH processor, 2 GB RAM, 32-bit Operating system; 5) The software used to perform the simulation is MATLAB Version R2010a. Megono lactogenic cans.

METHOD

The materials used refer to previous research by [14], 1.5 kg of chopped young jackfruit mixed with spices and 1 kg of grated coconut. Then mixed until smooth and cooked until half cooked. All ingredients are put into cans, (each can contains 200 grams of megono), two pieces cans, the size is 300 x 205 cm. With enamel (lacquer) specifications, the outer can body is transparent (clear lacquer) and the inner can is aluminum; easy open end (EOE) can lid. Canning process with a sterilization temperature of 121^{o}C with a sterilization time of 15 minutes.

Megono that has been half cooked, then put into cans containing 200 grams of megono per can. The can that already contains the megono is empty by the exhausting process, then closed. The can that already contains the megono is inserted into the retort and connects the thermocouple to the terminal according to the sequence. The retort was closed and set at 111^{0}C for 15 minutes. The retort and data logger are turned on, waiting for the sterilization operation to complete. Repeat procedure 1 to 4 for all temperature variations (111^{0}C, 121^{0}C, 131^{0}C), setting time (10 minutes, 20 minutes and 30 minutes). The temperature increase for every 1 sample with 1 minute intervals will be printed on the print out paper by the data logger, as well as the sample sterility value (F value) at a certain time.

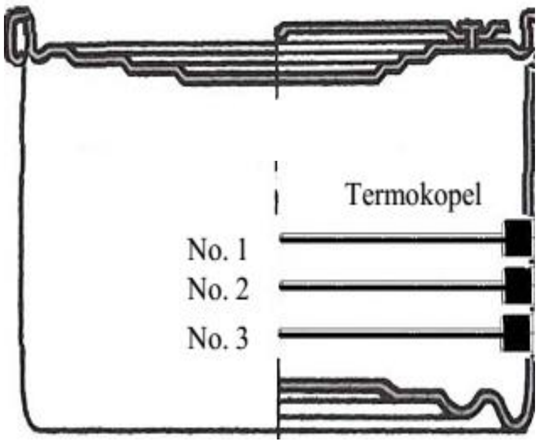

Fig.1. The terminal architecture of a thermocouple on a can
Source: Asep, et al (2014)

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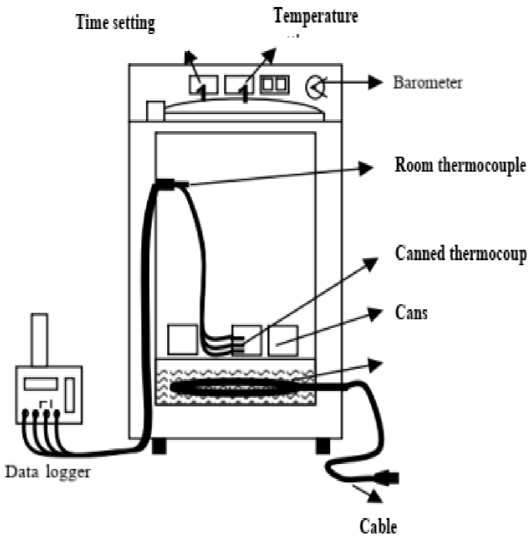

Fig 2. Hematic of the can position on the retort
Source: Asep et.al, 2014

Model Simulation **(**Mathematical modeling) methods with differential equations are used in computer simulations. One of them is a type of soft computing algorithm, calculating with the help of numerical computing [14]

Matrix Laboratory (MATLAB), is one of the most widely used finite difference engineering programs in the use of numerical computational discretization models [13, 16]. Stability is determined based on a number of assumptions, namely the temperature outside the cans remains constant [13,17], heat reaction is neglected [13,18], heat capacity between ambient temperature and the can wall is neglected, so T wall = T environment [13,19].

RESULTS AND DISCUSSION

The results of the study on megono latogenic with 2 (two) variants adding 1% in sample A and 2% Sauropus androgynous leaf powder in sample B which were packaged using cans:

Heat adequacy test

The results of the heat adequacy test when the product is sterilized during the canning process for both samples are shown in Figures 4 and 5

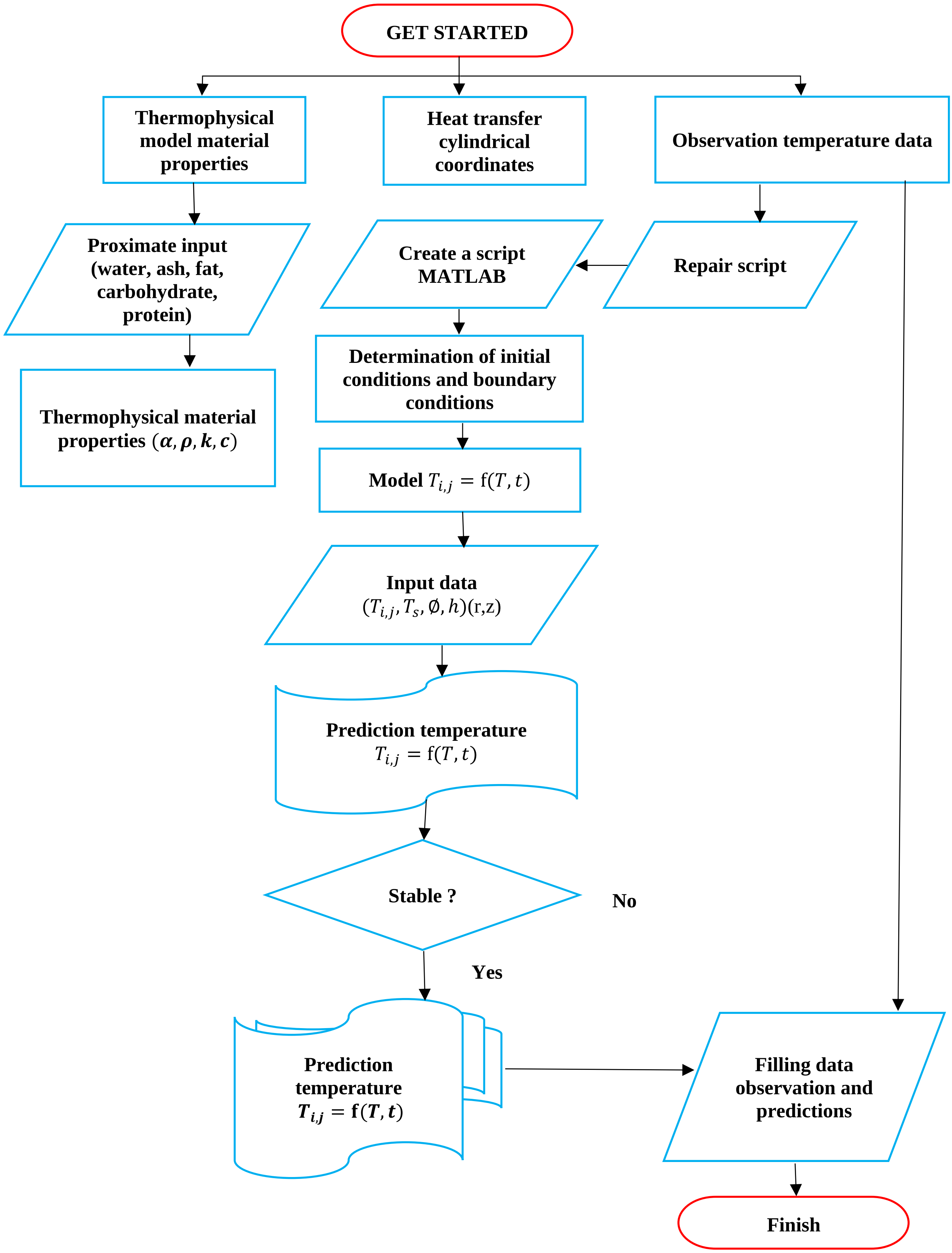

Fig 3. Flowchart of MATLAB simulation; Source: Nurhikmat, A., et al. 2014

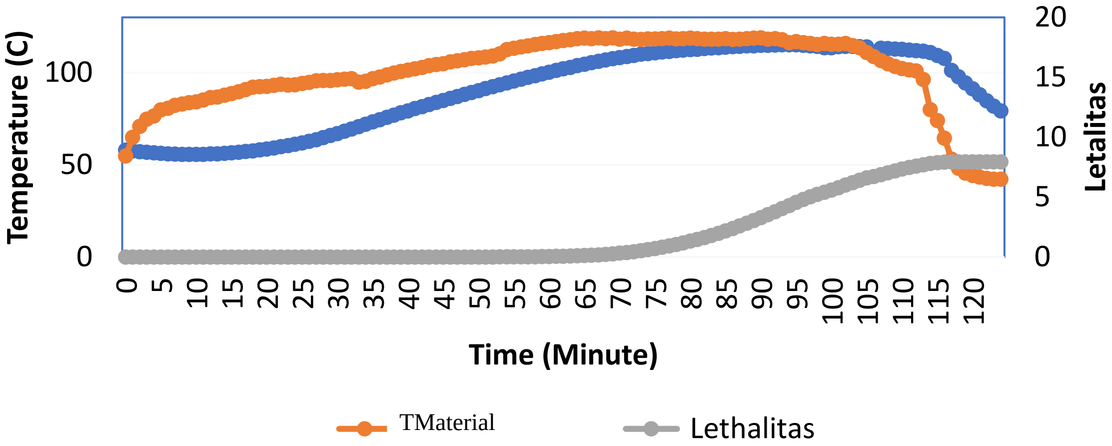

Figure 4. The heat adequacy graph of the sample A. Source: CV. Uniform Tester Lab Bandung, 2020

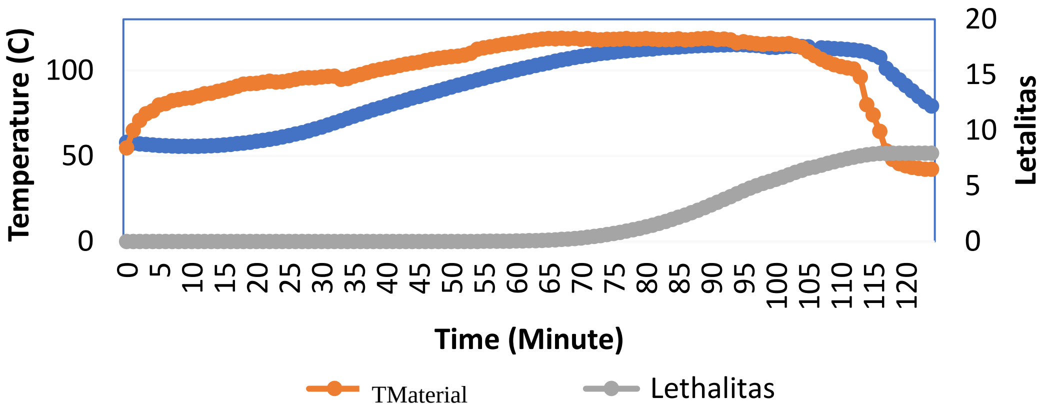

Figure 5. The heat adequacy graph of the sample B.Source: CV. Uniform Tester Lab Bandung, 2020

It can be seen in Table 1. that both samples have solid properties, it can be seen in the first heating (to reach a temperature of 100°C) it takes a long time, namely 61 and 60 minutes. after that to reach the sterilization temperature (121°C) it takes 27 and 26 minutes.

With a sterilization time of 16 and 18 minutes, the resulting heat adequacy value (Fo value) for samples A and B were 7.48 minutes and 7.94

The development of a food product, the product must be specific, namely: having advantages, not being limited to new products and alternative processes, the results of selection and meeting consumer safety factors. The idea and concept of product development must be really mature so that research, regulation, and legal aspects from the government must be supported [20]. The latest development of the food production process is the availability of ready-to-eat food that is safe and has a long shelf life [21]. One technology that can be used is packaging with cans. minutes, respectively. Based on the Regulation of the Head of the Food and Drug Supervisory Agency – Republic of Indonesia (BPOM RI) Number 24 of 2016 concerning Commercial Sterile Food Requirements, chapter III Commercial Sterile Food Requirements Article 3, paragraph 2 that the Fo value of at least 3.0 minutes is calculated against Clostridium spores botulinum [22].

Food canning is a method of preserving food that is packaged hermetically and then sterilized. Hermetic means that the closure is done very tightly, so that it cannot be penetrated by air, water and microbes. Thus canned food is protected from spoilage, changes in water content, oxidation and changes in taste.

Another advantage, this method can be applied to almost all types of food such as vegetables, fruit, meat, fish, poultry, milk, eggs, and various types of beverages [23]. The application of technology to maintain product quality and safety in the development of traditional foods needs to be improved so that the resulting products are guaranteed quality and safety. Applications carried out at high temperatures will extend the shelf life of a product, because high temperatures can inactivate microbes that cause damage [24].

The process that is quite important in canning is sterilization, because at that temperature the microbes become inactive and even destroyed, but the other effect is a decrease in nutritional value and organoleptic properties. Therefore, it is necessary to optimize the use of heat with a temperature high enough to destroy microbes but not high enough to reduce nutrition and organoleptic properties. Canning technology is not a new technology but there are still many things that have not been mastered, especially the stages of the process on various raw materials. One of them is the optimization of the use of sufficient heat to kill microbes but still maintain the quality of the resulting product [21]. Heat sterilization is the most effective preservation method but has a detrimental effect on nutrients and food quality [24].

Heat adequacy test

The sterilization process aims to destroy spoilage microbes and pathogens, to make the product cooked enough, texture and taste as desired. Therefore, the sterilization process must be carried out at a temperature high enough to destroy microbes, but not too high to overcook the product. If the heating is too high, the organoleptic value and nutritional value of the food will be damaged so that the food cannot be accepted by consumers [24, 25].

The concept of temperature measurement is the temperature distribution that occurs inside the packaging of a material determined as a function of position and time [23]. The amount of heat required for adequate sterilization depends on several factors, namely: The size of the can (the larger the dimensions of the can, the longer the sterilization), The type of material (the denser the material, the slower the heat penetration), The type of microbe (Commercial sterilization is designed to kill Clostridium botulinum and spores), Heat source (Water vapor is pure water vapor so the heat transfer process runs quickly).

Expiration test (shelf time)

It can be seen in Table 2. that the results of the expiration test using the Accelerated Shelf Life Test (ALST) method, Fanelis prefers sample A with the addition of 1% Sauropus androgynous leaf powder so that the resulting expiration period is 12,550 months or more than 1 (one) year. Meanwhile, sample B with the addition of 2% expiration date resulted in 10,374 months or less than 1 (one) year.

Storage temperature is directly related to the shelf life of the product. If the temperature of 10°C is considered as the desired storage temperature, then increasing the temperature to 20°C causes the shelf life of the material to decrease by half. If the color of the material is damaged at a temperature of 10°C then at a temperature of 30°C the damage will be accelerated 4 times until the same level of damage is achieved. Chemical reactions that occur during canned food storage will affect the taste, color, texture and nutritional value of the food [26,27].

Tables 1: The results of the heat adequacy test of samples A & B

Stages	Sample	
	A (Minutes)	B (Minutes)
heating I	61	60
heating II	27	26
Sterilization time	16	18
Cooling	19	19
F0 Value	7.48	7.94

Source: CV. Uniform Tester Lab Bandung, 2020

Table 2: Expiration test results for samples A & B

Attribute	Unit	Sample	
		A	B
Color	Month	14,880	10,469
Scent	Month	13,764	11542
Texture	Month	12,976	11.018
Taste	Month	12,550	10.374
Whole	Month	14,191	11.433

Source: CV. Uniform Testerlab Bandung, 2020

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FDI TRENDS IN UZBEKISTAN: SPATIAL PATTERNS REALLY MATTER

Abstract: *This paper focuses on the spatial dimensions of foreign direct investment in Uzbekistan. This is because the regional/sectoral distribution of FDI and the results of development based on foreign investment have shown inequality for 30 years. Therefore, the study examines the factors that determine foreign investment in the country, the contribution of foreign investment to the growth of the country and regions, the reforms and problems carried out by the government to make the country more attractive to foreign investors. The main topic of the paper is spatial patterns of FDI in Uzbekistan, which deals with theoretical and practical approaches.*

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Introduction

The set of economic, political, regulatory, and social opportunities plays a key role in attracting foreign investment. Such opportunities include the following factors: natural conditions, mineral reserves, working capacity and average wages, domestic and foreign market opportunities, the provision of benefits for foreign capital, and more. One of the key factors in the gradual implementation of structural changes in Uzbekistan is the inflow of foreign direct investment (FDI) into the economy. Many studies have shown that Uzbekistan has received less foreign investment than other CIS countries since its independence. However, there is no detailed study of the historical and spatial dimensions of foreign investment in Uzbekistan in recent years. Therefore, this study aimed to examine the inflow of foreign investment in economic regions of Uzbekistan and its spatial dimensions. Because most studies discussed the overall investment climate in Uzbekistan since independence.

2. Study object

Our study further focused on regional and sectoral distribution of the FDI inwards in Uzbekistan. This is because the distribution of FDI in regions and the results of development based on the FDI inbound have shown inequality for 30 years. Therefore, the study examines the factors that determine foreign investment in the country, the contribution of foreign investment to the growth of the country and regions, the reforms and problems carried out by the government to make the country more attractive to foreign investors.

3. Methodology

Geographical comparison, historical, regional analysis, and statistical methods are used in this work. The main topic of the dissertation is *spatial patterns of FDI in Uzbekistan*, which deals with theoretical and practical approaches. Information on the topic of the study is obtained from the State Statistics Committee of the Republic of Uzbekistan, and the international official data (Also, *doing business, outsourcing, unctad.org, World Bank*, etc.).

4. Theoretical background

Interested in the motives for attracting large foreign investment by U.S. corporations, *Hymer* went beyond existing theories and created a framework to explain why this phenomenon occurred. *Hymer* (1976) developed theories of market imperfection aimed at explaining firm behavior in an imperfectly competitive environment, i.e., an oligopolistic or monopolistic environment. *Eclectic theory* gives rise to several factors that determine foreign direct investment, and include market size, labor costs, government incentives, and access to raw materials.

Ietto-Gillies Grazia (2012) preceded *Stephen Heimer's theory* of direct investment in the 1960s on the causes of foreign direct investment and multinational corporations to macroeconomic principles explained by the based neoclassical economy.

Scientists from Uzbekistan have studied the location and development of industries as well as attracting foreign direct investment (FDI). In this regard, the standard and geo-economic ideas created in the Western European countries (like France, German, etc.), regional production complexes, and energy production cycles established in the CIS countries, the problems of integrated development of the regions formed in Uzbekistan are particularly noteworthy. The following scientists were engaged in the placement and development of productive forces in Uzbekistan:

A. Vahabov, Sh. Khajibakiyev, N.Muminov (2010) described the essence of investment as follows: "Investments are money invested in business entities and other activities to make a profit and achieve positive social results. , bank deposits, shares, other securities, technologies, machinery, equipment, licenses, loans, any other property or property rights, intellectual property".

Oblamurodov (2008) put forward the idea of creating a scientific methodological basis for the orientation of FDI to the national economy. His research principally contains comparative analysis using foreign experience. *Akramov* (2006) described the theoretical basis for the proper use of FDI in his research work. He put forward the idea of a scientific approach to directing FDIs to industries and making high profits from them.

Ubaydullaeva (2004) conducted a study to assess the effectiveness of the public policy on inbound FDI in Uzbekistan, their use. This study provides an example of foreign experience in attracting foreign investment. She also cited some research on the geography of joint ventures. *Mirzaakhmedov*'s dissertation (2003) on "Peculiarities of territorial location and development of joint ventures in the industry" can be considered as the best literature on this matter. Although this dissertation focused on the regional structure of industrial production and the activities of joint ventures, we used it to cover our research topic.

3. Results and Discussion

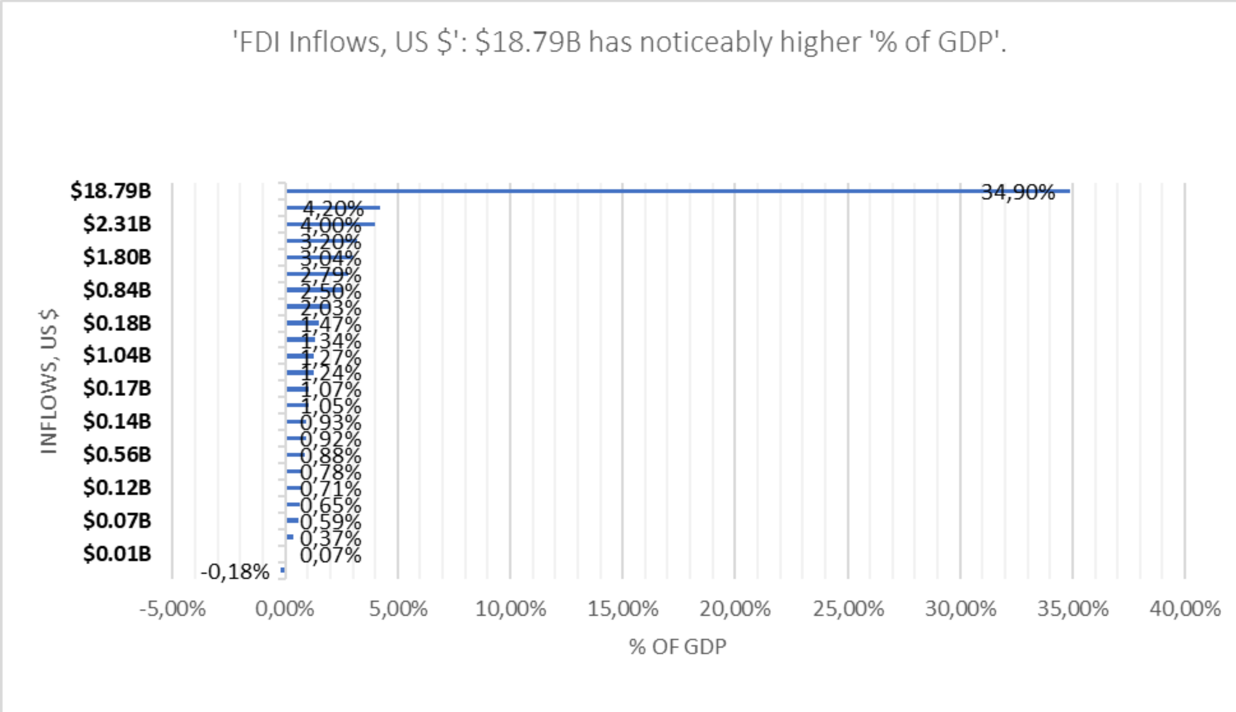
3.1. FDI trends since 1992

Uzbekistan, with a population of 34.4 million (2021), ranks 42nd in the world in terms of population. Uzbekistan is the 204th largest economy in the world with a GDP of $58.8B and has diplomatic relations with 137 countries. As Uzbekistan is pursuing political, economic, and legal reforms to increase its competitiveness in inbound foreign investment the inflow of large amounts of direct investment to Uzbekistan is growing.

According to statistics from the Ministry of Investment and Foreign Trade of Uzbekistan, for over 30 years, around 50 countries have been investing: $18,79 billion. The FDI inwards traditionally arrive from Russia, South Korea, China, USA, and Germany, but Canada recently increased its financial presence. Investments focus on the energy sector, including renewable energy in recent years.

Since 1992, Uzbekistan began the transition to a market economy and has pursued a policy of inbound foreign investment to achieve a sustainable economy. This chapter provides historical information on foreign investment. Table 1 shows the FDI data for Uzbekistan for 1992–2020, updated with World Bank statistics. In a developing country, foreign investment, measured as a reserve against income, rises and falls over the years. Throughout the past 30 years, Uzbekistan has seen a significant increase in foreign investment. The figure 1 provided by the World Bank international financial institution shows a record of steady Foreign Direct Investment (FDI) growth in Uzbekistan between a period of 1992 and 2020.

Figure 1. Uzbekistan: FDI – historical data 1992-2020



Source: World Bank-2020

Chronologically, the amount of foreign investment came in Uzbekistan was reported as 0.01 billion US dollar in 1992, and by 1997 it reached $0.17 billion. However, starting from 1998 to 2006, we can see a constant fluctuation between $0.14b and $0.17b. A sudden increase of $0.71b US dollars in FDI in 2007 resulted in a growth of Gross Domestic Product (GDP) of Uzbekistan by 3.16%. Compared to the rest of the years from 2007 to 2020, a couple of decline in FDI and GDP were experienced in 2012 and 2014 ($0.56b and $0.81b respectively). It is worth noting that the peak of the trend in the table was reported in the last year of those years with $3.02b FDI and 4.20 percent of GDP growth rate.

Uzbekistan has been achieving economic growth since independence. Many reforms have been implementing to attract foreign investors to increase the flow of foreign investors.

While the persistence of a closed market in Uzbekistan in 1992-2000 led to a slow inflow of FDI, Uzbekistan's joining the international capital movement opened the door to foreign investment. As a result, it has become the fastest-growing economy in the region (i.e., Central Asia).

Considering a situation with inward foreign direct investments in economy of Uzbekistan, at the beginning of the 2000th inflow of FDI to the country was insignificant, and their cumulative amount by 2004 did not exceed 1 billion dollars.[1]

The period of rather low investment activity of the beginning of the 2000th years which was caused internal problems of Uzbekistan's economy. But in 2006-2009 pre-crisis situation in the world market was replaced by expansion of demand for investment resources. Thus, in 2010-2011, rapid growth of inward FDI into Uzbekistan’s economy. The growth in volumes of foreign investments demonstrated improvement of characteristics of the investment climate of Uzbekistan and increased in trust to its economy by investors in recent years.

Dynamics of foreign investments in 2006-2011 showed that in process of development of world financial and economic crisis of 2008-2009 foreign investors not only did not leave Uzbekistan, but also continued expansion of the presence in the market of the country.

As a result of continuously reforms during this period, annual foreign investment increased from $ 0.7 billion in 2000 to $ 1.64 billion in 2011. Some decrease in inflow of foreign investments to Uzbekistan in 2012 reflected a general situation in world economy. But the cumulative number of foreign investments in economy of Uzbekistan for the end of 2014 exceeded 10 billion dollars including inbound FDI 0.81 billion dollars. The share of FDI increased

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[1] *It seems that Uzbekistan had not yet established itself as a key destination for the FDI inbounds (UNCTAD -1999).*

from 14.4 percent in 2000 to 79 percent in 2011, to about $ 2 billion. According to analysis, in 2004-2014, the volume of investments in the national economy increased by 3.2 times, while the volume of foreign direct investment increased by more than 20 times during that period. All this has set out excellent indicators of the economic policy measures taken by the government of the country in the context of the global economic crisis.

By 2020, FDI inflows had exceeded the $3 billion line. This was because the government has expanded the exchange of delegations with states and international organizations, as well as reached a broader approach to market relations.

3.2. Impact of FDI to economy

Foreign direct investment impacted to modernizing the industrial base and increasing its efficiency of industries. According to the State Statistics Committee, the main inflows of foreign investment are in agriculture, services, tourism, construction and so on.

Chronologically, the GDP growth rate in Uzbekistan was reported as -11.2% in 1992, and by 1997 it reached 5.7%. However, starting from 1998 to 2003, we can see a constant fluctuation between 4.3% and 4.2%. A sudden increase observed in 2007 – 9.4% and it became unique peak until now. Compared to the rest of the years from 2008 to 2020, a couple of decline in GDP was experienced in 2017 and 2020 – 4.4% and 1.6% respectively). It is worth noting that the peak of the trend in the table was reported in the last year of those years with 5% of GDP growth rate (Figure 1).

In 2004-2005, high GDP growth rate was observed without FDI impact in Uzbekistan. This is not because the country's economy is well-established and government policies have yielded the desired results, but because cash inflows from Uzbek labor migrants, mainly in Russia and Kazakhstan, have increased. Therefore, after 2004, Uzbekistan's GDP growth rates remained positive.

By 2007, Uzbekistan's development strategy was mainly focused on the export of natural resources such as natural gas and minerals and the import of equipment. As a result, GDP growth peaked in 2007 at 9.5%. The global financial crisis of 2008 affected both the U.S. and Europe; however, Uzbekistan almost retained its immunity. That is why many investors have turned to countries like Uzbekistan, which have not been seriously affected by the crisis.

For example, after 2011, large foreign companies did not invest in Uzbekistan for some time. But official sources said the situation had little effect on the country's gross domestic product growth rate, which averaged 8% a year. This is because, by 2010, the value of remittances (labor migrants) to Uzbekistan increased sharply and amounted to 10% of GDP. This has outpaced the inflow of FDI and foreign loans.

In 2020, real GDP growth for Uzbekistan was 1.6% (Figure 1). Though Uzbekistan's real GDP growth changed substantially in recent years, it tended to decrease through the 2001 – 2020 period ending at 0.7% in 2020 due to COVID-19-related blockages and trade disruptions.

3.3. Comparison of FDI impacts: CA and Uzbekistan

So far, Uzbekistan has attracted foreign capital, mainly for the development of several industries. The sector of effective water management has also been developed by attracting foreign investment. In 2000-2018, foreign investment improved the relevant infrastructure for the use of renewable energy technologies. As the tourism sector in Uzbekistan is one of the main sources of income in attracting foreign capital, it has attracted foreign investment in the cultural and archeological sectors. In addition, the mining, service, and textile industries have also attracted large amounts of foreign investment.

In covering FDI trends, it is suitable to compare Uzbekistan with neighboring countries. Because Central Asian (CA) countries have gained independence one after another and have common aspects in introducing FDI into the economy.

Central Asian countries are considered to have landlocked economies, yet they are attracting large amounts of foreign direct investment. According to several studies, the inflow of foreign investment has often not had a significant impact on the development of the local economy. At the same time, the inefficient social health insurance system has led to a reduction in the global competitiveness of the host economy and a reduction in the country's attractiveness to foreign investors.

CA countries have common features in attracting foreign capital: mainly in the natural resources, agriculture, and manufacturing industries. While Kazakhstan and Turkmenistan were the largest CA countries to attract foreign capital between 1992 and 2016. The World Bank (2017) noted that there are potential investment areas common to all five countries with abundant mineral resources, such as agriculture and food exports. Despite widespread corruption, Uzbekistan has been ahead of CA countries in the FDI inbounds due to trade openness and other sensible reforms. As a result, FDI contributed more to economic growth in Uzbekistan compared to CA countries. Most of the Central Asian economies have absorbed agricultural investment in the agricultural and manufacturing sectors. However, Uzbekistan directed the FDI inwards mostly to mining, agriculture, energy, services, textiles, and tourism sectors. The following table compares the impact of foreign investment on CA and Uzbekistan (Table 1).

Table 1. Comparison of FDI impacts in Uzbekistan and CA countries

	Central Asian countries	Uzbekistan
Growth	FDI inflows led to economic growth and increased productivity	FDI led to financial development and reduced poverty rates
Sector	Most FDI in the energy, agricultural, and manufacturing industry	Most FDI in the mining, agricultural, energy, services, textile, and tourist sector
Natural resources	The countries of the region attracted FDI since they are rich in natural resources reserves	FDI inwards thanks to the country's abundant natural resources
Education & infrastructure	They are not considered key factors in attracting FDI	The government improved both infrastructures and social services
Regime	Democratic regions attract more FDI	Economic regions attract more FDI
Legal framework	Top FDI destinations developed the Rule of law	The legal reforms performed proved insufficient
Environment protection	FDI increased CO2 emissions in the region	Successful environment strategies applied

Source: MPRA Paper No. 63849, posted 25 Apr 2015

Table 1 shows that the legal reforms implemented in Uzbekistan were not sufficient to attract more foreign investment, but the Uzbek government has managed to implement a successful environmental policy in relation to the rest of the region.

In summary, bureaucratic barriers and corruption by lower authorities are almost common barriers to FDI inbound in CA countries. It should be noted that in recent years, Uzbekistan has been offering more financial, social, and government benefits to foreign investors than other CA countries.

4. Conclusion

Inbound foreign direct investment is very useful in shaping and strengthening the national economy of Uzbekistan. The study of spatial patterns of FDI provides a scientific approach to the effective direction of investment flows and the rapid development of economic sectors.

This paper examined FDI flows to Uzbekistan in 1992-2020 and analyzed its impact. The results show that over the past 30 years, Uzbekistan has initially been slow to inbound FDI due to its slow transition to a market economy, the constant existence of a closed market regime, and the subsequent centralized financial system and poorly developed legal framework. Analyzes have shown that the inward FDI is unevenly distributed through economic sectors, despite the inability to achieve large-scale inward bound FDI. In conclusion, it is recommended to further strengthen the ongoing reforms, to form the legal framework in accordance with international standards and to continue offering preferential motivations to foreign investors.

As a result of the policy of openness pursued by President Shavkat Mirziyoev, inbound FDI has begun to be directed to regions and sectors by their potential, while there has been a significant boost in the flow of FDI. Conclusion is that inward FDI should be directed to the specialized sectors of each region based on excellent, scientifically based promising projects with tough protection against corruption. At the same time, it is recommended to address the issue of potential personnel, to guarantee the rule of law and to create clear database that meets international standards.

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DESIGNING READING COMPREHENSION TESTS OF UZBEK AS L2 FOR SCHOOL GRADUATES

***Abstract**: As Alderson suggests that perfect understanding of reading construct is hard to overview, as our thoughts of the phenomenon might be incorrect or subjective. Striving to put our theories on reading construct into practice we most probably, might create techniques with which we can investigate and develop our knowledge of the field. Yet reading assessment is not very alien for classroom practitioners since testing reading comprehension has always been part of their classroom activities. This work intends to discuss important sides that should be looked into while designing reading tests for learners of Uzbek as second language. Additionally, it proposes a reading comprehension-testing framework for school graduates who have had instruction other than Uzbek.*

***Key words**: reading comprehension tests, test principles, reading assessment.*

***Language**: English*

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***Scopus ASCC**: 1203.*

Introduction

The efforts to design reading tests target at creating a system, which could unite authentic language and students' comprehension assessment. Reading tests are to track learners' skills in various reading aspects and they monitor their progress and show how well they comprehended the information reflected in the curriculum. In return, these findings can evaluate the process used in teaching second language giving authorities invaluable feedback on their policies.

Uzbekistan was one of the countries of the former USSR and Russian-language-instructed schools still enjoy noticeable popularity in the Republic, which makes reading assessment considerably more challengeable. Interestingly, native speakers of Uzbek studying at schools with Russian language instruction learn the state language (Uzbek) as L2 together with other nationalities residing in the country.

Theories on Reading process

As we are discussing on testing we usually refer to academic purposes. Grabe highlights main six purposes:

1. Looking up specific information of the passage (scanning and skimming)
2. Defining the general idea quickly of the passage (skimming)
3. Targeting at learning something new from reading
4. Combining passage information
5. Approaching critically to the passage
6. Interaction with the text on general purposes

He adds that the list above can be enriched or vice versa depending on the demands levied on the reader. When defining reading we have to take into consideration these differing purposes.

When talking on the theories to describe the process taking place during reading we can't skip three models that occur in the learner and passage interaction. They are **Bottom-up**, **Top-down** and **Interactive theories**. By Gough's **Bottom-up** theory (1972), learners (passive decoders) identify letters individually before integrating with sounds. Letters are kept in the memory until each letter is held in the memory until the next letter is identified. Words are identified by the brain then sentence meaning is comprehended which is followed by paragraph and passage comprehension. "I see no reason, then, to reject the assumption that we do read letter by letter. In fact, the weight of the evidence persuades me that we do serially from left to right" (Gough, 1972, p. 335). Background knowledge is not an essential factor in this theory. Developed by Smith and Goodman **Top-down** model emphasizes what learners bring to the passage. "Goodman calls this process as "psycholinguistic guessing game", in which readers guess or predict the text's meaning on the basis of minimal textual information, and maximum use of existing, activated knowledge" (Alderson, 2001, p.17). They just try to sample, choose from the text and make teir own assumptions and predictions taken from hints they receive letters, words, and syntax, and while reading they confirm or get rejection for their predictions by their background knowledge and experience that they encounterd from the beginning. Apparently, bottom-up and top down theories have little in common after all, they bear different insights. To fill the gap between the two theories a new theory emerged. **Interactive model** is a flexible and accommodating theory. Alderson states that the interaction differs according to the text, reader, and purpose. Stanovich (1980) argued that:

interactive models of reading appear to provide a more accurate conceptualization of reading performances than do strictly top down or bottom up models. When combined with an assumption of compensatory processing (that a deficit in any particular process will result in a greater reliance on other knowledge sources, regardless of their level in the processing hierarchy), interactive models provide a better account of the existing data on the use of orthographic structure and sentence context by good and poor readers (as cited in Samuels & Kamil, (1984) p. 212).

He adds that readers rely on their strong sides trying to compensate the weak ones. Readers hopeless at word decoding (bottom-up) will make most of their background knowledge (top-down). So, the sense of interactivity includes situations when processes interact with each other to achieve comprehension.

The purpose of the designed test

The designed test plans to define the weaknesses and strengths of high school graduates with regard to reading for comprehension of the academic knowledge of Uzbek depicted in school curricula. Additionally, to assess their skills to skim, comprehend details, scan for details, encounter unknown words and guess the meaning of them in context and to draw inferences from a text. The test is conducted at the entrance exams for universities to define would-be students' knowledge on the state language.

Test construct

The proposed test is a summative test aiming at measuring students' abilities in terms of reading strategies by offering various different text materials. The suggested reading techniques to be used for this test are 'skimming and scanning' (finding specific details) and 'careful reading' (understanding the main ideas

Sample test

The test involves authentic passages are generally chosen from books, journals, internet sites and newspapers which are in three types: informative, entertaining, literary, The test designer intend to choose passages which are thought-provoking and not deeply specialized taking into account the lexicology of secondary school subjects. The first passage deals with entertainment and informative content. The second one concerns factual texts from history and the last one tests students' interaction with scientific material.

Below we can provide one sample passage and question relating

Choy yoki qahva

"Euromonitor International" tomonidan "Choy yoki qahva: qaysi mamlakatlarda bu ichimliklarga xohish bor?" mavzusida so'rov o'tkazilgani, tadqiqot natijalariga qaraganda, O'zbekiston aholisining 99,6 foizi choy iste'mol qilishga moyil ekanliklari aniqlangan. Endi esa dunyoning ayrim mamlakatlaridagi choyxo'rlik haqida so'z yuritamiz.

Choy – avvaliga bemorlarni davolashda dori sifatida ishlatilgan. Ommaviy tarzda iste'mol qilish esa Tan sulolasi davrida boshlangan. Xitoyda choyning bir necha turi bor. Xitoyliklar asosan ko'k, sariq va ulun deb nomlangan choyni xush ko'rishadi. Qora choy ham sevib iste'mol qilinadi, ammo ko'proq eksportga chiqariladi.

"Osmon osti mamlakati"da choy iliq holda ichiladi. Choyga shakar va boshqa mahsulotlar qo'shilmaydi. Chunki qo'shilgan boshqa mahsulotlar choy ta'mini buzar ekan. Xitoyliklar uchun choy kundalik iste'mol qilinadigan ichimlik sifatida ko'riladi. Bundan tashqari, choy bilan bog'liq bir qator an'analar mavjud. Unga ko'ra, xitoyliklarda choy kichiklar tomonidan piyolalarga quyilib kattalarga uzatiladi. Oilalarda 3 litrgacha choy qaynatilib, chinni idishlarga damlanadi. Xitoyda turli ko'rinishlarda choynak va piyolalar tayyorlanadi.

Yaponlar asosan ko'k choy ichishadi. Ayrim hollarda sariq choy ham ichib turadilar. Sariq choy xitoyliklar usuli bilan 2 daqiqagacha damlanadi. Yaponlar choyni sekin-astalik bilan ho'plab ichishadi. Yaponiyada choy ovqatdan avval, ovqat vaqtida va ovqatdan keyin ham ichiladi. Xitoyliklardan farqli ravishda yaponlar choyni issiq holda emas, balki sovitib ham ichishadi.

Tibetda asosan ko'k choy ichadilar. Bir litr suvga 50-75 gramm choy solinadi. Tibet choyi insonni tetik qilishi aytiladi. Tibetliklar an'anasiga ko'ra, sutli choy bilan mehmon qilish mehmonnavozlikning oliy ko'rinishi ekan.

Tailandliklar achchiq qizil choyi bilan nom qozonishgan. Ular choyga sut va boshqa mahsulotlarni qo‘shishni yaxshi ko‘rishadi.

Hindiston va Shri Lankada choy yetishtirishni inglizlar yo‘lga qo‘ygani aytiladi. Buyuk Britaniya choy masalasida Xitoyga qaramlikdan qutilish maqsadida Hindiston hududlarida choy yetishtirishga qaror qiladi. Unga qadar Hindistonda faqat buddaviy monaxlargina choy ichishgan. Bugungi kunda bu ikki mamlakat ahli choy ichish bo‘yicha yigirmata mamlakat safiga ham qo‘shila olmagan. Hindistonda asosan shimolda istiqomat qiluvchi aholi choy ichadi. Janubliklar esa asosan qahva ichishni afzal ko‘rishadi. Hindiston va Shri-Lankada choyga albatta shakar va sut qo‘shiladi.

Shimoliy Afrika va Arabistonda yalpiz choy ichiladi. Mag‘rib mamlakatlarida choy damlash ijtimoiy hayotning muhim ko‘rinishlaridan biri hisoblanadi. Oshxona ishlari bilan faqat ayollar band bo‘lsa, choyni erkaklargina damlashadi. Oila rahbari shaxsan o‘zi choy damlab, mehmonlarga uzatadi. O‘z navbatida mehmonlar uch piyoladan ortiq choy ichishmaydi.

G‘arbiy Afrikada “Senegal choyi” deb atalmish choy juda ham mashhur. “Attaya” deb nomlanuvchi mazkur choy ko‘k va qora choydan damlanadi. Buning uchun metall choynakdan foydalaniladi. Choynakka katta miqdorda choy, shakar, yalpiz bargi va sovuq suv solinib olovga qo‘yiladi. Qaynab chiqqunga qadar kutiladi. Shundan so‘ng shisha stakanlarga quyiladi. O‘zbeklarda choy uch marta qaytarilsa, G‘arbiy Afrikada choy stakandan stakanga bir necha bor solinadi.

AQSHda choy qahvaga nisbatan 25 barobar kam ichiladi. Choy asosan Sharqiy sohil bo‘yidagi shtatlarda iste’mol qilinadi. Shunda ham qora choy afzal ko‘riladi. Kaliforniya ham choyxo‘rligi bilan mashhur. Bu shtatda Xitoy va Yaponiyadan xarid qilingan ko‘k choy ichiladi. Janubiy sohillarda muz va limon solingan sovuq choy ichiladi. Markaziy va Janubiy Amerika mamlakatlarida choy keng tarqalmagan. Mazkur mintaqalarda choyni eslatuvchi mate o‘simligining bargi ancha mashhur. Choy deganda Lotin Amerikasida sovuq ichimlik tushuniladi.

Avvallari Ozarbayjonda qora choy ko‘p ichilgan bo‘lsa, bugungi kunda choyning rangi deyarli ajratilmaydi. Ham ko‘k, ham qora choy ichilaveradi. Ozarbayjon choyxonasi Markaziy Osiyo choyxonasidan butunlay farqlanadi. Ozarbayjon choyxonalarida ovqat tortilmaydi, faqat choy ichiladi va shirinlik yeyiladi, xolos. Agar sovchilarga shirin choy berilsa, bu qizlarini berishga rozi ekanliklari anglashiladi. Choy alohida, shakar alohida qo‘yilsa, bu rad javobidir.

Yevropa qit’asida choy kam ichiladi. Yevropaga choy Xitoydan XVII asr o‘rtalarida portugal, golland va inglizlar tomonidan olib kelina boshlandi. Avvaliga Yevropada ham davolash maqsadlarida qo‘llanilgan.

Oradan yillar o‘tib, choy ichish odatiy holatga aylandi. Biroq avval choy Yevropada qarshiliklarga uchraganini aytib o‘tish kerak.

“Ko‘hna qita”da ko‘proq qahva ichiladi. Shu sababli ham bu o‘lkalarda choy tayyorlash borasida milliy urf-odatlar deyarli yo‘q, desak ham bo‘ladi. Faqat inglizlar choyni milliy ichimlik sifatida ko‘rishadi. Inglizlar uzoq yillar davomida eng ko‘p choy ichadigan millat sifatida tan olib kelingan. Bu mamlakatda bir kishi o‘rtacha 2530 gramm choy ichadi. Inglizlar bir kunda uch marta choy ichadi. Ular choyga sut qo‘shadilar. Lekin avval choyga sut qo‘shish kerakmi yoki sutga choy qo‘shish kerakmi, degan savolga hamon javob topilmagan.

Shvetsiyada qora choy, meva va gullar aralashmasidan tayyorlangan syoder choyi mashhur. Bu choy 1979-yilda kashf qilingan. Shveysariya qadoqlangan sovuq choyning vatani hisoblanadi. Shveysariya sovuq choy iste’moli bo‘yicha Yevropada birinchi o‘rinda turadi. Fransuzlar choy haqida 1636-yilda bilishgan. Germaniyada choy haqida ilk bor 1650-yilda ma’lumotlar paydo bo‘ldi.

Tushirib qoldirilgan so‘zlarni matndan toping va yozing. ***(So‘zlar soni BITTAdan oshmasin)***

Choy dastlab

1. o‘rnini bosgan. Tan sulolasi vaqtidan boshlab choyga ichimlik sifatida qaralgan.
2. choyni eksportga chiqaradilar. Tibet aholisining ko‘pchiligi ko‘k choy ichishadi. Tibetlarda
3. choy mehmonga beriladigan eng yaxshi ichimlikdir. Hindistonda
4. aholisigina choyni ma’qul ko‘radi.
5. asosan, qahva ichiladi. Shvetsiyada
6. choyi mashhur.

Quyida berilgan ma’lumotlar matnda *TO‘G‘RI* yoki *NOTO‘G‘RI* ekanligini aniqlang.

1. Xitoyda choy turlari ko‘p emas.
2. Yaponiyada choy ovqatlanishdan oldin, ovqatlanish vaqtida ham iste’mol qilinadi.
3. Buyuk Britaniya choyni faqat Hindistonda yetishtirgan, sababi Xitoyga qaramlikdan qutulish edi.
4. Ozarbayjonda choyga shakar solinmasligi bu kelgan sovchilarga rozilik belgisi hisoblanadi.
5. “Ko‘hna qit’a”ning asosiy ichimligi qahvadir.
6. Britanlar asosan choyga sut qo‘shadilar.

Types of questions for the text given.

As we can see questions 1-6 test students’ gap filling skills which require detecting the right word from the passage. The other 6 questions are identical to True/False. The test designers avoid using the same type of questions in the rest two passages.

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PERIPHRASES IN THE PROSE WORKS OF ALISHER NAVOI

Abstract: *The article analyzes the use of periphrases in prose works of Alisher Navoi, including the synonymy between periphrases, the lexical units in the formation of antonyms, and the periphrases used to express human characteristics as well.*

Key words: *lexical unity, synonyms, and antonyms of classical periphrases, Shamsuddin Muhammad Tabodgoni, Abdurahman Jomi, Amri azim, charity, generosity, ungenerous, hilm, gentle, a person with a tender nature, kindness, sympathy, the mortal world, liar and contentment, tuflise qone, a contented poor.*

Language: *English*

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Introduction

In linguistics, all phenomena that are equal to words and speech are considered a lexical unit. The primary type of lexical unit is the word. Euphemisms, dysphemisms, slang and Argos, periphrases, and phrases, which have the same general meaning as words, are also studied as lexical units. It serves to enrich the lexical fund of a particular national language as well. Such units may include complex compound and figurative phenomena in the figurative sense. For example, in Alisher Navoi's Hamsat ul Mutakhayirin, he used the periphrase *"tasavvur va anoniyat umuriniig xudroyi*" to evaluate himself from a humble point of view. The periphrase in the sentence used above is a complex lexical unit.

Phrases, euphemistic, dysphemistic, idiomatic units, periphrases are formed in Uzbek as a result of the full or partial change of meaning. Since such phenomena are stagnant and their parts are inseparable, there is no dominant or subordinate relationship in the composition of the compound, except for the word combination. The dominant and subordinate clauses of a phrase can be replaced by other lexical units or grammatical means. For example, the combination *"boshga ko'tarmoq"* is analyzed, we can see both stagnant and free-joint phenomena. The combination *"boshga ko'tarmoq"* is a word combination, a verb combination, and a controlled combination. It is possible to form a free combination of several options, such as *boshidan tushirmoq, boshiga tushirmoq, boshini ko'tarmoq,* depending on the communicational purposes. It is impossible to form in any other variant the words in the composition of the phrase *"boshga ko'tarmoq"* which conveys the meaning of making a noise, rioting, quarreling, to make fun of. When the structure of a lexical unit changes, the meaning, the essence also changes. This condition is typical for all stagnant compounds.

Among the lexical units, which are objects of study of lexicology, it is known in science that the phenomena of synonymy, antonymy, homonymy, paronymy are observed. Such grouping in terms of form and meaning is reflected not only in the modern lexicon but also in the language of classical sources. We prefer to use the prose works of Alisher Navoi in the study of the phenomena of antonyms, synonyms, homonyms of periphrases used in the language of classical works, and it would be appropriate to call the periphrases used in such literary masterpieces as classical periphrases. These linguistic phenomena are as complex and beautiful as the content and structure of the classics.

Materials and Methods

Synonymy is the grouping of lexemes according to the same meaning [1.166]. An action, a sign, an object, and a person (denotation) can have different forms of expression. The phenomenon of synonymy applies to simple lexical units as well as to other linguistic phenomena with the same content. For example, the definition of the city of Termez can be expressed in such periphrases as *"janub gavhari"* (pearl of the south), *"janub darvozasi*" (southern gate) which are synonymous.

Synonymy of periphrases in the masterpieces of the 15th century, there are many cases of synonymy of periphrases, especially in the prose of Alisher Navoi. The distinctive and noteworthy feature of the synonymy of classical periphrasis is in place of application in relation to a particular person, event, or character; we will be able to accept cases when the meaning of the expression is close or identical to each other. It has been observed that the state of synonymy of classical periphrasis is synonymous with great personalities, scientists, and statesmen, as well as with a number of stable compounds for human characteristics and events. For example, in the work "Holoti Sayyid Hasan Ardasher", the periphrases for Shamsuddin Muhammad Tabodgani such as "*janobi haqiqatmaob"* (a truthful person) was used as synonymous with *"qutbi doirai haqiqat* "(the leader of truth). Both compounds are aimed at illuminating the fact that the wise man follows the path of truth and requires truth. The periphrases for the great person Murshid Ahl al-Shari'ah such as *murshidi ahli shariat* (religious leader), *tariqat, koshifi ulumi rabboniy* (the scholar of religious sciences) were used as synonymous with the main goal of highlighting his role in the field of religion. For example, Navoi used periphrases in his book "Mahbub ul Qulub" about Abdurahman Jomi, who was his master and a friend: *Shaykh al-Islam* (the ranking person of the Muslim world, Sheikh), *muqtado and peshvos ul quvhari yaktadur* (a valuable religious man, Imam), *nur Ul milleti ve-a-din* (the light of a nation and religion) formed a synonymic line. However, it should also be noted that there are periphrases that were used in relation to a person and cannot form a mutual synonymy, we can witness that such lexical units serve to illuminate the importance and position of one person in a different field, areas and a direction. For example, Mawlono Samsuddin used to give a definition to Muhammad Tabodgoni in these two periphrases *"murshidi ahli shariat"* and *"janobi haqiqatmaob"*, the content of which serves to express two different characteristics of the scientist is expressed. The first periphrase emphasizes the importance of religion and the other praises truthfulness. Therefore, we cannot say that there is a phenomenon of synonymy between these two units. The periphrases *"janobi haqiqatmaob"* va *"qutbi doirai haqiqat"* were used to describe this person are synonymous, as both periphrases illuminate the scholar's truthfulness. The first periphrase expresses the truth, and the next periphrase is defined as the leader of truth.

In Navoi's prose, it is possible to find many periphrases used as synonyms for expressing a certain person, event, feature. The periphrase *"yog'insiz sahob"* (a cloud that can not rain) was used for expressing of a person who does not do good to people but treats them as friends and the periphrase *"amalsiz olim"* is a person who does not spend his / her knowledge to increase the potential of others, or who can not apply the knowledge in time, the content of which is described by two different lexical units representing the same feature. Therefore, these are periphrasic synonyms.

The periphrases such as *"husn malohatin idrok qilg'uvchi"* " is the one who perceives beauty, *"ishq o'ti yolinig'a yoqilg'uvchi"* is one who burns in the path of love and *"xo'blar husni tuzig'a kaboblig' qilg'uvchi"* is the one who burns in the fire of love, were used in order to give a definition and description to the soul as burning in the grief of the beauties formed mutual synonymy. All three images or descriptions are expressions of confessions and events, such as the ability of the mind to feel emotions and to experience different situations as a result of these feelings. The periphrases used in the work "Mahbub ul qulub" such as *"so'zining varaqnigoridur"* is a typewriter, *"so'z maxzanining xazonadori"* is the responsible for the word treasure, were used in relation to the secretariat, which caused the phenomenon of synonymy, the main reason for our perception of these periphrases as a synonym in both definitions for describing the person who performs the action associated with the word.

We can observe the phenomenon of synonymy in the descriptions given in relation to the language, which is still used today as a beautiful definition and interpretation in the works of Alisher Navoi. For instance, *"Ahli saodatlar ruhbaxsh zulolig'a manba' "*- pure, clear water which gives the soul to the happy, *"ahli shaqovatlar nahs qavqabig'a matla'"*- unhappy, causing war and disagreements in the life of the bad people, *"nutqning olatidur"*- weapon of speech, *"ko'ngul maxzanining qulfi "* - we can see in such definitions as the lock of the treasure of the soul that the main factor in the occurrence of all the good and bad things that happen in a person's life is his language and speech. All good words and bad deeds approach to the one through his/her language. The main weapon of communication is the language which opens the secrets of the soul through the masterpiece.

Other synonymous periphrases used in "Mahbub ul Qulub" are based on a description of youth and old age. The youth was described in periphrases such as *"umr gulshanining bahoridur"*- the most colorful period of human life, *"hayot shabistonining nahori"*- the brightest period of life. Old age was defined by periphrasic expressions such as *“shabob mayining maxmurlug‘i”* - drunken from youth wine, longing for youth, *yigitlik sihhatining ranjurlig‘i ”* - the loss of strength, health of the young man. Periphrases such as *“yog‘insiz abri bahor”* which means a cloud that can not cause rain in the spring, and *“royihasiz mushki totor[2.78]”* which means the fragrance that does not cause sweet smell are synonymous periphrases.

The scholar and poet Alisher Navoi describes almost all human characteristics through stories and images, which can lead to positive and negative events in a person's life and shows respect for the good aspects of humanity. By contrasting such traits, it allows the student to make comparisons and develop the ability to master a good upbringing.

Antonymy is the grouping of lexemes on the basis of their contradictory meanings [1.170]. Among the periphrases used in Alisher Navoi's prose works, we can also observe the antonymy by the following examples. The periphrases “f*ano tangnoyi”* a narrow path of absence and *“baqo gulshani fazosi[3.148]”* - the eternal life are mutually antonyms, the first periphrasis was used to denote death and the second to denote life.

In the chapter dedicated to the theme of *“Hilm”* (gentleness) in “Mahbub ul qulub", the antonym periphrases *“foniydur bevafo”* and *“boqiy hayot mujibi baqo”[2.86]* were used to express life and death. In the chapter of the work entitled “Safar” the periphrases *“hikmat sarmoyasidur”*- the basis of wisdom and *“g‘aflat piroyasidur[2.128]”*- the root of ignorance, negligence, which caused spiritual conflict through defining a pang of hunger and satiety.

Alisher Navoi's "Mahbub ul Qulub" illuminates the philosophy of life with the help of images and uses the periphrases *“tangri do‘stlari”* and *“tangri dushmani”*in order to express the truth and lies that can be unique to each person. This definition implies that a person can create eternal life.

Such figurative expressions can be observed in all prose and lyrical works of Alisher Navoi. The poet tries to describe events and happenings not in simple, short expressions, but in images and life events. In this way, he desires to contribute to the emergence of the perfect man, just ruler, humane, passionate leaders whom he dreamed of. Alisher Navoi considers artistry, aesthetic pleasure of the artistic work in explaining life events, shortcomings through beautiful, unequal and unique expressions, and in accordance with this rule, he created invaluable works that have been read and studied for seven centuries.

Alisher Navoi is known as a scholar, pioneer, linguist, and poet, not only a poet in Turkish poetry but also a major creator of prose and an author of large prose works on wisdom, preachment, memorization, and memory. Mahbub ul Qulub was written in the spirit of preachment and has a special role in Turkish prose. The holy book of the Muslim people, the Holy Qur'an, served as a program in the creation of the content of the work. This can be seen in the descriptions and explanations of life, occupation, and characteristics. This work was formed on the basis of the proverbs, poems, and hadiths written in Turkish, and "Mahbub ul Qulub" can be called a collection of paremiological units. This work has been studied linguistically and literary [4] and this research will further continue.

Among the positive features of a person, which are given the opportunity to become a high potential owner by Allah, are good morals, honesty, kindness, thoughtfulness, devotion, generosity, and contentment and these features have their interpretation and form of manifestation in scientific and religious works. The negative aspects that are the opposite of these actions and characteristics, such as apathy, lying, jealousy, impatience, and cruelty, have been emphasized by scholars for centuries as a major obstacle to the development of the individual's role in society. It would not be an exaggeration to say that Navoi's prose works contain his conclusions in "Mahbub ul Qulub" during his 60 years of life. This work expresses the views of a person and the actions, events that are observed throughout the life of each person, as well as how to overcome such events in a way that these aspects are explained not by simple language and simple speech through artistic expressions in the sentence patterns based on the context of preachment. The periphrasis is the leading one among such expressions. Here are some examples of such periphrasis.

“Amri azim”[2.76] ehsondurkim, aning bayonida ko‘p so‘z ayondur. Al-insonu ubayd al-ehson anga dol va halli jazo al-ehson ilal al ehson anga guvohi hol. The word *“amri azim”* in this sentence expresses the meaning of charity, and the periphrasis in the form of a compound expresses that charity is a great action, a great deed for a person.

Insoniyat bog‘ining dilpisandroq shajari ehsondur vaodamiyliq koninig arjumandroq gavhari ham ehsondur. The periphrases in the sentence “*Insoniyat bog‘ining dilpisandroq shajari*” - the most beautiful tree in the garden of humanity “*odamiyliq koninig arjumandroq gavhari[2.76]*” –the most precious pearls for humanity were formed in a complex combination.

Ehson tiriklikda yaxshi otdur, o‘lgandin so‘ng do‘zax azobidin najot. This periphrasal combination was formed on the basis of both a complex compound and a pattern of speech. The periphrase “*tiriklikda yaxshi ot*” - gains the respect of those around him for the rest of his life and “*o‘lgandin so‘ng do‘zax azobidin najot[2.113]*” -saves the suffering from torture of hell after death. It follows that charity is one of the best deeds that gives a person the blessings of two worlds.

Another characteristic of humanity is generosity, which Navoi explained it through this periphrase *“saxovat insoniyat bog‘ining borvar* *shajaridur, balki ul shajarning mufid samaridur. Odamiyliq kishvarining bahri mavjvari, balki ul mavj bahrining samin gavhari"* denoting the generosity is the fruit of the garden of humanity and the precious light of the roaring sea. In relation to generosity, which is the antonym to generosity, *"saxovatsiz kishi- yog'insiz abri bahor va royihasiz mushki totor[2.78]"* which was compared such people to a cloud without rain and an odorless perfume.

Another of the good qualities of human beings is *hilm*, which explains the meanings of gentleness, patience, and caress. Hilm was described in "Mahbub ul Qulub" in the following: "*Hilm inson vujudining favoqihlig' bog'idur, odamiylig' olamining javohirlig' tog'i. Tengri do'stlarining hikoyati[2.83] va alar axloqining rivoyati afsonasidurkim, uyug'on ko'nglumni uyg'otur va taronaedurkim, xiralig'idin qotgan ko'zni yig'latur, Yaxshilarg'a erishmak - itni poklar chergasiga qotti va yomonlarg'a qorishmoq- anbiyo avlodin jahannamg'a uzatti". T*he term "hilm" was used in the above sentence, interprets the meaning of gentleness, kindness and a person with a tender nature [5.179]. The periphrase *"inson vujudining favoqihlig' bog'i"* refers to the fruit garden of the human body, and his/her tender nature protects him/her from harmful properties. As the fruit tree constantly saturates the people, hilm enriches the soul and the body with good qualities.

Birth and death are true for a person. Navoi used the periphrases *"Umr foniydur bevafo, ul boqiy hayot mujibi baqo[2.83]"* in relation to life and eternal life, which life is a liar, life after death is a real life and , the eternal world where both the good man and the bad man live after the death in the mortal world. There are a lot of thoughts about the eternal world which depends on the good and bad things we have done in this mortal world.

"Ilm o'rganmak din tavqiyati uchundur, yo'qki dini jam'iyati uchun. Xayrsiz g'aniy- yog'insiz sahob[2.90] va amalsiz olim- dobbaki anga yuklagaylar kitob" Xayrsiz g'aniy-means that a rich and wealthy man with good incomes who does not even give a loaf of bread to the needy, orphans and the poor, is ungenerous, stingy and Navoi compares ungenerious man to a *"yog'insiz sahob "*-a cloud without rain. He says regardless, how large a cloud it is, nature will not benefit or if it does not rain.

The following periphrase "Yolg'onchi- *unutquvchi va taammul va ehtiyot yo'lidin kanora tutquvchi[2.90]*" is used for people who are liars, who make empty promises, and unable to keep their word in Mahbub ul Qulub and described as having a vital philosophy of these people who always forget what they say, are cunning and very careful.

The periphrases *"Qanoat- istig'no sarmoyasidur vasharaf va izzat piroyasidur",* two units used above as a synonym for contentment, satisfaction which is a manifestation of humanity and willpower, "*istig'no sarmoyasi"- muhtoj bo'lmaslik asosi[6.285]*-and *«sharaf va izzat piroyasi"* means greatness and honor were formed in the compound units. The term Muflisi qone' in the following periphase*"Muflisi qone'- g'aniy va shohu gadodin mustag'niy"* means contented poor, described in the following periphrase *"g'aniy va shohu gadodin mustag'niy [2.104]"* -the one who does not expect help or charity from the king and the beggar even if he was hungry and had no a cloth. In a sense, this expression encourages the reader to be proud and honest.

The above explanations and analyzes testify that such qualities as generosity, contentment, humaneness, honesty, and gentleness, which are the expression of humanity, are the greatest actions and qualities that lead to perfection and are necessary for the blessings of two worlds.

Results and Discussions

The events described in Alisher Navoi's creative work are based on careful observation of events, in-depth analysis of the results of observations, and, most importantly, on the advantages and disadvantages of nature and human nature on the basis of concrete examples and transitions. As a servant of God, he tries to enlighten on only the good deeds of the individuals and to educate badness by describing negative behaviors. Such images can also be found in the periphrases he used in relation to the scholars of the period in which they lived and representatives of religion.

Alisher Navoi describes Nizami Ganjavi, Khusrav Dehlavi, Abdurahman Jomi, and Lutfi in glorious sentences, expressing his invaluable contribution to the writing of incomparable works in almost all of his prose and lyrical works. Navoi considered Abdurahman Jomi not only his master and a scientist, and also the one who lived at the same period and were also heartily connected with mutual friendship and secrecy, consultation, creative cooperation relations. Navoi first presented his Turkish samples to Jomi and shared his master's views.

It is clear that Jomi, who wrote in Persian, also had a perfect understanding of the Turkish language and the ability to analyze works written in Turkish. As mentioned above, Navoi also expressed his thoughts and opinions about the master in tazkirs, lyrical and epic works, and among these expressions, we can find periphrasic units. We can see the following explanations about the qualities and characteristics of Abdurahman Jomi and his role among the scholars of that time. For example, *Oliy hazrati valoyat manqibati koshifi asrori rabboniy va olimi rumuz va asrori samadoniy al-ulamo varsah al-anbiyo qismat koxida ilmi o'n olamcha erkanlardin iztiror ortuqroq taraka olg'on va ulamo ummatiga k-anbiyoyi isroil komida yuz yigirma to'rt ming harif arosida o'zini tariqat elining muqtado va imomi, sharif xaylining mujtahid va shayx ul-islomi, ya'ni Nur ul-haq vad-din, kahf ul-*

islom va muslimiyna shayxuno6 va Mavlono Abdurahmon ul-Jomiy. The periphrases were used in the form of sentences and conjunctions in this complex sentence: *"Oliy hazrati valoyat manqibati koshifi asrori rabboniy va olimi rumuz va asrori samadoniy"*- conveys that the light of the Turkic nation, as a representative of the field of religion, warms the hearts of the people and guides them to the right path through the works written in the Turkish.

The interpretations about Navoi in the periphrastic descriptions of fifteenth-century scholars and clerics can be found. For instance, *"tasavvur va anoniyat umuriniig xudroyi va ujbu nafsoniyat olamining dashtpaymoyi"*(he has religious and secular knowledge, *(Xamsat ul mutaxayyirin)), samona mia muhibbi darveshon va mo'taqidi eshon* (despite his high potential, he is simple and humble), *az himai shug'l ser va bar faqr daler* (honest lover, faithful believer, engaged in all fields, knowledgeable, courageous and brave), *dag'dag'ai sobiq samti taqviyat* (he was able to overcome the difficult situation in silence), *ta'kid paziruft* (he was able to defend her thoughts and fair (*Xamsat ul mutaxayyirin)).*

We can find many expressions and descriptions that can serve as an example in all areas of the time and provide information about the scholars, clerics, and religious leaders who were great representatives of a particular field in Alisher Navoi's "Holoti Sayyid Hasan Ardasher". Almost all of these expressions were given through artistic images through stagnant compounds.For example: we can observe a huge of periphrastic expressions in the descriptions of Pahlavon Mahmud. The periphrases used to this great figure are not only in the form of a simple compound but also in the form of a complex compound, even in the form of a sentence,*" tariq fanosida mufarrad va fano tariqida mujarrad "*(the one in mortal path), *"jahondag'i pahlavonlarning pahlavoni jahoni va pahlavonlig' jahonining jahon pahlavoni"* (a brave man of the world), *"surat va ma'nida beshabih va Benazir"* (a cute and the intelligent), *"borcha sodotu mashoyix va ulamoyu fuqaroning mahbub ul qulubi"* (pleasing to the hearts of all), *"suhbatning mujibi nishot va inbisoti"* (has a sense of joy and happiness), *"nadimi majlis va anisi anjuman"* (a friend and a companion in the events), *"fununda ahli fandek mohir"* (knowledgeable in science and profession*),"xilvati va har rozda mahrami"* (a good listener),*"suhbatning yuzi"* (always ahead in a roundtable discussion), *"hamzabonu-hamdam"* (interlocutor friend), etc.

Mawlana Shamsuddin Muhammad Tabodgoni was introduced by periphrases such as "*Mavlono Shamsuddin Muhammad Tabodgoniy janobi haqiqatmaob"* (truth-teller), "*qutbi doirai haqiqat"* (leader of the truthful), "*murshidi ahli shariat"* (religious leader), and "*tariqat, koshifi ulumi rabboniy"* (scholar of religious sciences). It is known that he was respected as a famous person who had a special role among the clergies. Similar periphrases have been used to Khawafi such as "*shayxul-mashoyix"* (which has the highest authority in the field of religion), *"umam shayx zaynul-millati vad-din"* (the loved one of the nation), "*olimil-murshidi tavoifil"* (the scholar who guides rights ways). We can see that he became one of the great representatives of the religious world of the fifteenth century.

In addition, the periphrases were used such as "*Hazratn Shayx ul-islomiy"* (a high-ranking person in theology) "*qahf ul-anomiy"*, etc.

Navoi considered Amir Khusrav Dehlavi as his master in Hamsanavism and used periphrases to describe Amir Khusrav Dehlavi such as "*nazm beshasining g'azanfari"* (the lion of poetry), "*dardu ishq otashkadasining samandari"* (born in the fire of love and lives in this fire), "*zavqu hol vodisining pokravi"* (the passenger of the valley of pleasure).

Conclusion

In conclusion, it should be noted that Alisher Navoi reflected the situation of his time and the life of the people in all his poetic and prose works. He tried to express the imaginary, pandnoma verses about ordinary people or statesmen of that time, as well as real scientists, who were highly respected by the scientist, through artistic movements and analogies. From the above examples, Navoi was able to achieve his goal. Definitions of a person or event from different points of view, the expression of ideas on the basis of synonymous fixed compounds, or antonymous explanations, given as a sample, which have both positive and negative connotations to a concept, lead to the formation of synonymous and antonymous periphrases. The judicious and appropriate use of such language tools shows that the scientist has an equal worldview and knowledge in literature and linguistics. It would be useful to study the periphrases used in such beautiful and expressive classics on the example of classical periphrases.

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THE EFFECTIVENESS OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSME) DEVELOPMENT PATTERNS IN PEKANBARU

Abstract: *The purpose of the study is to determine the effectiveness of the MSMEs development pattern in Pekanbaru and to determine the level of effectiveness of the development pattern from various aspects such as training, capital, mentoring, partnerships, information technology and government policies in encouraging the growth and development of MSMEs in Pekanbaru.The method used in this study is descriptive qualitative using case study sampling method.The results of the study show that the effectiveness of the Micro, Small and Medium Enterprises (MSMEs) development pattern in Pekanbaru is relatively good. This can be seen from the results of the questionnaire that show (1) The effectiveness of training by 31.48% is very effective and 66.67% is quite effective; (2) The effectiveness of Capital by 36.84% is very effective and 52.63% is quite effective; (3) The effectiveness of development assistance by 33.33% is very effective and 66.67% is quite effective; (4) The effectiveness of partnership by 40% is very effective and 55% is quite effective; (5) The effectiveness of information system by 53.33% is very effective and 46.67% is quite effective; (6) And the effectiveness of government policies by 20% is very effective and 65% is quite effective.*

Key words: *MSMEs, the effectiveness of the development pattern, training, capital, mentoring, partnerships, information technology and government policies.*
Language: *English*
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Introduction

Micro, Small and Medium Enterprises (MSMEs) have a strategic role in increasing income, expanding job opportunities and business opportunities, and overcoming poverty. Therefore, the efforts to empower small and medium enterprises have become a priority strategy, reflected in various attentions, development, training, strengthening in various performance growth activities carried out by the government, community, business world and international institutions.The participation of various institutions with various development assistance programs is considered positive, as a development asset which is not always fulfilled only by the Government.

Although the development of small businesses shows an increase, there are many problems and obstacles in providing development assistance to them. The different characteristics of MSEs are one of the obstacles that make it difficult to provide intensive (integrated) development assistance, especially the marketing aspect of their products.In addition, in general, the level of education and skills of the regional MSEs is still low so that the quality of the products produced is still diverse. Besides the knowledge of business management management is also low.

Micro and Small Enterprises (UMK) have an important and strategic role in national economic development.In addition to playing a role in economic growth and employment, MSEs also play a role in distributing development outcomes.According to the Minister of Cooperatives and SMEs, the contribution of MSMEs to the 2017 national GDP was IDR 7,005,950 billion or around 62.5% of the total GDP.

If calculated based on business scale, MSME cooperatives that make up the contribution of MSME GDP are 38.90% of micro enterprises, 9.73% of small enterprises, and 13.95% of medium enterprises. For MSMEs, there are currently 59.69 million units, which are broken down to 58.9 million units of micro businesses, 716.8 thousand units of small businesses, 65.5 thousand units of medium businesses, and 5.03 thousand units of large businesses.

Data obtained from the Central Statistics Agency for Riau Province shows that there are 509,252 MSMEs spread across 12 (twelve) regencies/cities throughout Riau Province.Based on national standards, the average MSME is a place to work for two people (Herispon, 2011).Thus, MSMEs in Riau Province absorb labor up to 1 million people.When compared with the Riau Province labor that was 3.1 million people in 2018, it means that the MSME sector contributes to absorbing up to 33% of the labor. Having many contributions does not eliminate its complex problems. For this reason, it is necessary to empower for increasing MSMEs’ competitiveness and strengthen their economy.

Common problems faced by MSMEs in their business development include:(1) limited funding for business development; (2) lack of information and access to raw materials and markets; (3) the low quality of human resources; (4) low ability to produce innovative products; and (5) weak assistance. (6) there is no upstream and downstream partnership model.The success of new MSMEs (start-up MSMEs) is only 20% in the first year and 10% in the second year, so their success needs to be more improved.Several good institutions from the government, Non-Government Organizations (NGOs), business corporations and so on have a significant role in helping to develop MSMEs (Syarif, 2009).

According to Suparyanto (2012) the most basic weakness experienced by most small businesses is in the management aspect, one of which is human resource management.One of the efforts to improve performance is to establish partnerships with companies in the form of Corporate Social Responsibility (CSR) programs as stated by Kim (2000). One of the very urgent goals of CSR, especially in developing countries, is strengthening the people's economy based on small and medium enterprises. It is in accordance with the Government Regulation of the Republic of Indonesia No.38/99 dated May 25th, 1999.One form of channeling funds to MSME actors is through a partnership program.

The pattern of development assistance for small businesses that have been carried out so far is more effective if a synchronization can be realized between one element and another, as well as between one activity and another. Although coordinations continue to be carried out, many activities show that the movement and steps for developing small businesses are carried out in an uncoordinated direction.

On the other hand, the effectiveness of the development pattern itself is largely determined by local government policies (specific patterns). This factor determines the need, approach, treatment, which needs to be done.In addition, there should be a specific (individual) treatment within the general (mass) treatment. The development pattern of developing small business that has been carried out so far has not focused on aspects of regional policy. As a result, the level of effectiveness of the development has become less, which has an impact on the slow increase in the ability of small businesses.

Based on some factors considered such as: a) the existing foundation for developing small businesses, b) the uncoordinated efforts of development assistance by various elements and institutions, c) behavior that refers to regional policies which so far have not existed for each agency, an activity that is held should produce a framework (concept) of the effectiveness of the development pattern. Therefore, this research was conducted in order to find a solution and answer a question related to the model of developing micro, small and medium enterprises in Pekanbaru.

Based on the research background that has been described, the following problems can be formulated; (1) Is the development of MSMEs in Pekanbaru that has been carried out so far been effective?; (2) How is the effectiveness of the development assistance pattern in terms of: training, capital, development assistance, partnership, information technology and government policies in encouraging the growth and MSMEs development in Pekanbaru?

Micro, Small and Medium Enterprises

There are several definitions of micro, small and medium enterprises. The following is the definition of MSMEs. Based on Law No. 20 of 2008 concerning Micro, Small and Medium Enterprises, Micro enterprises, they are productive businesses owned by individuals and or individual business entities that meet the criteria for micro enterprises.Small business is a productive business that stands alone, which is carried out by individuals or business entities that are not subsidiaries of companies, that are owned, controlled, or become part either directly or indirectly of a medium or large business, and meets the criteria of a small business. Medium-sized business is a productive economic business that stands alone, which is carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled, or become a part either directly or indirectly with small businesses or large businesses with total net assets or annual sales results. Here is the characteristics of MSMEs based on business size is as follows:

Table 1. Criteria of MSMEs & Big Business based on Asset and Trunover

Business Size	Criteria	
	Asset	Turnover
micro business	IDR 50.000.000 Maximum	IDR 300.000.000 Maximum
mini business	> IDR 50.000.000 - IDR 500.000.000	> IDR 300.000.000 - IDR 2.500.000.000
midlle business	> IDR 500.000.000 - IDR 10.000.000.000	> IDR 2.500.000.000 - IDR 50.000.000.000
Big Business	> IDR 10.000.000.000	> IDR 50.000.000.000

Source : Bank Indonesia

The development of MSMEs will strengthen the structure of the domestic economy, due to the labor absorption and can increase people's purchasing power which in turn will increase the level of demand. High demand will encourage economic growth. Although the role of MSMEs in the Indonesian economy plays a very central role, government policies and supporting regulations are still considered not optimal. Therefore in its implementation, MSMEs still face various problems.

The Effectiveness of MSME Develpment Patterns

There are several factors that influence the effectiveness of managerial development for MSMEs. Management capabilities should support MSME's activities to be more effective and efficient in running their business (Yin, 2012). Management ability is important in contributing to business performance. Management capability is always used as an important parameter in the production process. Nuthail (2001) found that the important components used to assess and change managerial ability in improving business performance are; personality, intelligence (knowledge), motivation and processing system.High managerial ability can contribute to business performance.

Kumalaningrum (2012) states that Small and Medium Enterprises' (SMEs') quality in Indonesia are difficult to develop in the market because they face several internal problems, namely the low quality of human resources such as lack of skilled human resources, lack of entrepreneurial orientation, low mastery of technology and management, and lack of information. Every business or company, whether it has small or large scale, requires the application of management principles, in its management to achieve effective and efficient results. Fayol in Hani Handoko (2003) states that planning, organizing, coordinating, giving orders and supervising are the main functions that must be possessed by a manager in managing a business effectively and efficiently.Improvement in managerial and technical capabilitiesare needed by an entrepreneur. Since he is a manager, the ability is needed to coordinate all his subordinates and manage all their potential. The technical skills of employees in Small and Medium Enterprises are generally low, this will affect the predetermined quality of the products.

Previous Studies

Common problems faced by MSMEs in their business development include:(1) limited funding for business development; (2) lack of information and access to raw materials and markets; (3) the low quality of human resources; (4) low ability to produce innovative products; and (5) weak assistance. (6) there is no upstream and downstream partnership model.The success of new MSMEs (start-up MSMEs) is only 20% in the first year and 10% in the second year, so their success needs to be more improved.Several good institutions from the government, Non-Government Organizations (NGOs), business corporations and so on have a significant role in helping to develop MSMEs (Hasbullah, Rokhani et al, 2014).

Kumalaningrum (2012) states that Small and Medium Enterprises' (SMEs') quality in Indonesia are difficult to develop in the market because they face several internal problems, namely the low quality of human resources such as lack of skilled human resources, lack of entrepreneurial orientation, low mastery of technology and management, and lack of information. Every business or company, whether it has small or large scale, requires the application of management principles, in its management to achieve effective and efficient results. There are several factors that influence the effectiveness of managerial development for MSMEs. One of the flaws of MSMEs is weak management capabilities. Management capabilities should support MSME activities to be more effective and efficient in running their business. Yin (2012) states that Management ability is important in contributing to business performance. Management capability is always used as an important parameter in the production process. Nuthail (2001) found that the important components used to assess and change managerial ability in improving business performance are; personality, intelligence (knowledge), motivation and processing system.High managerial ability can contribute to business performance.

Although small and medium enterprises are actually reliable against the crisis, it is difficult to get facilities because they are facing complex and critical credit rules (Kamio, 2003). This requirement makes a small businessman who tends to have low education feels defeated before competing. In addition, non-bank financial institutions are generally located in cities, while small businesses are spread in various places that may be far from the city. The consequence is usually that many small businesses do not have access to bank or to other financial institutions.

Fayol in Hani Handoko (2003) states that planning, organizing, coordinating, giving orders and supervising are the main functions that must be possessed by a manager in managing a business effectively and efficiently. Improvement in managerial and technical capabilitiesare needed by an entrepreneur. Since he is a manager, the ability is needed to coordinate all his subordinates and manage all their potential. The technical skills of employees in Small and Medium Enterprises are generally low, this will affect the predetermined quality of the products.In connection with the governing body,a small business is sometimes fostered by more than one institution, each of which has a different purpose due to different interests, so that a small business must solve various problems. Otherwise, entrepreneurs who are starting to succeed, their time runs out only to receive guests for the benefit of training, data collection or comparative studies.

Research Method

Place and Time of Study

The location was in Pekanbaru, which takes place from June to November 2020 (apparently 6 months).

Population and Sample

The population of this study are the MSMEs in Pekanbaru. There were 60 MSMEs in all economic sector that joined as sample.The sampling method used was case study.

Type and Source of Data

The type of data used in this study is primary data, namely data obtained directly from the first source from individuals such as the results of questionnaires conducted by researchers and interview some related parties, as well as other data related to study. In this study, the primary data source was the result of interviews using a questionnaire with MSMEs in Pekanbaru.

Data Analysis Method

The method used in analyzing the data in this study was a descriptive method using a qualitative approach. The qualitative approach is considered appropriate because it is in accordance with the research objectives to be achieved, namely knowing the effectiveness of the MSME development pattern in Pekanbaru City. A qualitative approach was used to gain a deep understanding of a phenomenon. It is in accordance with the research objectives the researchers wanted to obtain, so that the qualitative approach is very relevant to be used in this study. In assessing the effectiveness of the pattern of developing SMEs in Pekanbaru, the researchers required in depth involvement to the environment studied. This was done to gain an in-depth understanding of the object.

The approach related to the theme can be categorized as a case study, which is a model that emphasizes the exploration of a system that is limited to one detailed case or several detailed cases, accompanied by in-depth data collection involving various sources of information. Case study is also a detailed qualitative research model about individuals or a particular social unit over a certain period of time. More deeply, it is a comprehensive, intense, detailed, detailed and in-depth model and is more directed as an effort to examine contemporary problems or phenomena (Haris Herdiansyah, 2010).

Result And Discussion

The Effectiveness of Training

The results of the study on the characteristics of the respondents based on the level of effectiveness of the training can be seen in Figure 1 as follows:

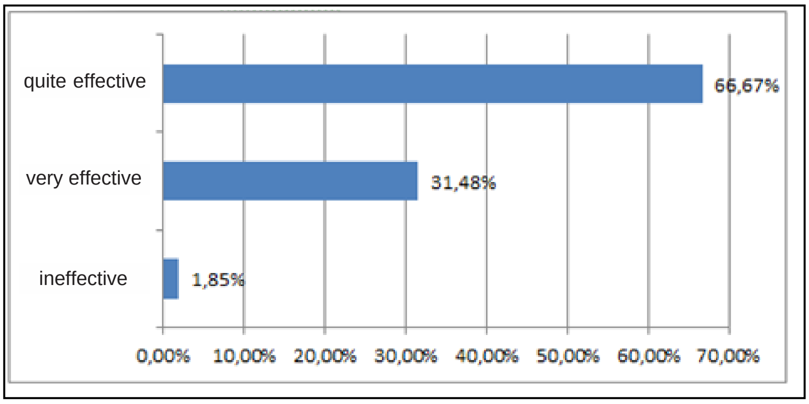

Figure 1 - Effectiveness of Training
Source : Data Source, 2020

The results showed that 66.67% of respondents thought that the training provided was quite effective, 31.48% of respondents answered that it was very effective, while the remaining 1.85% of respondents thought that the training provided was not effective. The high level of effectiveness of training activities shows that the results are positively correlated with improving the MSMEs performance. Although the respondents who stated that it was not effective was relatively small (1.85%), it was necessary to pay attention to the training organizers, both the government and other parties. Considering that the implementation of training activities requires substantial time and cost sacrifices, if the participants judge them to be ineffective, it indicates that there has been an inefficient training implementation.

The Effectiveness of Capital

The results of the study on the characteristics of the respondents based on the level of effectiveness of the capital can be seen in Figure 2 as follows:

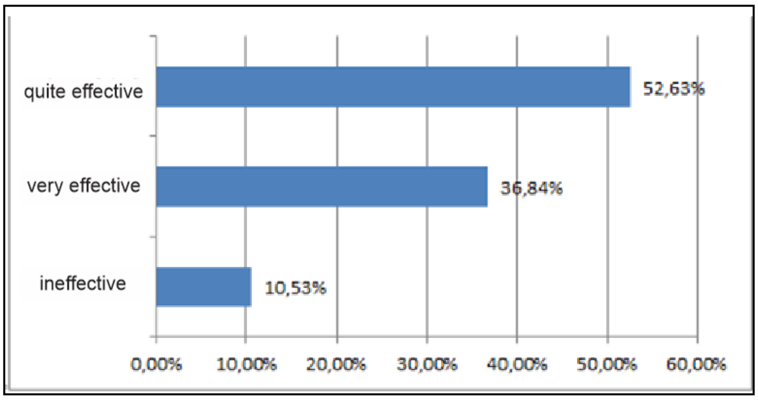

Figure 2 - Effectiveness of The Capital Field
Source : Data Source, 2020

The data show that 52.63% of respondents think that business capital is quite effective for business development, 36.84 think it is very effective and as many as 10.53% think that business capital is not effective for future business development.For this reason, capital is the main supply for entrepreneurs to run their business.Many often misinterpret that capital is only important for large-scale businesses.However, actually, small and micro scales also need adequate capital in order to develop.Capital is the basis for MSMEs development to make sure that their existence is strong enough to support their future performance.Not only for the purposes of production equipment, but capital requirements are also very important to penetrate the market which will have an impact on business development in the future.

The Effectiveness of Development Assistance

The results of the study on the characteristics of the respondents based on the level of effectiveness of the development assistance can be seen in Figure 3 as follows:

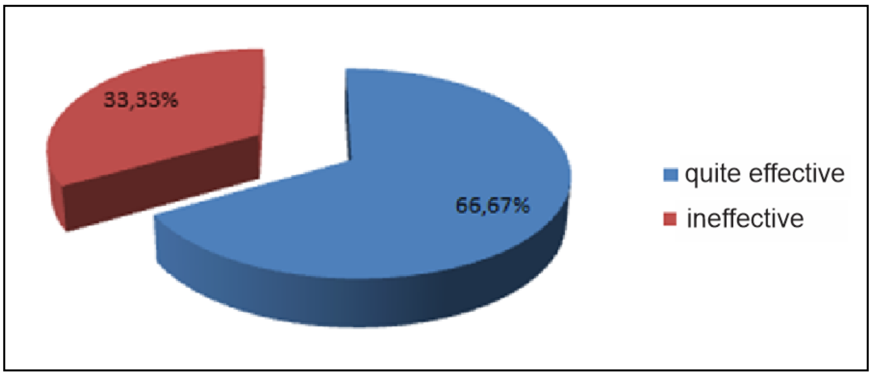

Figure 3 - Effectiveness Of Mentoring
Source : Data Source, 2020

The data show that 66.67% of respondents feel that assistance is quite effective for future business development and as many as 33.33% of respondents think that assistance is very effective in helping MSMEs in future business development. The role of assistants will determine the success of MSMEs in advancing, because assistants are expected to be motivators, conduct business consultations, assist MSMEs in promoting superior products, help access financing, or improve the quality of MSMEs through business training, managerial skills and improving MSME marketing networks. In regard to assistance, the facilitation process and support for various aspects for business development will be provided by a consultant or MSME assistant in making business actors able to develop and run their business lines accordingly. Indeed, basically every business will experience various problems that can interfere with the business itself, both from the aspect of capital or financing, management, whether it is HR, finance, marketing then product problems and others. Assistance role will provide input and motivate MSME actors to grow and be more advanced.

The Effectiveness of Partnership

The results of the study on the characteristics of the respondents based on the level of effectiveness of the partnership can be seen in Figure 4 as follows:

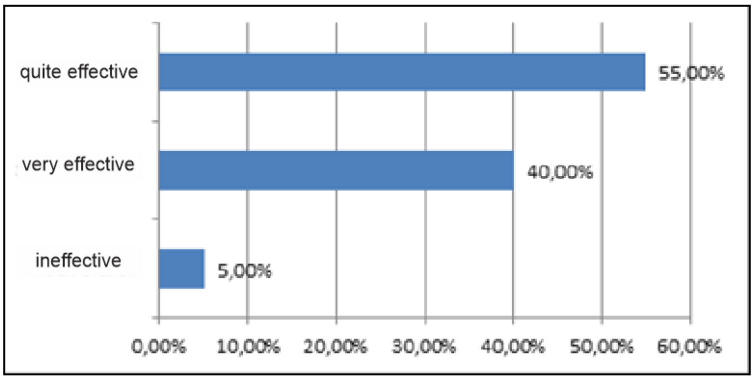

Figure 4 - Effectiveness of Partnerships
Source : Data Source, 2020

The data shows that as many as 55% of respondents feel that partnerships are quite effective for future business development and as many as 33.33% of respondents think partnerships are very effective in helping SMEs in future business development and as many as 5% of respondents think partnerships are not effective in business development. This is because most respondents feel a significant impact when conducting business partnerships in any form so that it helps businesses to continue to grow.

The Effectiveness of Information System

The results of the study on the characteristics of the respondents based on the level of effectiveness of the information can be seen in Figure 5 as follows:

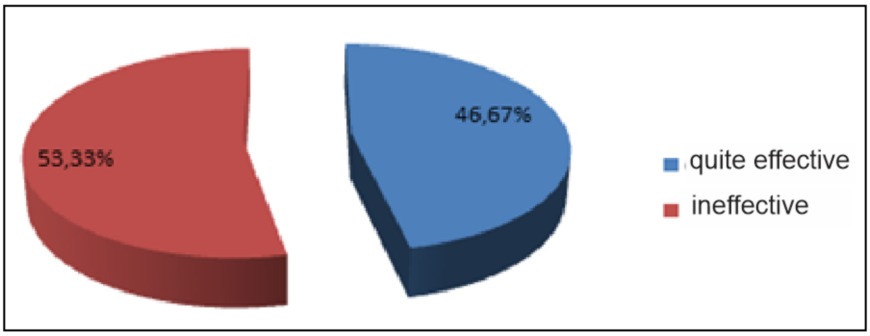

Figure 5 - Effectiveness of Information System
Source : Data Source, 2020

The data show that 53.33% of respondents think that information systems are very effective and 46.67% of respondents think that information systems are quite effective in helping MSMEs develop their businesses in the future. This is because the application of information technology is very helpful for MSMEs in product marketing so that they can reach a wider market and are effective in business management.

The Effectiveness of Government Policies

The results of the research on the characteristics of respondents based on the effectiveness of government policies can be seen in Figure 6 as follows:

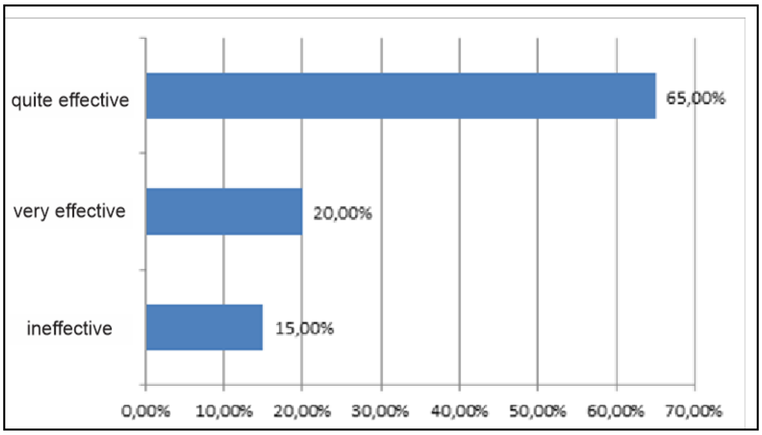

Figure 6 - Effectiveness of Government Policies
Source : Data Source, 2020

The data show that 65% of respondents think that government policies are quite effective, 20% of respondents think that government policies are very effective and as many as 15% of respondents think that government policies are less effective in helping MSMEs in future business development. Regulatory support from the government is very important for the development of MSMEs. For this reason, the government needs to optimize all policies related to the development of MSMEs, including government's ability to regulate so that MSMEs can increase their assets through access to financing, increase theur capabilities/skills and strengthen their supporting infrastructure and technology.In addition, the government must provide supporting services in the form of assistance programs, business development and technology commercialization, as well as helping MSMEs to accelerate business growth through the provision of tax/fiscal incentives, fostering a healthy competitive climate and cutting unnecessary administrative costs and forming a positive mindset about entrepreneurship.

Conclusion

1. As many as 66.67% of respondents think that the training provided was quite effective, 31.48% think it was very effective and 1.85% of respondents think that the training provided was not effective.
2. As many as 52.63% of respondents think that business capital is quite effective for business development, 36.84 think it is very effective and as many as 10.53% think that business capital is not effective for future business development.
3. As many as 66.67% of respondents feel that assistance is quite effective for future business development and as many as 33.33% of respondents think that assistance is very effective in helping MSMEs in future business development.
4. As many as 55% of respondents feel that partnerships are quite effective for future business development and as many as 33.33% of respondents think partnerships are very effective in helping SMEs in future business development and as many as 5% of respondents think partnerships are not effective in business development.
5. As many as 53.33% of respondents think that information systems are very effective and 46.67% of respondents think that information systems are quite effective in helping MSMEs develop their businesses in the future.
6. As many as 65% of respondents think that government policies are quite effective, 20% of respondents think that government policies are very effective and as many as 15% of respondents think that government policies are less effective in helping MSMEs in future business development.

Suggestion

1. For the assistance model in the training aspect, the provider need to conduct a survey about the analysis of the training needs of MSMEs before conducting the training. So that training activities are appropriately on target because a training needs analysis has been carried out based on the needs of MSMEs
2. For the development model in the capital aspects, it is hoped that MSMEs will receive guidance related to the procedures borrowing money and the use of capital from external parties. If possible, the government can provide accessible capital facilities that can help MSMEs to grow and develop.
3. For the development assistance model in the mentoring aspect, it is hoped that the government will continue to actively provide a sustainable assistance to MSMEs in a programmed approach, not only a project approach.
4. For the development assistance model in the partnership aspect, it is hoped that the government and other stakeholders will provide assistance and support to MSMEs to facilitate business partnerships, so that it will provide opportunities for MSMEs to develop.
5. For the development assistance model in the government aspect, it is hoped that the government will continue to provide protection to MSMEs with various policy for efforts to develop MSMEs.
6. For the development assistance model in information systems aspect, it is hoped that MSMEs can get open and transparent business information related to various policies and facilities provided for MSMEs.

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COMPETENCE-BASED APPROACH IN TEACHING FOREIGN LANGUAGES

Abstract: *It is apparent that, in this globalization era the requirement of learning foreign languages is increasing dramatically and modern educationalists are expected to see perfect results in teaching the language productively which is the highest factor of teachers pedagogical competence. The author reckons that one of the ways to intensify the educational activities of learners, encourage them to learn a foreign languages and enhance creativity is a competence-based approach to educate foreign languages. The article purposes to present the most effective methods and techniques of teaching students a foreign language from the standpoint of the competence approach.*

Key words: *competence approach, competence, modernization, competence, foreign language, training, foreign language communication.*

Language: *English*

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Introduction

Changes in the socio-political situation, the development of international contacts in all spheres, the consolidation of these contacts and international integration have led to an increase in the role and importance of skills and abilities of genuine foreign language communication. Rapid socio-economic progress dictates high demands to the quality of teaching a foreign language in educational institutions, as each new generation of students must rise to a higher level of proficiency foreign languages. Changes in the socio-cultural context of a foreign language, new requests of students regarding the level of proficiency in it make it necessary to change the quality of training. In connection with the modernization of domestic education, one of the most important tasks facing educational institutions is the formation of key competencies, and the issue of a competence-based approach in education is becoming particularly relevant. Knowledge of a foreign language gives the future specialist access to foreign sources of information, without which the activity of a certified specialist is currently unthinkable. The ability to work with original literature in the specialty includes obtaining the information contained in the text, its critical understanding, generalization, analysis and evaluation of reliability. Foreign language competence ensures the readiness of the student to actually use the acquired knowledge in a professional environment. The concept of "competence" comes from the Latin word compete, which means fit, match. In a general sense, it means meeting the requirements, established criteria and standards in certain areas of activity and in solving a certain type of tasks, having the necessary active knowledge, the ability to confidently achieve results and master the situation [1]. For the first time, the concept of "competence" appeared in the 60s of the XX century in the United States of America, where it was used in the framework of activity education, the purpose of which was to train professionals who are competitive in the labor market. Initially, everything was reduced to automating the acquired practical skills within the framework of the behavioral approach, which was clearly insufficient for the development of creative and individual abilities of the trainees. In this regard, it was proposed to distinguish between two concepts: competence and competence (competence and competencies). Competence began to be considered as a personal category, and competences turned into units of the curriculum and formed the" autonomy " of competence [2; 3].

Speaking about competencies, it is necessary to clarify the concept of "competence" – a set of competencies, that is, the observed manifestations of successful productive activity. Competence is a complex personal resource that provides an opportunity for effective interaction with the surrounding world in a particular area and depends on the necessary competencies [4]. And what is meant by the competence approach? The competence- based approach in education is understood as a method of teaching, which is aimed at developing students ' skills. The students ' ability to solve a certain class of professional tasks in accordance with the requirements for personal professional qualities: ability to search, analyze, select and process the received information, transmit the necessary information; knowledge of the skills of interaction with others people, the ability to work in a group; knowledge of the mechanisms of planning, analysis, self-assessment of their own activities in non-standard situations or in conditions of uncertainty; knowledge of methods and techniques for solving problems [5]. The competence approach imposes certain requirements on students and their level of proficiency in a foreign language. In this regard, the basic and advanced competencies of students are distinguished.

At the basic level, it is assumed that the language is a means of communication (a certain vocabulary, knowledge of basic grammatical structures, knowledge of the advanced level assumes that students will use a foreign language to solve practical problems, for example, to find the necessary information on the profile of their specialty. This level has an interdisciplinary character and is evaluated on the achieved result, and not only on the correctness of the use of certain grammatical constructions and active vocabulary.

The main means of forming key competencies in the study of a foreign language are various technologies, forms and methods of teaching. These forms and methods include: a teacher's monologue; a frontal-individual survey; informative conversations; independent work with a textbook on the teacher's tasks; a film demonstration; traditional control work.

Researchers of the competence-based approach to learning offer several

classifications of key competencies:

1) value-semantic,
2) general cultural,
3) educational and cognitive,
4) informational,
5) communicative,
6) social and labor,
7) personal improvement [6].

Each of the competencies includes a large set of knowledge, skills, skills and values.

Let's take a closer look at this classification.

1. Value-semantic competence provides a mechanism for self-determination of the student in situations of educational and other activities. It demonstrates what his values are, whether he is able to understand his role and purpose in the world, whether he can choose attitudes for his decisions and actions, whether he is responsible the student refers to the choice of the solution. Students master this competence by participating in moral conversations, in situations of moral choice of actions.

2. General cultural competence allows students to join the dialogue of cultures, to find out the cultural foundations of family, social, social phenomena and traditions, the role of science and religion in human life. At the same time, this competence shows how competent the student is in the household and cultural and leisure sphere (for example, when organizing free time). In terms of learning foreign languages, we are talking about the formation of socio-cultural competence, which is considered:

- as a willingness and ability to find the common and specific in models development of the studied and native languages;

-find, compare and summarize cultural information obtained from different sources and in different languages;

- build speech interaction in accordance with the norms adopted in a particular culture, taking into account speech specifics.

3. Educational and cognitive competence includes elements of logical, methodological, and educational activities related to real cognizable objects. This includes knowledge and skills of organizing goal-setting, planning, analysis, reflection, and self-assessment of educational and cognitive activities. So, for example, students are asked to re-check their own work (grammar test, essay), already checked by the teacher, but without corrected errors. The teacher discusses in detail with them the reasons for the appearance of errors, students work on the errors, do a number of exercises aimed at better assimilation of the material, analyze the inaccuracies of style and form. At the next stage, they repeat the work, taking into account all the previous comments.

4. Information competence provides the skills of the student's activity in relation to the information contained in educational subjects and educational areas, as well as in the surrounding world. It is information competence in the modern world that is the key to successful implementation in various areas of communication, including professional communication. To do this, you need:

-To find the necessary information in various sources, both on paper and on electronic media in different languages;

-To select the necessary information, highlighting the main and secondary;

-To determine the degree of reliability of information by comparing it with information from other sources and questioning it;

-To use the received information effectively;

-To save information, protecting it from unwanted users.

5. Communication competence includes knowledge of languages, ways of interacting with surrounding and remote people and events, skills of working in a group, knowledge of various social roles in a team. Children master this competence in role-playing games, when writing questionnaires and letters.

6. Social and labor competence is closely related to communication competence. Social and labor competence directs the ability to master various social roles in the sphere of civil and social and labor activities. The main method is a role-playing game, during which students not only practice using language skills, but also prepare themselves for future social roles.

7. The competence of personal self-improvement is aimed at mastering the methods of physical, spiritual and intellectual self-development, emotional self-regulation and self-support. In this formation, the teacher himself, his style of communication with people, his spiritual values and priorities play an important role [7].

It is these key competencies that make it possible for the formation of the student as a subject of educational activity and the education of his personality. A competence-based approach to teaching a foreign language requires creative thinking. An approach to the organization and construction of the educational process, the creation of conditions for the formation and development of practical skills and skills of foreign language speech. Therefore, it is necessary to strive to create such conditions in the classroom when the students ' assimilation of language material is carried out naturally, in the process of communication between the teacher and the students in the life situations modeled by us in various ways.

The formation of students 'competencies depends on their activity, when the" activity " of the teacher turns into the activity of the students. The competence-based approach strengthens the practical orientation of education, emphasizes the need to gain experience in activities, the ability to put knowledge into practice. Thus, the competence approach includes a set of principles for determining the goals of education, which are expressed in self-determination, self-actualization and the development of students' individuality. Equally important is the choice of forms and methods of teaching students. Training in the competence-oriented education is an active character, i.e. the formation of knowledge and skills is in the practical activities of students, organized their joint work in groups; use of active forms and methods of teaching, innovative technology and productive character; builds individual educational trajectory; in the learning process actively implemented interdisciplinary communication; developing important qualities: independence, creativity, initiative and responsibility [8].

The formation of educational and cognitive competence is the formation of skills of educational activity, the ability to analyze their activities. Self-control and mutual control are actively used to form this competence. The formation of communicative competence takes place in stages with the help of game technologies, discussions, and case-study technology. When conducting classes, we use electronic multimedia technologies, since it is impossible to teach a foreign language without giving students the opportunity to hear the speech of native speakers language and see their style of behavior in a particular communication situation. Students define social roles, conduct dialogues on various topics, practice oral speech and speech cliches of a socio-cultural orientation, which allows them to show creative thinking. Mastering a communicative competence means mastering different social roles. The main way to do this is role – playing. In the process of playing out various life situations, students prepare themselves for future social roles, for life in a society with its own laws and rules, thus forming social and labor competence.

In the context of teaching a foreign language, students develop certain competencies by gaining knowledge that they can acquire in their future professional activities in the field of economics, commerce and business, mastering various ways of solving problem-cognitive tasks, experience effective decision-making and achievement of goals through overcoming obstacles. A stock of knowledge, knowledge of ways to solve problems and experience in achieving goals are necessary components of students ' competence. The absence of at least one of these components makes the competence defective [9]. Thus, the competence-based approach in teaching a foreign language is developing as an alternative to traditional learning, in the process of which there is a mastery of the language. Knowledge, skills, and capacities that limit their practical application in the future professional activity of students and do not sufficiently take into account the essence of the competence of a modern person in the conditions of competition of the free market. Before you start using the competence approach in teaching a foreign language, you must meet the following requirements. First, it is necessary to familiarize students with the essence and content of the competence approach. Students must master certain intellectual, creative, and communication skills. This means that they must be able to work with the text (highlight the main idea, search for the necessary information in a foreign language text), analyze the information, make generalizations and conclusions, be able to work with a variety of reference materials, and also be able to conduct a discussion, listen and hear the interlocutor, defend your point of view, support it with strong arguments, be able to compromise with the interlocutor, be able to express your thoughts concisely. In addition, students should be able to work in various organizational forms: in pairs, groups, in teams, where there is a clear distribution of roles (for example, boss, secretary, etc.). they must have a certain program, lexical and grammatical material, be able to work with correspondence in a foreign language and independently compile various documents in Russian and foreign languages, have an idea of conducting business negotiations in a foreign language [10]. Thus, the competent use of the competence approach requires significant training, the creation of a solid language base for students, which is carried out in the training system.

In turn, the high quality of learning a foreign language contributes to competitiveness and professional mobility in the field of professional activity and communication of the future specialist. The acquisition of foreign language competence by students consists in mastering a foreign language at a level that will allow them to use it to meet professional needs, implement business contacts and further professional self-education and self-improvement.

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