European Science Review

№ 11–12   2022

November – December

European Science Review

Scientific journal

№ 11–12   2022 (November – December)

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Section 1. Study of art

Nigmatov Ulug'bek,
dotsent of "Theater decoration painting" of the National Institute
of Art and Design named after Kamoliddin Behzod
Uzbekistan, Tashkent

REPRESENTATION OF THE DAILY GENRE IN COLORED PAINTING

Abstract. This article analyzes the originality of the works created in the daily genre in the art of wares painting, creative feelings, attitude in describing the processes taking place in the surrounding world, the role of pictorial means in its expression. Painting art arises in the creator's unique attitude to the reality that is happening around him and increases the desire to enrich the spiritual world of people, to create, to live in their hearts.

Keywords: artist, painting, daily genre, image, character, means of expression, style, form, paint, colorite, wares.

Painting it is a pictorial and remote formative creation. This process takes a lot of time and begins from the very first glance of the artist. The success of a creative person, the mood of creative creativity also depends on his mental state, the appreciation of his talent. In essence, painting is an inner mood in itself; and the desire to engage in this art reflects a clear vision and conception of the painting.

When painting works with volumetric objects, it places them in the plane. The two-dimensionality of the picture plane is opposed to the requirements for describing the distance in painting. In fact, everything is flat on the plane of picture. The shapes and paints painted by the artist are seen by the viewer in remote interaction.

And in reality, the card does not have either a previous plan or a background, the real distance of the card being described lies in the plane of the card. Only the shape and color are present in the painting. If the images are depicted on the painting as real as in nature, then the most reliable illusion has been created. At the same time, it should be noted that artists who lived and worked at different times interpreted the plane and distance in the painting differently. The shape of the items is the element that forms the distance. The environment and distance transferred to the picture plane are defined as a negative form.

Painting of artists working with the help of a special tool-a workbench (easel). Wares painting works are treated with mosaic, stained glass, watercolor, gouache, pastel paints on flat surface materials such as fabric, cardboard, mirror, plywood in no large measure. In counter painting, oil and watercolor paints are often used [1, P. 169].

The art of wares painting has a rich history, which occupies a very important place among other types of art in the formation and development of the aesthetic worldview of mankind. The works created in the easel painting penetrate the human psyche, attracting the viewer, no matter in which genre they are

represented. It gives people a sense of pleasure, no matter whether it is a portrait, still life or landscape and daily genre.

Especially the paintings created in the daily genre make a special impression on the viewer with their reflection on the spirit of the era, everyday lifestyle and important events of the era.

During the independence period, the art of machine painting in Uzbekistan has made great progress in a very short time. Art of painting of Uzbekistan has come a triumphal way. Artists of the Republic actively participated in many exhibitions, demonstrating the growing impressionability of our art. In addition, our artists have been creating in many genres to this day.

One of the genres of painting art with its own peculiarities is the domestic genre, which reflects the everyday social and personal life of Fine Art, domestic life. In marriage, it has such features as a deep disclosure of conspicuous interactions and actions, its internal essence and social historical content. This genre developed in connection with the growth of democratic and realistic artistic traditions, the increased interest of artists to describe in detail the life and work of the people. In the daily genre, painting occupies a leading place, in graphics, small-scale sculpture, a household theme is also common.

Daily genre are common in primitive art (hunting scenes, images of traditions), Oriental (murals and reliefs) and Greek (vase decoration) art, occupying an important place in Hellenistic art. The first samples were created in the Ancient East (China, later Korea, Japan). During the Renaissance, the domestic genre was enriched with Real events, household details. In medieval Europe and Asia, murals, embossed patterns, became widespread in miniature, appeared in the shark and in Europe as a special genre of art.

In the domestic genre, from the XVII century, domestic life acquired a social meaning, a comic, Social critical orientation arose; emotional elegance, psychological subtlety and sharp chayotic observations were reflected. World artists such as Jotto, Rembrandt, he. Hogarth, A. Vatto, F. Goya, P. P. Rubens, V. G. Perav, I. E. Repin, V. E. Makovsky, A. A. Daneyka works of art in the domestic genre are popular [2].

On the territory of Uzbekistan, this genre has found expression in murals and miniatures. Of the artists of the XX century B. Hamdamy, L. Abdullaev, 3. Inagamov, M. Saidovs, from masters of Applied Art A. Muhtarov, Sh. Mominova's created works on a domestic theme [3].

The best examples of the work of artists of Uzbekistan for these periods have such qualities as a unique style, expressive images, a high professional culture. Although these works do not resemble each other in style and thematically, their ideological commonality is in tune with a careful reflection of modern reality, a deep description of the inner world of Uzbek people, their attitude to work and life expectancy. Even today, while artists are images of the life of the ring and the reality that is happening around it, delicate in it seeks to express the landscape behind the scenes.

It is not so that the artists see life in their works, but they choose the action-packed looks in it, drop the unnecessary secondary looks, exaggerate the important ones. By familiarizing and exaggerating, artists achieve an effective effect of things and employees on the thinking and feelings of people.

An artist is not just a person who knows being, but a person who has a rich imagination and the ability to contemplate. In his work, he not only simply reflects the being, but also, based on it, comes up with, imagines and weaves something. The most important thing is that works of art not only reflect the presence in its content, it expresses the artist's ideas, enriches it, while such works also have the power of emotional impact on the viewer.

Images in domestic genres are created through the experiences of the artist's life, who tries to attribute the story in his imagination or in real life to the wares of life behind the window in wares painting, that is, in a philosophical sense. It is natural that the landscape that takes place on the second side of the

window, acting as a visible barrier, will interest every person, of course.

But since the artist expresses this landscape, he conveys to the viewer the extent to which life in the human way of life is either joyful or sad, through color harmony and philosophical depiction. Moreover, through the manifestations of a real or fantastic nature, the artist's feelings, thoughts, dreams are expressed in him.

The artist is involuntarily attracted by the expression of domestic marriage in a machine painting. The composition created in the painting brings the viewer into the illusion of the image, while deeply contemplating it. During the observation of the pictorial life, a person lives, feels with the colors reflected in it. In painting, colors and emotions are the highest level factor. The fact that he finds expression in each creator in a different way is a vivid proof that he is without limits.

Each Uzbek artist in his work shows the Uzbek daily in a beautiful form-wind and tries to increase the imagination of the work by depicting it in connection with nature.

Indeed, the cultural wealth created by mankind remains not only wealth left or created from the people of the past, but also a mirror in itself, reflecting human intelligence, thoughts about life.

As a conclusion, I will say that the works of the above-mentioned skilled artists serve as a large school for young artists, young artists who are studying like us, stepping into independent creativity. Not all of the works of our young artists of different genres that are put on exhibitions today are artistically perfect. In counter painting, works of the domestic genre are increasingly reduced. Works that embody the realities of life, imagination and real life are practically not created. In our works, we must reflect the spirit of the era, the beauty of life.

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Makhmudov Mavzur Mansurovich,
dotsent of "Theater decoration painting" of the National Institute
of Art and Design named after Kamoliddin Behzod
Uzbekistan, Tashkent

THE ROLE OF RUSSIAN ANIMATORS IN THE FORMATION OF ANIMATION ART IN UZBEKISTAN

Abstract. Russian animation has served as the basis for the emergence and development of the art of animation in Uzbekistan, as well as films created in collaboration with the creators of Russian animation. This article presents the material on how Russian animation served as the basis for the emergence and development of the art of animation in Uzbekistan. Also, based on the experience of Russian animators, the creation of animated films and the works of specialists who, having studied the secrets of this sphere at all-Russian State Institute of Cinematography, conduct effective activities in the development of Uzbek animation are analyzed.

Keywords: script, plot, character, animation, frame, rhythm, scenery, decoration.

In Uzbekistan, the art of animation appeared in the second half of the twentieth century on the basis of puppet technology. Yu. Petrov and D. Salimov, who carried out activities in the field of cinema, are considered the fathers of Uzbek animation. The first Uzbek animated film appeared as a result of the search and torment of these creators. In 1964, a multi-association was organized at Uzbekfilm. Talented creator Yu. Petrov, who worked in motion pictures as a set designer, studies the secrets and difficulties of this art at the Soyuzmultfilm studio founded in 1936 in Moscow and presents a guide to creating animated films. As a result of their development, in collaboration with the director of art cinema D. Salimov, he manages to create a puppet film "In a 6x6 square" (1966). After graduating from the Faculty of Directing of the All-Union State Institute of Cinematography (1959), D. Salimov began his activity with the creation of children's films. Among them are such feature films as "In the Desert Sky" (1963), "The Circle" (1967), "The Return of the Commander" (1968), "Mountains" (1972), "These Terrible Children at car races" (1974), "Mischief Maker" (1977).

In her monograph "Children's cinema in Uzbekistan", candidate of arts, film critic M. Mirzamukhamedova, who conducted research on children's cinema in Uzbekistan, expressed the following opinion about the first Uzbek animated film: "It is impossible to draw deep philosophical conclusions from the film "In a 6x6 square". But they managed to use the visual means of animation so productively as fabulousness, conventionality, universal humanity that, as a result, the idea was stated openly and clearly" [2].

The characters in this film consist of various insects and the colorado potato beetle is presented as the main character in it. Although the heroes of the film are insects, but each of them reflects the traits peculiar to man. It feels like the artist of this film Yu. Petrov, when creating this work, created it, inspired by the puppet film "The Beautiful Lyukanida or the war of the horned with the moustaches" by the founder of the puppet animation of the Russian director-cameraman V. A. Starevich. Because the reality and the peculiarities of the characters reflected in the Russian picture are also observed in this film.

Inspired by this film, shot in the form of an experiment in 1966, Yu. Petrov and D. Salimov created the

film "The Magic Chest" (1966) based on the motif of an Uzbek folk tale through the images of the first puppet heroes Zumrad and Kymmat, who reflected their nationality. They also wrote the script for this film, when creating puppet characters, animators-puppeteers V. Stupakov, F. Tomashevsky were involved, S. Strashnov, E. Poleektov, N. Ayupov were involved in making dolls and decorations (F. Khamraev, Z. Sadrieva, S. Satibaldieva, Ya. Abdullayeva, D. Khasanova were also involved in voicing roles).

This film served as an impetus for the development of Uzbek animation one step forward and the creation of a series of paintings. In particular, an experienced director K. Kamalova, who began his work with the creation of puppet films and studied at the All-Union State Institute of Cinematography, together with the artist Yu. Petrov created the film "Who created the cloud?". This work is devoted to the curiosity of the bear cub, and his search for an answer from forest animals for a long time, to who created the cloud, is the main idea of the work. Also among them are such films of the director as "Rahim and the Beetle" (1967) and "Mischievous" (1968). Also, such films as "The Little Deceiver" (1968), "About the Unexpected Bear" (1970), "The Sunbeam" (1971) by the talented director E. Roizman were mature examples of their time.

As a result of the creative searches of the master of painting, the talented creator M. Makhmudov since the second half of the 1970s. in Uzbek animation, new approaches have appeared in animated films. Studying the lessons of creating animated works from the famous Russian director and animator Ivanov-Vano at the All-Union State Institute of Cinematography, M. Makhmudov in 1976 graduated from his studies as an artist of animated films. In the same year, he began his activities in the multi-association at Uzbekfilm (the current State Unitary Enterprise "Studio of animated films").

"Uzbek filmmakers have a responsibility to glorify the ideas of national independence in their works, to form a modern worldview in the broad social strata, especially in the younger generation, which in turn requires new research on the subject and artistic expression. Research in this area first of all encourages the discovery of a socially significant screen language as a means of artistic expression in accordance with the existing reality, to get rid of the stereotypes that have been used for many years and to carry out creative research in unique styles" [5].

In 1977, he worked as a production designer in the films "Deceived Deceivers" (hand-drawn) and "Miracle Carpet" (puppet). The films being created at that time were created in cooperation with the specialists of the cartoon studio at the Kiev Studio of Popular Science Films or Soyuzmultfilm. It should be especially noted that the puppet cartoon "The History of Billiards" (1989) by this creator, who effectively worked to glorify Uzbek animation, is one of the films that received special attention (he was awarded the nomination "the best puppet film" at the V International Film Festival in Ankara). The plot reflected in this painting is the former Soviet Union, where the artist depicted billiard balls in the image of people. This film was dedicated to the activities of the leaders, the simplicity and credulity of the people in the era of the totalitarian regime, where the human character was interpreted in the image of a ball. In the course of events, the orders and expressed thoughts of the leader are supported by the people, where the ears and eyes listening to the conversations of those who opposed the leader were expressed in special details. This work is characterized by the fact that it showed all the responsibility regarding the importance of the ability to choose a literary basis for a cartoon.

In the development of Uzbek animation, along with puppet films, hand-drawn films were created. As is known from observations, the art of animation, which originates from hand-drawn cartoons, was very widely developed in the twentieth century. Hand-drawn animation, started by the French cartoonist E. Kohl, having reached its highest peak in the Disney era, has turned into a perfect art. "The development of world animation, the ongoing creative

and technical processes have also affected the art of Uzbek animation. A clear example of this is the mastery of modern technical means for the art of animation by the creators of our country. This is a peculiar evolutionary process" [6].

In 1969, the first hand-drawn film "The Brave Sparrow" was created in Uzbekistan. This film was created in collaboration with the director and artist V. Arsentiev, who was invited from Moscow. The main character of this film is a little bird, which tells how she helps to find and rescue a young boy stolen by the Khan's employees. Thanks to this picture, Uzbek animators have the opportunity to create a hand-drawn film. Created in the form of an experiment, these technological patterns were assimilated by Uzbek artists and directors. By 1978, gradually expanding, the Cartoon Association turned into a workshop for "Puppet and hand-drawn films". As a result, a number of films were created, such as "Balcony", "Bear Cub on a walk", "Fox and Bird", "The Secret of the Owl", "Brothers Fingers", "Spring".

In the 1980s, the multi-unit found itself in a difficult position. The work in the studio was difficult due to the shortage of items used in hand-drawn films (celluloid, necessary paints and equipment). M. Makhmudov will say about this process: "It was at this time that I was looking for a way out of the situation. Then I saw through the TV screen the film "The Voyages of Captain Vrungel" created by the technology of rearrangement of the Ukrainian director D. Cherkassky and immediately got acquainted with the process of creating the film in the cartoon studio at the Kiev "Studio of Popular Science Films". At the same time, it is possible to cite many works of Russian animation based on this technology. For example, the film "Hedgehog in the Fog" (1975) directed by Yu. Norstein was once particularly noted by the world's animators.

In animated films shot with the technology of shifting, first of all, the artist's creativity is clearly visible. When creating a film by this method, attention is paid to the colorful appearance, attractive appearance and interpretation of the characters. As a result of studying the secrets of this technology, M. Makhmudov managed to create the first film of the shift of the comedy genre and rich in humor "Khoja Nasriddin" (1982). The creation of the film's characters in the miniature style further enriched the visual appearance of the picture. Relying on the traditions of miniatures expressing the selected poetry of the East on the basis of dialogues characteristic of the art of askia (a witty joke said impromptu) was useful in expressing the ideas of M. Makhmudov. The creators who started the creation of this work paid special attention to the successful, interesting interpretation of the film in amplified dynamics and attracting a young audience with game events. The creators managed to carefully create the work, although some difficulties arose when creating and transferring the script text into the language of the image based on the art of askia and wordplay.

The high attention and honor paid by the creator served as an impetus for the creation of a number of films in the future. The animated film "The Nightingale" (1999) was filmed, which glorified the Uzbek art of animation by M. Makhmudov and the talented artist M. Karabaev throughout the world. The basis for it was the fairy tale of the same name by the Danish writer G. H. Andersen, who lived and worked in the XIX century. By writing a script based on this work, he will change some of its plots. The event that took place in the fairy tale at the court of the Chinese emperor was interpreted in the conditions of Central Asia. The goal of the film is not always the pursuit of benevolence, artificial external beauty, it is to prove that the real beauty is the inner beauty. The events of the film take place in the ruler's palace, and the pictorial image of the characters is created in the style of oriental miniature.

The artist expressed the costumes of the characters in bright colors, in a way characteristic of palace attire. The rhythm in the frame is illuminated in mutual proportion, especially at the moment when the shah and his viziers (ministers) were enchantingly

admiring around a fake "nightingale" like an artificial, dazzling toy, and not around a live "nightingale" who is the main character of the film. In the course of the events of the film, the shah, lying at death's door, will be disappointed in the artificial nightingale, who did not have enough strength and who could not heal him from mental illness. When he falls into despair, listening to the pleasant sound of a live "nightingale" he will reach out to him. Having been awarded the nomination "The kindest Film" of the International Children's Animated Film Festival held in Moscow in 1999, he was awarded the main prize "Goldfish".

As a conclusion, it is worth mentioning the fact that the emergence and development of the art of animation in Uzbekistan is based on Russian animation. And relying on the experience of such directors and animators of Soyuzmultfilm in Moscow as Ivanov-Vano, R. Kachanov, F. Khitruk, Yu. Norstein found his way.

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Section 2. Materials Science

Tokarev Michael Valentinovich,
PhD, Corporation AXIS Ltd.

COMPLEX, MODEL, SYSTEM

Abstract. The article discusses artificial, natural systems and complexes. Natural systems cannot be such, because, by definition, a system is a set of elements and relationships between them. Unlike artificial systems, in natural systems it is often impossible to establish such sets. Scientists are forced to build models of natural systems and subject the models themselves to system analysis.

Keywords: system, system environment, neural systems and complexes, system analysis, element, relationship.

There are dozens of definitions of the concept of "system". It was originally introduced about 110 years ago by the Russian philosopher A. A. Bogdanov [9], who defined "tectology", a general organizational science. In the 1930s, Bogdanov's ideas were developed by Ludwig von Bertalanffy [7]. The most detailed analysis of existing definitions is given in the work of V. N. Sadovsky [11].

It is not necessary to address all the differences in systems terminology from different scholar's works. Our task is to present differences in the understanding of artifact systems from models of systems and complexes of loosely coupled elements.

The article by M. V. Tokarev [2] argues that a system should be understood only as artificial systems, since by any definition the elemental composition of the system and the relationship between the elements are known to the researcher. When analyzing natural systems, the researcher is forced to move from the real system to its model. In the textbook by A. M. Korikov [10], a unique idea is given: that the research is often based not on the properties of the system, but on the properties of the subject studying the system.

So, for the time being, we exclude artificial systems from consideration, since they are created exactly the way a person expects to create them: elements, relationships, target function, the relationship of the system with the environment.

The composition of a natural system is seldom thoroughly known to the researcher. He does not know the full functionality of the elements of the system, which are almost always heterogeneous, their interrelations. Such systems do not have and cannot have goal function, since the goal is a subjective concept. For example, what is the goal of the lymphocyte, destroying bacteria or dead cells? If we assume that he acts on the principle of nutrition, then what should he do when there are no bacteria? And why does it kill some bacteria that it cannot absorb with reactive oxygen species or nitric oxide. If its goal is to heal the body, then must you also assume that it has a nervous system, or even a brain?

Researchers are forced each time to build a model in the context in which they are interested in this object. Take for example any "system" of a living organism. An animal's digestive system includes specific organs, from a biologist's point of view. But

the more scientists study this system, the more they understand that it cannot be considered in isolation from the circulatory system, the nervous system, and even the motor system. The further the researcher goes into the relationship of these systems, the more he understands that the whole organism is a system and the study of individual organs is riskily with an incomplete understanding of their functioning.

But as soon as the researcher enters the organismic level, he immediately encounters the environment of the organism, which significantly affects him. The learning process becomes infinite.

In this case, researchers build a model of the system, including essential elements, functions, and relationships in it. At the same time, the scientist is guided by his goals, which impose additional restrictions on the model. Any scientist understands that modeling always leads to loss of information about the object, simplification. The main modeling criteria in the case of a system analysis of natural objects should be the following:

1. The composition of the elements of the model system is formed from those that are essential for the researcher;

2. Only significant interactions in this context are defined between elements;

3. The goals of the researcher should in no case be transferred to the object under study;

4. From the environment of the model, it is necessary to highlight significant impacts on the model system, inputs. It is also necessary to evaluate the impact of the system on the environment;

5. At the level of the elements of the model, it is necessary to investigate their internal composition and the influence of the internal functions of the elements on the function of the entire model system;

6. When analyzing the elemental composition, it must be borne in mind that the selection of individual elements makes sense only when the functioning of these elements affects the system function.

When these conditions are met, the object model can be considered in turn as a system, and a system-atic approach and system methods of analysis can be applied to it.

Let's take the solar system as an example. A non-specialist believes that the Sun, 8 planets and, possibly, satellites of these planets are considered as elements of the solar system. But if we ask an astronomer about the limits of the solar system, he will name as elements the Kuiper belt, which extends far beyond Neptune – 25 angstroms, or almost twice as far from the Sun as the last planet. At a distance of another 20 angstroms, the heliosphere ends, up to the boundaries of which the Sun still affects cosmic bodies with the solar wind – a continuous stream of charged particles. And after a few dozen angstroms, the Oort Cloud provides a potential border to the solar system. Here, astronomers could draw the boundary of the solar system, but, firstly, the exact distance to this cloud cannot be measured, and secondly, the cloud itself is only an assumption, because artificial satellites have not yet reached it. And it is impossible to establish the exact distance from the when the solar wind is completely negated by the interstellar medium. If we go further, consider entities outside the solar system, it is necessary to take into account the influence on it of the surrounding stars in the Galaxy, and the black hole in the center of the Galaxy, around which all the stars surrounding the solar system revolve. When modeling such an object, scientists are forced to initially indicate what is included in the model and what is excluded. And already such a model, as artificially created in the imagination of a scientist, can be analyzed as a system.

If we move from macro-objects of space to micro-objects, we can give a similar example with the DNA of an organism. During the transcription of DNA into RNA, its rate is influenced by introns, non-coding regions of DNA. This discovery was not made immediately. At first, scientists considered these sites "junk". But later it turned out that the composition of the cell plasma and folded proteins also affect the rate of transcription. Even later, it turned out that even unfolded proteins can affect both the rate of

transcription and even its very possibility. The complexity of this seemingly simple system grows so much that the most powerful computers are not enough to process all the parameters. And all this happens in a tiny "system" – a cell, about one micron in size. And in addition to DNA transcription, hundreds of other functions are performed in the cell: ion exchange, cell division, energy production, information transfer to neighbors, correction of transcription errors, apoptosis, etc. And in this example, it is important to correctly choose the elemental composition of the system under study, limit the set of analyzed functions, and limit external influence.

If the relationship between the elements of the model is insignificant in the context of the researcher, it is necessary to consider such a model not as a system, but as a complex of loosely connected (unrelated) entities. Here, by a complex, we mean the usual set of similar entities that do not affect each other or their influence is not interesting to the researcher as a context of study.

Take, for example, a pile of sand. It is obvious that the grains of sand act on each other both by weight and by possible bonding forces (wet sand). However, until we examine this heap of sand, for example, as a component of a future concrete mortar or as the contents of an hourglass, it can be considered as a collection of unbound grains of sand or a complex. Unlike the concept of "chaos", the complex singles out entities that are similar in composition, functions, structure in order to distinguish them from the environment. In turn, complexes can also be studied as, for example, a set of natural numbers or a set of letters in the alphabet.

Thus, a researcher who claims to use a systematic approach must be able to separate the terms complex, model, and system. Otherwise, loading the system with insignificant entities will lead to the complication of the model and the impossibility of its analysis.

Artifacts, as systems, are much easier to study. All of them are purposeful systems and fulfill the role assigned to them. It does not matter if these are organizational systems, artificial intelligence systems or just a computer. The analysis of such systems is hardly of interest to scientists. Of course, such systems can also be studied using models, but the strict requirements listed above are not imposed on them, insofar as the composition of the elements and their functions are designed by the developers of such systems, and an objective description of these entities exists. In addition, artificial systems, by definition, are clearly limited in their design and development, unlike natural systems. It is often difficult for natural systems to establish not only the composition of elements, but even their boundaries.

Complexes, models and systems are not only contained in other systems of a higher order, but the elements of which they are composed can be included in other complexes and systems. This greatly complicates the system analysis, since the functions of the elements can be essential for all systems in which they are included. The elements of a system can be affected by entities that are part of other systems, just as the elements themselves can affect other entities. All these considerations greatly complicate the modeling and analysis of natural systems.

Terminology

- System – a set of strongly connected elements, during the interaction of which functions are performed that are not inherent in any of the elements separately (emergence). As a rule, the system is, in turn, an element of the upper-level system, and each of its elements can be considered as a system of a lower order. The main properties of systems are: integrity, connectivity, hierarchy, structuring, purposefulness for artificial systems;
- Element – an entity of any nature that is indivisible at the level of analysis;
- Relationship – a characteristic of the interaction of elements with each other or with the entities of the environment;
- System environment – a system of a higher order, in which this system is included as an element.

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Section 3. Pedagogy

Qurbonova Oysha Beknazarovna,
associate professor, PhD of TSPU named after Nizami
Uzbekistan, Tashkent

THE PROBLEM OF THE FORMATION OF SPEECH COMPETENCE IN PRESCHOOLCHILDREN IN PSYCHOLOGICAL AND PEDAGOGICAL LITERATURE

Abstract. Preschool age is a period of intensive personality development, which is characterized by the formation of the integrity of consciousness as the unity of the emotional and intellectual spheres, and the formation of the foundations of independence and creative individuality of the child in various activities.

Keywords: speech development, creative initiative, beliefs, assessments, the formation of skills, productive communication, native speech.

In the works of L. S. Vygotsky, M. M. Alekseeva, S. L. Rubinstein, F. A. Sokhin, E. I. Tikheeva and others, it is indicated that the general development of the personality of a preschooler is largely due to the level of development of his speech. Mastering the native language is one of the most important acquisitions of a child in preschool childhood. It is preschool childhood that is especially sensitive to the assimilation of speech. Therefore, the process of speech development is considered in modern preschool education as a common basis for the upbringing and education of children.

According to L. S. Vygotsky, for the successful development of the school curriculum, a kindergarten graduate must have speech skills – speech operations that are carried out unconsciously, with full automatism in accordance with the norm of language and serve for the independent expression of thoughts, intentions, experiences. To form skills means to ensure the correct construction and implementation of the statement [1, p. 65].

Recently, the competence-based approach to teaching has become increasingly popular. The problem of the formation of key competencies in preschool age was devoted to their works (N. N. Avdeeva, T. I. Alisheva, A. G. Gogoberidze, I. A. Zimnaya, O. L. Knyazeva, M. V. Krulekht, L. A. Paramonova, John Raven, R. B. Sterkina, E. G. Yudina, etc.).

In the conditions of modern language education, when the prerequisites for the development of creative initiative are created, a wide scope is open for the expression of various opinions, beliefs, assessments, the formation of skills and skills of productive communication should begin from an early age and continue throughout life, since a serious attitude to the ability to master native speech is the key to life success.

M. F. Quintilian, an ancient rhetorician and author of a fundamental work to help teachers of rhetoric and future speakers, insisted on teaching rhetoric to children from the age of seven, "because every-

thing you learn at a tender and inexperienced age takes root deeper in the minds" [2, p. 94].

Definitely, modern children and those who lived two millennia ago differ from each other, but the fact remains unchanged, which the great rhetorician wrote about – at this age, "children do not know how to pretend yet, but more obey instructions". The speech competence of a preschooler, in my opinion, is a cross-cutting competence, as it is reflected in almost all spheres of a child's life.

Experimental studies by leading foreign scientists – M. Alekseeva, E. Amatieva, L. Antonova, A. Bogush, E. Krutiy, Z. Kurtseva, T. Ladyzhenskaya, M. Lisina, A. Maksakov, G. Sagach, S. Hadzhiradeva, A. Chulkova, etc. – regarding the development of language, speech and communication skills indicate a low the level of development of the designated skills and abilities.

Let's give an example of the results of some experimental studies. Thus, experimental data from the survey of the level of development of speech competence obtained by E. Amatieva, A. Bogush, S. Khadjiradeva, A. Chulkova, indicate "… a rather low level of development of this phenomenon (up to 8.6%) in preschool children", "a sufficient level of development of all structural components of the culture of speech communication can be attributed not to more than 15% of children of senior preschool age".

In the older preschool age, the vocabulary of words is rapidly increasing, the lexical side of children's speech is rapidly developing. Of course, the vocabulary, understood as the vocabulary of the native language, varies widely even in children of the same age. On average, the total volume of vocabulary, including an active dictionary (a set of words that a child uses when constructing statements) and a passive dictionary (words that a person understands but does not use in his speech), reaches, according to various experts, 3.5–5 thousand words. This is a very significant figure, suffice it to say that most of us adults use about 4 thousand words in our daily lives [3, p. 36].

E. Krutiy in the article "Features of the communicative and developmental technology of language teaching, speech development and speech communication of preschool children", analyzing the reasons for the difficulty in the formation of speech competence of preschoolers, emphasizes the lack of orientation of educators to the implementation of developmental learning tasks. Thus, only 9% of the surveyed educators call the goal of preschool education the speech development of the child, 4% – the improvement of his "sense of language". The author points out the insufficient orientation of teachers in the concepts of "speech competence", "language development", "language ability", "sense of language", at best they understand them one-sidedly, narrowly, incorrectly defining the essence of the relationship between teaching the native language and the language development of the child. The consequence of this is the lack of the ability to consciously work to stimulate the language development of preschoolers [4, p. 74].

In older preschool children, coherent speech reaches a fairly high level. The child answers the questions quite accurately, briefly or in detail (if necessary) answers. The ability to evaluate statements and responses of peers, supplement or correct them develops. In the sixth year of life, a child can quite consistently and clearly compose descriptive or plot stories on the topic proposed to him. However, children are still more likely to need a previous model of a caregiver. The ability to convey their emotional attitude to the described objects or phenomena in the story is not sufficiently developed.

D. B. Elkonin revealed that the growth of the dictionary, as well as the assimilation of the grammatical system, depend on the conditions of life and upbringing. Individual variations are greater here than in any other sphere of mental development:

– in V. Stern's research, children of five years have a vocabulary of 2200 words, and children of six years – 2500–3000 words.

– in Smith's studies, children of five years have a word count of 2072, a word gain of 202, children

of five to six years – 2289 with a word gain of 217, children of six years – 2589 with a word gain of 273 [2, p. 845].

The vocabulary is only a building material, which only when words are combined in a sentence according to the laws of grammar of the native language can serve the purposes of communication and cognition of reality.

Based on a carefully conducted study of the formation of the grammatical structure of the language, A. N. Gvozdev characterizes the preschool period (from three to seven years) as a period of assimilation of the morphological system of the language, characterized by the assimilation of types of declensions and conjugations.

During this period, there is a differentiation of previously mixed unambiguous morphological elements by separate types of declensions and conjugations. At the same time, all single, stand-alone forms are assimilated to a greater extent.

After three years, there is an intensive mastery of complex sentences connected by conjunctions. Of the total number of unions assimilated before the age of seven, 61% are assimilated after three years. During this period, the following conjunctions and allied words are assimilated: what, if, where, how much, which, how, to, in what, though, after all, or, because, why, why, why. The assimilation of these conjunctions, denoting a wide variety of dependencies, shows the intensive development of coherent forms of speech.

Having conducted his research, K. I. Chukovsky writes that in the period from two to five years, a child has an extraordinary sense of language and that it is this and the associated mental work of the child on the language that form the basis of such an intensive process. There is an active process of mastering the native language. "Without such an increased flair for the phonetics and morphology of the word, one naked imitative instinct would be completely powerless and could not lead wordless infants to full possession of their native language".

Thus, the independent word formation of children is put forward as proof of the presence of a special "linguistic flair" inherent in a child of preschool age. The fact of word-making should be understood as a manifestation, as a symptom of the child's mastery of linguistic reality.

The basis on which language acquisition is based is orientation to the sound form of the word. A. N. Gvozdev observes the appearance in the fifth year of a child's life of the first attempts to comprehend the meanings of words and give them an etymological explanation. He points out that these attempts are made by the child based on the comparison of some words with other consonant words. This leads to erroneous approaches. For example, the word "city" comes closer to the word "mountains". That is, the semantic interpretation follows the sound comparison. Sufficient meaningfulness of speech appears only in the process of special training.

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Section 4. Science of law

Chiladze George Bidzinovich,
University of Georgia, professor

MANAGEMENT OF SCIENTIFIC RESEARCH, INTELLECTUAL PROPERTY AND INNOVATION IN ACCORDANCE WITH THE LAW "ON SCIENCE, TECHNOLOGIES AND THEIR DEVELOPMENT"

Abstract. In the fields of science, technology, innovation and intellectual property development and management, it is important to develop legal bases and uniform approaches that define the scope of their regulation. In this regard, relevant normative acts were adopted by the Parliament of Georgia during the years 1994–2016.

The present paper reviews the relevant articles of the 1994 Law of Georgia on Science, Technology and their Development, the 1999 Patent Law of Georgia, the 2016 Law of Georgia on Innovation, the 2009 Organic Law of Georgia on Normative Acts, and the 1997 Civil Code of Georgia.

The Law of Georgia on Science, Technology and their Development – in relation to other abovementioned normative acts – has some shortcomings, inaccuracies and they require expansion and specification.

In this respect, relevant changes and recommendations, including those of the editorial character, are proposed.

Keywords: Intellectual Property, Innovation, Science and Technology, Law Regulation.

I. Introduction

The legal basis of the state policy in the field of development of science, technology, innovation and intellectual property is a precondition for the progress and prosperity of the country [1; 2; 3; 4; 5].

The Georgian state recognizes that scientific and technological progress is one of the main factors in the development of society as it creates favorable conditions for revealing the intellectual potential of the country and advancing the innovative economy [6; 7].

Activities in the fields of science, technology, innovation, and intellectual property encompasses the fundamental and the applied research and development, application of their results, and the improvement of the existing technologies and methods. All this is aimed at raising the level of production and manufacturing of the competitive, innovative products [8; 9; 10].

The development of Georgia's state policy in this field, taking into account the interests of the country, is based on its real capabilities. It defines the forms of its participation in the development of science, technology, innovation and intellectual property and creates structures to protect its own interests and rights. The state recognizes that the increase of funding for science is among its obligations.

Several normative acts were adopted by the Parliament of Georgia in the above direction over the

period between 1994–2016. In particular, the 1994 Law of Georgia on Science, Technology and their Development, the 1999 Patent Law of Georgia, the 2016 Law of Georgia on Innovation, defined the basic principles of scientific, technological, innovative and intellectual property policy and the legal basis for their regulation. With these laws, the state recognized their important role in the socio-economic development of the country and undertook responsibility for their development in terms of providing financial as well as organizational and legislative support [11; 12; 13].

The main text

There are a number of shortcomings and inaccuracies in the above-mentioned normative acts, some articles require expansion and clarification. In particular, Article 18 of the Law of Georgia on Science, Technology and their Development deals with the issues of protection of intellectual industrial property. I would note, that the title of the article does not fully correspond to its content. It is narrower in scope than the further provided expansion on the topic. In particular, in addition to intellectual and industrial property, the article as well talks about "the results of other scientific and technological activities", including the secrecy of the rules of production. The above objects represent the property of the state, physical or legal person (persons) and the state provides them with legal protection.

It can be argued that there is certain conflict between the rules of regulation of the Law of Georgia on Science, Technology and their Development and one of the basic laws regulating the field of intellectual property, the Patent Law of Georgia. In particular, under special law, patents on intellectual and industrial property may be granted for an invention or a utility model. In the mentioned cases, these include:

– Equipment (machines, mechanisms, equipment, tools, electronic circuits, etc.);

– Substance (solutions, alloys, chemical compounds, etc.);

– Biological material (strain of microorganisms, plant and animal associations, cell cultures, etc.);

– Method (technological processes, techniques, operations, etc.).

– Use of a product known from the existing level of equipment for a new purpose [14].

That is, this list does not talk about the secret of the rule of production. At the same time, Article 16 of the Patent Law of Georgia contains a complete list of objects that are not considered as inventions. In particular, as such are not considered as the following:

A) discovery, scientific theory, mathematical method;

B) artistic creation;

C) algorithm, computer program;

D) method and system of upbringing, teaching, grammatical system of language, method of performing mental operations, rules of playing, drawing;

E) method of management of activities and organization;

F) building, spatial planning and urban development plans/projects;

G) Submission/presentation of information.

The above objects are not considered patentable only if these objects directly represent the subject of the application.

Thus, Georgian Patent Law does not protect know-how, as it does not belong to industrial property.

The Law of Georgia on Science, Technology and their Development also needs to clarify the term about what is meant by the "secret of the rule of production", as this law does not define it in its definition of the used terms. Obviously, in such a case we should mean "know-how". It is unclear, however, exactly why this term is not used in the text of the law.

I should note that the protection of industrial and commercial secrets is carried out under Article 1105 of the Civil Code of Georgia. In particular, according to paragraph 1 of this Article, an entrepreneur who holds a production-commercial secret (know-how), which is a technological, organizational or commercial information of special importance, as is confirmed by the necessary and sufficient measures taken for its se-

cret storage, as is At the same time, in a broader sense, the „secret of the rule of production" is a "know-how", sincein addition to being the knowledge related to production process, is also a combination of technical, commercial, financial, administrative and other knowledge, drawn up in the form of technical documentation, expressed inuseful skills and experience, which are needed for organizing the particular types of production process. This ruleis practically used in industrial or professional activities, however it is not yet available to everyone. At the same time, it is important to note that it is not patented for any reasons [15].

Industrial-commercial secret, which is a technological, organizational or commercial information of special importance, must be validated by the necessary and sufficient measures taken for its keeping insecrecy. That is, the law must specify directly as exactly what necessary measures are to be taken to consider them sufficient [16].

Article 18 of the Law of Georgia on Science, Technology and their Development also refers to the protection of intellectual industrial property. I should note that such a term – "Intellectual Industrial Property", is not contained in the Patent Law of Georgia (see Article 2, where the definition of terms is discussed). This term is also not found in the Civil Code of Georgia. In particular, the fourth book of the Code deals with intellectual property law and its second Chapter regulates the industrial property issues:

Article 1100. Protection of rights to invention, utility model and industrial design;

Article 1101. Protection of selection rights;

Article 1102. Protection of exclusive rights to a trademark;

Article 1103. Right to geographical indication of origin and appellation of origin;

Article 1104. Protection of trade name;

Article 1105. Protection of industrial-commercial secret.

Thus, both the Patent Law of Georgia and the Civil Code of Georgia do not recognize the term "intellectual industrial property". That is, we have a collision between normative acts and the question arises as to which of them should be given precedence.

In this regard, we can be guided by Article 6 (6) of the Organic Law of Georgia on Normative Acts (Concept and Types of Legal Acts), according to which, the Code is a systematic normative act of the legal norms which regulate (the defined (uniform) public relations. And according to Article 7, Paragraph 3 of the same law (interrelation of normative acts), the following hierarchy applies to the legislative acts of Georgia, the Constitutional Agreement of Georgia and the international treaty and agreement of Georgia:

A) the Constitution of Georgia, the Constitutional Law of Georgia;

B) the Constitutional Agreement of Georgia;

C) International treaty and agreement of Georgia;

D) Organic Law of Georgia, Decree of the President of Georgia;

E) Law of Georgia, Rules of Procedure of the Parliament of Georgia [17].

Thus, we can conclude that since the organic law of Georgia is hierarchically higher than the law of Georgia, it is clear that the term "industrial property" established by the second Chapterof the Civil Code of Georgia should be unconditionally shared in the Law of Georgia on Science, Technology and Development. In particular, it should be established in Article 18 of the law.

Conclusion

The title of Article 18 of the Law of Georgia on Science, Technology and their Development does not fully correspond to its content. It is narrower in scope than the further provided expansion on the topic. In particular, in addition to intellectual and industrial property, it also discusses "the results of other scientific and technological activities", including the secrecy of the rules of production.

There is a certain collision between the rules regulated by the Law of Georgia on Science, Technology and their Development and one of the main laws regulating the field of intellectual property – the Patent Law of Georgia. In particular, according to

the special law, the list of intellectual and industrial property objects that can be granted a patent, does not mention the secrecy of the production rules. At the same time, Article 16 of the Patent Law of Georgia contains a complete list of objects that are not considered inventions. Georgian Patent Law does not protect know-how, as it does not belong to industrial property.

The term "secret of the rule of production" shall be specified in the Law of Georgia on Science, Technologies and their Development. This law does not define it in the definition of terms. Obviously, in such a case we should mean a "know-how". However, this term is not directly used in the text of the law.

Protection of industrial-commercial secret is carried out by Article 1105 of the Civil Code of Georgia. In a broad sense, the "secret of the rule of production" is "know-how", as in addition to being the knowledge related to production process, it also presents a combination of technical, commercial, financial, administrative and other knowledge, drawn up in the form of technical documentation, expressed useful skills and experience required for the particular types of production process. It is practically used in manufacturing or professional activities however has not been yet available to everyone and for some reason, is not patented.

Industrial-commercial secrecy must be validated by the necessary and sufficient measures taken to keep it secret. In other words, the Law of Georgia on Science, Technology and their Development should specify what are the necessary measures that should be taken so they can be consider to be sufficient.

Article 18 of the Law of Georgia on Science, Technology and their Development refers to the protection of intellectual industrial property. The term "Intellectual Industrial Property" is not contained in the Patent Law of Georgia (see Article 2, which deals with the definition of terms). This term is also not found in the fourth book of the Civil Code of Georgia, which deals with intellectual property law, as well as in its second chapter, which the regulates industrial property issues.

Thus, both the Patent Law of Georgia and the Civil Code of Georgia do not recognize the term "intellectual industrial property". Thus we have here a collision between normative acts. In resolving the issue as towhich of them must be given priority, we should be guided by Article 2, Paragraph 6 and Article 7, Paragraph 7 of the Organic Law of Georgia on Normative Acts. Since the organic law of Georgia is hierarchically higher than the law of Georgia, the term "industrial property" established by the second part of the Civil Code of Georgia should be shared and unconditionally established in Article 18 of the Law of Georgia on Science, Technology and their Development.

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Section 5. Philology and linguistics

Gulyamova Zarina Rahmatiloyevna,
associate professor, PhD of TSPU named after Nizami
Uzbekistan, Tashkent

BASIC CONCEPTS OF LINGUOCULTUROLOGY AND COGNITIVE LINGUISTICS

Abstract. Cognitive science is an interdisciplinary science that integrates the efforts of scientists of different specialties (psychologists, logicians, philosophers, linguists, psycholinguists, mathematicians, programmers, cyberneticists, anthropologists, etc.) in order to obtain the most complete and adequate understanding of such a complex phenomenon of nature as human consciousness and reason.

Keywords: Cognitive science, concept, theoretical thinking, cognitive-linguistic, conceptualization and categorization.

Cognition is an English–language term (cognition), the translation of which into Russian is ambiguous. This term differs in its content from the closest Russian-language term "cognition". According to the definition given in the Concise Philosophical Encyclopedia, "cognition" is "knowledge, cognition". In other words, unlike the term "cognition", "cognition" means both the cognitive process itself – the process of acquiring knowledge, and the results of this process – knowledge. Therefore, this term is used along with the term "cognition" when referring to the processes of conscious scientific knowledge of the world or theoretical thinking. Cognition is a concept that covers the cognitive activity of a person in his linguistic embodiment.

All cognitive activity of a person (cognition) is aimed at mastering the surrounding world, at the formation and development of the ability to navigate in this world based on the knowledge gained. This, in turn, is due to the need to compare objects and events. At the same time, an important place in this activity is occupied by the processes of conceptualization and categorization, which differ in their final result and purpose.

Although the field of cognitive linguistics has not yet fully developed, one of the most important aspects of cognitive linguistics is the study of verbal means representing language and speech. "Cognitive linguistics" is a linguistic direction that focuses on language as a general cognitive mechanism, as a cognitive tool, a system of signs that play a role in the representation and transformation of information, language knowledge and knowledge about the world.

Cognitive linguistics has as its subject the study of lexemes, phrases, utterances and texts that represent certain concepts in language and speech. The sides, layers, components of the concept that are included in the semantic space of the language are investigated, how they categorize it, and in which parts of the system of a particular language is manifested, the concept under study is found. The purpose of cognitive-linguistic research of the concept is as fol-

lows: having described the meaning of all words and expressions representing a particular concept in the national language, to systematize, i.e. systematically describe, present in an ordered form the section of the language system representing this concept (semantic, lexico-semantic, lexico-grammatical, syntactic field) [1, p. 54].

The main concepts of cognitive linguistics relevant for the purposes of our research are the concepts of conceptualization, categorization of the concept, the conceptual sphere, frames and knowledge structures. The process of conceptualization is aimed at identifying the minimum meaningful units of human experience – knowledge structures, and the categorization process is aimed at combining similar units into larger categories.

Conceptualization is the comprehension of incoming information, the mental construction of objects and phenomena, which leads to the formation of certain ideas about the world in the form of concepts (i.e., meanings fixed in human consciousness). Categorization is the division of the world into categories (including conceptual categories as a generalization of specific meanings or objects). At the same time, categorization as a cognitive process is the mental correlation of an object or event with a certain category. Accordingly, the exchange of information using language is reduced to correlation with the knowledge system available to a person, to the identification of objects and events, i.e. from the definitions of categories [2, p. 71]. The function of categorization, thus, i.e. the division of the world into categories and the attribution of specific objects and events to these categories, is the most important function of human consciousness underlying all human cognitive activity. At the end of the XX century, on the basis of the idea of the closest interaction of language and culture, a new science emerged – linguoculturology. The term "linguoculturology" appeared in connection with the works of the phraseological school headed by V. N. Telia [3, p. 130].

V. N. Telia defines linguoculturology as a part of ethnolinguistics devoted to the study and description of the correspondence of language and culture in their synchronous interaction. "The object of linguoculturology is studied at the "crossroads" of two fundamental sciences: linguistics and cultural studies" [3, P. 130]. The following main problems and areas of study of linguoculturology are distinguished:

1) non-equivalent vocabulary and lacunae;

2) mythologized linguistic units: archetypes and mythologems, rituals and beliefs, rituals and customs fixed in the language;

3) paremiological foundation of language;

4) phraseological foundation of the language;

5) standards, stereotypes, symbols;

6) metaphors and images of language;

7) stylistic structure of languages;

8) speech behavior;

9) the area of speech etiquette

"Linguoculturology is a branch of linguistics that arose at the junction of linguistics and cultural studies and explores the manifestations of the culture of the people, which are reflected and entrenched in the language" [4, p. 61]. "Linguoculturology is a relatively young philological discipline of the synthesizing type, which arose at the junction of linguistics and cultural studies and considers language as the embodiment of culture." Telia V. N. defines linguoculturology as a part of ethnolinguistics devoted to the study and description of the correspondence of language and culture in their synchronous interaction [3, p. 130].

According to V. V. Vorobyov, "today it can already be argued that linguoculturology is a new philological discipline that studies a certain selected and organized set of cultural values, explores the living communicative processes of speech generation and perception, the experience of a linguistic personality and national mentality, gives a systematic description of the linguistic "picture of the world…" [5, p. 131].

Thus, analyzing the above definitions, we can say that the subject of linguoculturology is the study of

the cultural semantics of linguistic units, which is formed during the interaction of language and culture. Linguoculturology as a special field of science has given rise to many concepts, such as linguoculturema, cultural language, cultural text, cultural context, subculture, linguocultural paradigm, key names of culture, cultural traditions, cultural process, cultural attitudes, cultural concepts and many others. One of the most important concepts for this science, as well as cognitive linguistics, is the concept of "concept", since cultural information can be presented with the help of this concept. The concept of a concept is one of the basic concepts of both cognitive linguistics and linguoculturology.

In linguoculturology, however, the concept of a cultural concept based on the relationship between language and culture has been introduced. The concept of a cultural concept for the purposes of our work is the most acceptable, since stylistic techniques are carriers of cultural information. Due to the fact that the concept of a concept is fundamental in our work, it seems necessary to consider the concept of a concept in general and a cultural concept in particular.

According to Arutyunova, concepts form "a kind of cultural layer mediating between man and the world". As a linguistic concept, "concept" makes it possible to consider ideal mental entities. Berestnev believes that concepts are the units with which we think about the world, mental formations that form the categorical basis of language and create a generalized image of the word, objectifying the model of consciousness. Despite the fact that the term "concept" has been used for quite a long time by scientists such as A. Vezhbitskaya, Yu. S. Stepanov, R. M. Frumkina and others, there is still no single definition of this term.

S. A. Askold was one of the first in the world linguistics to turn to the study of concepts. He believed that the most important function of concepts is the function of substitution, since, being a mental formation, the concept replaces many objects of the same kind. The concept can replace both real objects and some aspects of the object or real actions. Likhachev D. S. proposed to consider the concept "an algebraic expression of the meaning that native speakers use in oral and written speech".

Yu. S. Stepanov gives the following definitions: "A concept is like a clot of culture in a person's mind; that in which culture enters the mental world of a person. And, on the other hand, a concept is something by which a person enters culture himself, and in some cases influences it" [3, p. 112].

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Makhmudova Olesya Yuryevna,
Senior teacher, Cooperative Belarusian-Uzbek Intersectoral
Institute of Applied Technical Qualifications in Tashkent
Uzbekistan, Tashkent

THE ROLE OF FOREIGN LANGUAGE BORROWINGS IN ENGLISH LANGUAGE

Abstract. This article is devoted to the study of foreign language vocabulary in the linguocultural aspect, as well as the interaction of linguistic, conceptual pictures of the world, the analysis of which is one of the most significant areas in modern linguistics. The identification of the specifics of the linguistic and cultural component, the study of the development of the linguistic picture of the world and intercultural communication through the study of borrowed words and concepts allow us to open up new perspectives in the study of the interaction of language, culture and thinking.

Keywords: Linguocultural aspect, linguistic picture, complex system, the individual elements, intercultural interaction, linguistic and cultural component.

The lexical composition of a language is a complex system, the individual elements of which are closely interrelated and interdependent. Modern linguistic science understands the system as "a set of linguistic elements of any natural language that are in connection with each other, which forms a certain unity and integrity" [2, p. 45].

The lexical composition of the English language, containing a very large number of borrowings, is in itself a clear demonstration of the intercultural interaction that took place on the territory of Britain in for several centuries. Borrowings in different languages have different effects on the enrichment of vocabulary. In some languages, they did not have a decisive influence on the vocabulary of the language, in others, on the contrary, borrowings carried out in different historical epochs had such a significant impact on the vocabulary of the language that even service words, for example, pronouns and prepositions borrowed from other languages, replaced the original service words. Since the process of borrowing is inherent to each language and integral to the lexical composition of the English language in particular, this topic remains relevant and has enough material for consideration and research. Since a living language is a constantly evolving phenomenon, it is quite natural that the language is enriched with something new, discards the superfluous and unnecessary.

Language borrowings represent a special layer of vocabulary both from the point of view of nomination processes and from the point of view of motivation. Borrowing is one of the possible answers to needs nominations arising as a result of language contacts and the expansion of the experience of this language group under the influence of other languages [1, p. 24]. In addition, borrowings represent a certain saving of linguistic efforts in the generation of speech, since ready-made units of a foreign language are used to fill nominative gaps that have arisen in this language. At the same time, the loss of the former associative links that existed in the language from which they were borrowed may entail a loss of motivation inherent in these words in the source language, which, accordingly, causes significant difficulties in recognizing their meaning in the process of speech perception [2, p. 106]. According to our according to the opinion,

the reason for this is the fact that the connection with the motivating word is not realized by the speaker as relevant. Lexical units borrowed from about 50 languages of the world make up more than 70% of the vocabulary of the English language and include layers of vocabulary borrowed in various historical epochs and under the influence of various – historical, geographical, social, economic, cultural, etc.– conditions for the development and existence of the English language. Being the result of a long historical interaction of languages, borrowing as a process and borrowing as a result of this process are of considerable interest for the history of language, within which the reasons for borrowing and the languages-sources of borrowing, ways, forms and types receive detailed coverage.

Language borrowings, as well as the transformations that a borrowed word undergoes in the language that borrowed it [4, p. 20]. In science borrowing is defined as the transition of elements of one language into the system of another language as a result of more or less prolonged contacts between these languages under the influence of intra- and extralinguistic factors [3, p. 102].

Borrowings are interesting not only for the influence they have on the system structure of the vocabulary of a given language, as well as for their special status in the borrowed language, if a number of genetic characteristics are preserved, but also for the influence they have on the formation of the linguistic picture of the world of speakers of this particular language.

This influence is most obvious when not only individual units are involved in the borrowing process, but whole groups of words between which certain semantic relations existed in the source language. Semantic should be understood as groups of words united by the commonality of the subject – semantic sphere, for example, borrowings from the English, French languages related to the areas of legislation, military affairs, religion and jurisprudence.

Considering the issue of changing the lexical composition of the English language during the transition from Old English to Middle English and Modern English, accompanied by the disappearance of many native words and the appearance of borrowings in their place, in our opinion, we should pay attention to some important circumstances. In all languages, the usual process of discarding words denoting archaic realities takes place. Such words move into the category of archaisms. In some cases, such words can still exist in the language for a long time due to literary use, despite the functional and genre limitations. The peculiarity of the history of English vocabulary was that the words belonging to the above type disappeared almost instantly. After the Norman conquest of England in the 11th century, which marked the transition from Old English to Middle English, not only the restructuring of state and public institutions took place, but also "the literary epic tradition broke off, where they could Anglo-Saxon archaisms would have been preserved" [1, p. 62]. This circumstance, according to in our opinion, it indicates the exceptional susceptibility of the language to foreign borrowings during the formation of the national supra-dialect language and, accordingly, the national picture of the world.

Since the object of this study is the vocabulary of the English language, we find it expedient to give a brief description of the lexical composition of the English language in the diachronic aspect, as well as to describe the processes of borrowing foreign vocabulary by the English language. From our point of view, this will allow us to get a general idea of the formation of the English language picture of the world, and about the factors that influenced its development. "The originality and uniqueness of the national language pictures of the world is connected, first of all, with vocabulary" [2, p. 54]. It is the diachronic aspect that is able to most clearly show the dynamics of the development of English linguoculture by the example of its adaptation of foreign language borrowings.

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Section 6. Electrical engineering

Hajiyev Nijat,
Master's in computer science,
Data Scientist, Akademia WSB

ANALYSIS OF THE EFFECTS OF ARTIFICIAL INTELLIGENCE ON LABOR, EMPLOYMENT AND INCOME DISTRIBUTION

Abstract. The paper's aim is to explain the impact of Artificial Intelligence (AI) to the current and future of work environment. The impact of Artificial intelligence on our work is the topic which became so important to discuss last years and creates confusion in people's minds in the case of its future. Whether many people argue its development will have more negative sides, paper supports the idea of creating more jobs with improvement of technology, but at the same time widening income equality in the world. The study shows that people believe in the importance of artificial intelligence and its growth in the workplace, but at the same time being optimistic in case of creating new jobs, increasing or having stable salary. Moreover, the survey also supports the idea that in future mainly less- and middle-skills needed jobs will be replaced more by artificial intelligence.

Keywords: artificial intelligence, job, income, future. *JEL Classification:* J24, J69, O3.

Introduction

Artificial intelligence has an impact in all parts of business starting from finance to IT, and even management. When AI impact growth, it creates some changes in business which are negative for some employees and positive for business, such as replacing less and middle-skill workers with computers. Workers of all educational levels are badly influenced by robots, although those without a college degree are negatively affected far more than someone with a college diploma or above (Brown [7]). From another point of view, from the survey at the end of article 1/3 people are already think that they are ready to replace employees by AI, if AI can do the same work as people. In comparison to commuter zones without exposure to robots, between 1990 and 2007, the rise in robots (about one per thousand workers) decreased a zone's average employment-to-population ratio by 0.39 percentage points and average salaries by 0.77 percent. According to this, a region loses around six workers for every robot that is added (Brown [7]).

Research methodology

The qualitative data were collected from referenced websites and related articles were used to express common opinions about AI and employment. Additionally, exploratory analyses were used to explain the survey, which was done among 184 people. Online survey was done to understand current opinions about AI and its impacts, thoughts about the future and its effects on jobs. The survey had questions about AI impact on salaries, replacement of workers, effects on new jobs and how likely are participants to replace employee by AI if it is

possible. The survey was done among people who are employed, and the survey was one fully anonymously with open shared age, gender information. To express thought better, survey consisted mainly multiple choice with possibility to add additional thoughts and linear-scale question types. Understanding Artificial Intelligence.

Artificial intelligence became the main topic of our world, especially during the last 10 years. When people who are working in IT, then people who are optimistic regarding the future of the world are enjoying this topic, at the same time there are some people who are focusing mainly on the negative sides as well. However, simple computers do whatever is coded in them, whether the main aspect which makes AI unique is the ability to learn (Stahl [15]). Artificial intelligence is a topic that, in its most basic form, combines computer science and substantial datasets to facilitate problem-solving. Additionally, it includes the branches of artificial intelligence known as deep learning and machine learning, which are commonly addressed together.

How did we come to this day?

Everything started in the 1950 s with small steps, ideas about this field. The first practical results were seen in 1997 when IBM's AI powered machine Deep Blue beat Garry Kasparov. Then, in March 2016commands from people to learning how to play by itself. Today AI is used nearly in every aspect of our life including finance, health care, transport, education and so on. It is a fact that sometimes people are interacting, talking, or connecting with AI even without knowing that they are interacting with AI. For example, the most known face detection square in mobile phone cameras is powered by AI and people do not know that it is AI. Then, AI powered chatbots, which became so popular during the last years, are talking with people and saving hundreds of thousands of dollars for businesses (Reeves [17]) As an example of it can be noted, self-driving cars which are nearly fully automated. Actually, it is clear that fear comes from having less information about the

topic. It is a fact that when people see in social media or in Google advertisements about their interests (latest searches), they are surprised and never complain that they saw ads according to their interest which has been powered by AI.

AI and labour

It is clear the impact of technology in almost all areas of business, from production to HR. So, this is the reality that IT impacts all of them but making some of them less human depended. According to data, during the previous four years, the usage of AI in several business areas has increased by 270%. (Stahl [15]).

In their research, Frey & Osborne concluded that 47 percent of employment in the US is at danger of automation in the next ten to twenty years, but 33 percent of jobs have a minimal risk of automation. (Aghion, Antonin, & Bunel, 2019) According to Oxford University's categorization research, up to 35% of all workers in the UK and 47% of all jobs in the US are at danger of being computerized during the next 20 years. Today, it seems that today AI is not taking our work from us fully, in reverse it is supporting people and making their work and lives easier.

The following 2 charts are showing annual installations of industrial robots:

It should be underlined that low-wage nations like China, India, and Bangladesh continue to profit from their excess of unskilled laborers while Western businesses continue to outsource their manufacturing to these nations. Jobs requiring low or medium qualifications will eventually disappear. When the cost of human work is 15% greater than the cost of robotic labor, replacing human manual work with robots makes financial sense in nations with low labour costs. Construction of plants where robots would replace 90% of the human workforce has already begun in China (Javelosa [9]). Additionally, during Covid-19 all these processes gained importance and speed, replacing human labour with AI.
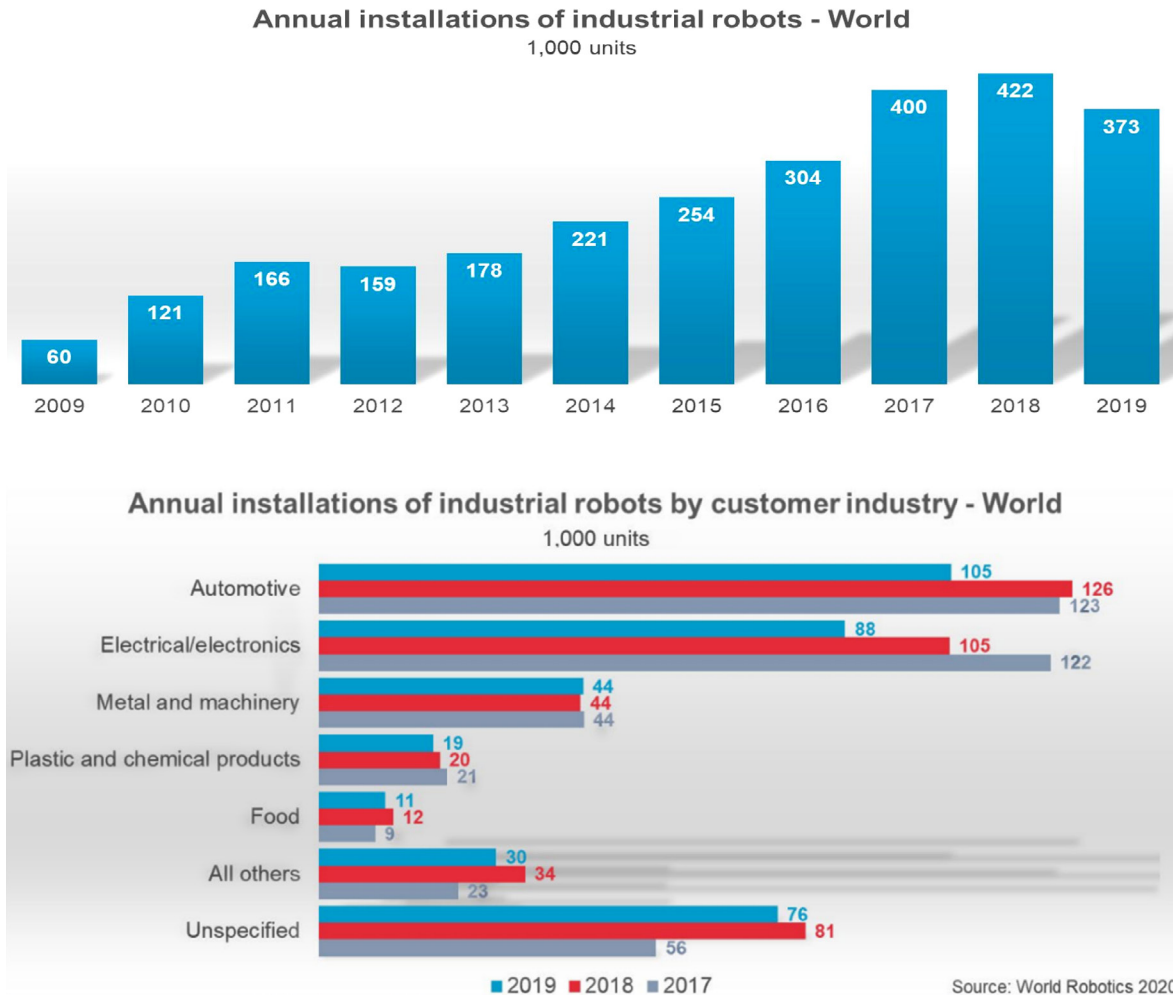
Annual installations of industrial robots - World
1,000 units

Annual installations of industrial robots by customer industry - World
1,000 units

Source: World Robotics 2020

Figure 1 & 2
Source: www.ifr.org

AI and income distribution

By delivering services and producing goods more effectively than ever before, artificial intelligence can create significant value. But a lot of people worry that this will result in an even wider gap between the rich and the rest of the world. It has always been arguable that AI is creating more new jobs or causing unemployment. Generally, the labour force can be divided into 3 groups: low skilled works, middle skilled works and high skilled works.

Over the past few decades, the nature of work has changed. The difference between workers who have access to higher education, leadership development opportunities, and work experience – and those who do not – is expanding due to the new digital divide.

Middle-skill occupations are disappearing in favour of entry-level, low-skill work and high-level employment that demands higher skill levels as the labour market has become more split. The Covid-19 crisis has probably sped up the procedure (Cremer & Kasparov [3]). Generally, the number of low skilled works is increasing, the number of middle skilled works is decreasing and the number of high skilled works is increasing.

In this graph it is clearly described the rise of low skilled share in employment in all types of countries, huge increase in demand for high skilled and huge decrease in demand for middle skilled workers. This graph is also another proof how AI is impacting employment and income equality. This

is explained with routine tasks and non-routine manual works are primarily carried out by low-educated individuals, whereas routine cognitive works are primarily carried out by middle-educated and non-routine works are carried by high-educated workers.
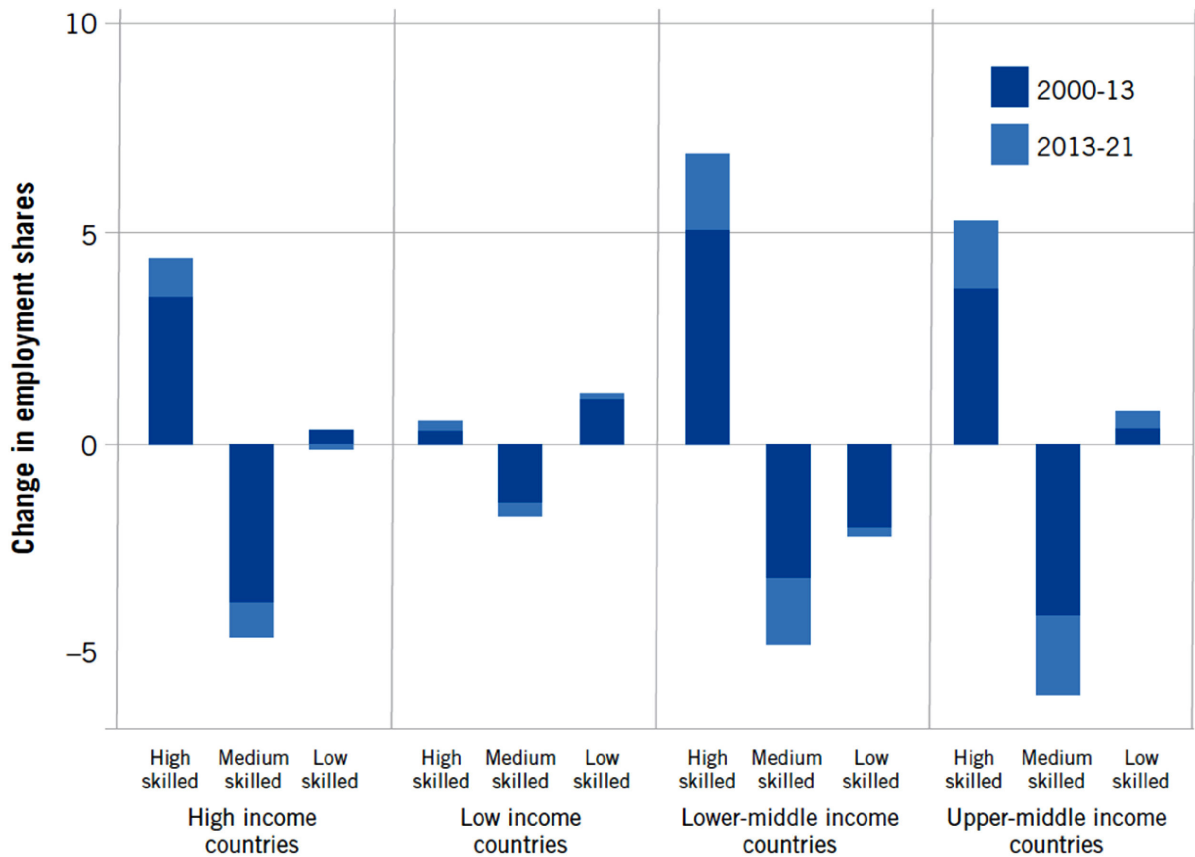

Figure 3. Change in employment shares
Source: International Labour Organization

AI and employment

By 2030, scientists estimate that using artificial intelligence (AI) more widely would boost the world economy by up to $15.7 trillion. Intelligent technologies are already replacing people in manufacturing, service delivery, recruiting, and the financial sector, which forces human workers into lower-paying positions or leaves them unemployed (Cremer & Kasparov [3]). The Covid-19 has expedited technological development and the digitization of many everyday jobs, from robots that deliver parcels to contactless cashiers. Many people are worried that artificial intelligence (AI) could significantly increase automation and eliminate employment in the ensuing decades. In many other occupations, the technology will alter the nature of work by enabling people to concentrate on higher-value, higher-touch activities that frequently need human contacts. Individuals and businesses who will have more opportunity to be innovative, strategic, and entrepreneurial will gain from these newly improved positions

Survey about AI and employment

In order to understand the current (2022 year) approach of people towards Artificial intelligence and employment, salaries, there was a research done among 184 people. One of the question of survey is Do you think that the importance of AI in the workplace is growing?

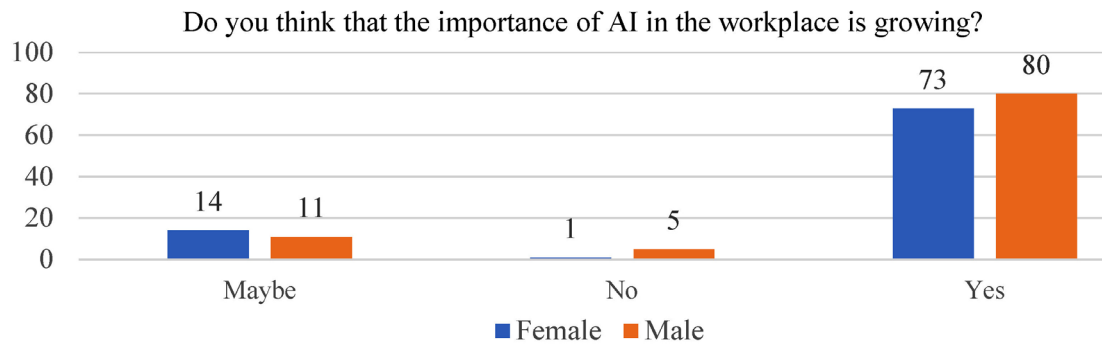Participants answered the following way: 153 (83%) Yes, 6 (3%) No, 25 (14%) Maybe

Do you think that the importance of AI in the workplace is growing?

Figure 4.

The following question is Are you afraid of impacts of AI on your jobs? Answers were: 15 (8%) Yes, 115 (62%) No, 54 (30%) Maybe

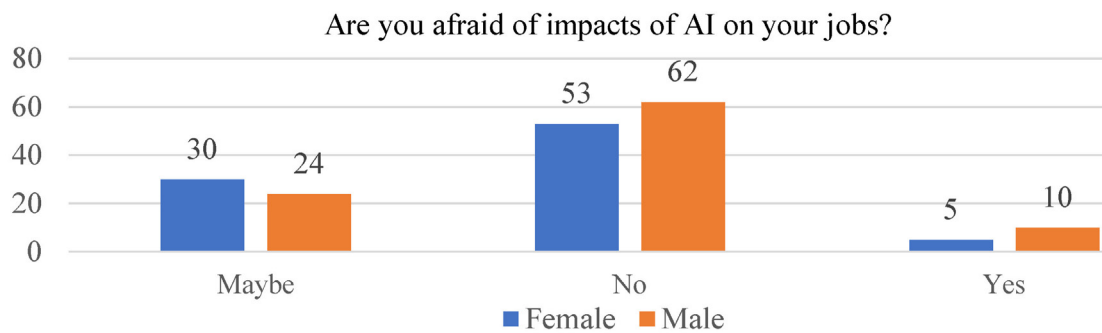## Are you afraid of impacts of AI on your jobs?

Figure 5.

The following question is What do you think, how likely is your current job will be replaced by Artificial Intelligence?

Participants were asked to evaluate from 1 to 10 whether 1 is less likely and 10 is most likely. Mean for answers is 5.2. Answers 8, 9, 10 were given mainly by people who are working in IT / Computer Science / Network (13 out of 38, 34%) and Finance (12 out of 38, 31%) and remaining 35% percent from other industries.

The following question is If you are director of one company, if AI can replace some of your workers fully, will you approve to replace them by AI (computers) or not?

From the answers it is clear that 30% (55 out of 184) of participants said Yes, 25% (46 out of 184) said No and and 45% (83 out of 184) are not sure or said dependson situation (taking into account cost, efficiency and the possibility of replacement).

What do you think, which one will be replaced more by AI in the future?
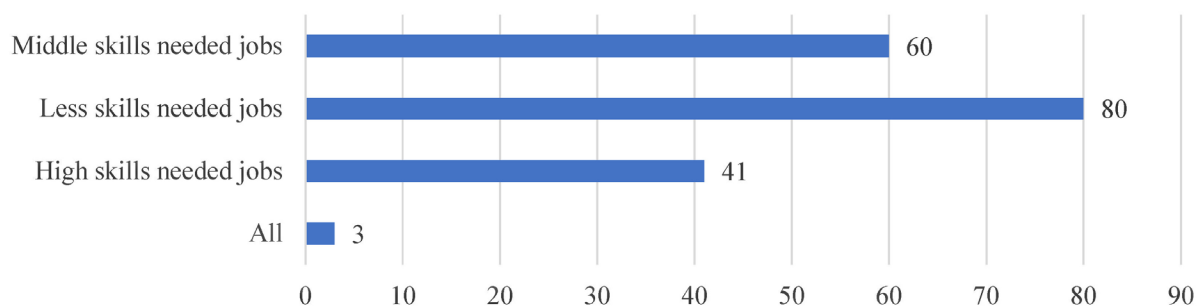
Figure 6.

The following question is Do you think, in future Artificial Intelligence will create many new jobs or not? 68% (126 out of 184) answered will create, 28% (51 out of 184) answered will not create and remaining 4% (7 out of 184) are not sure.

Do you think, in future Artificial Intelligence will create many new jobs or not?
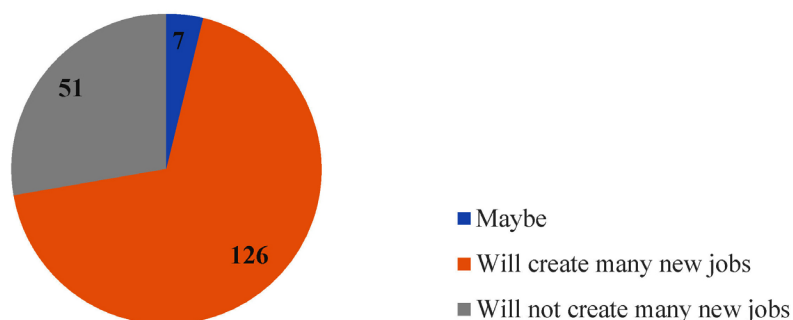

- ■ Maybe
- ■ Will create many new jobs
- ■ Will not create many new jobs

Figure 7.

The last 2 questions are two of the most important ones in the survey which are focused on AI replacement of works and the future of salaries.

The following question is What do you think, which one will be replaced more by AI in the future? 43% (80 our of 184) responded less skills needed, 32% (60 out of 184) middle skills needed jobs, 22% (41 out of 184) high skills neeed jobs and 3% (4 out of 184) all.

What do you think, which one will be replaced more by AI in the future?
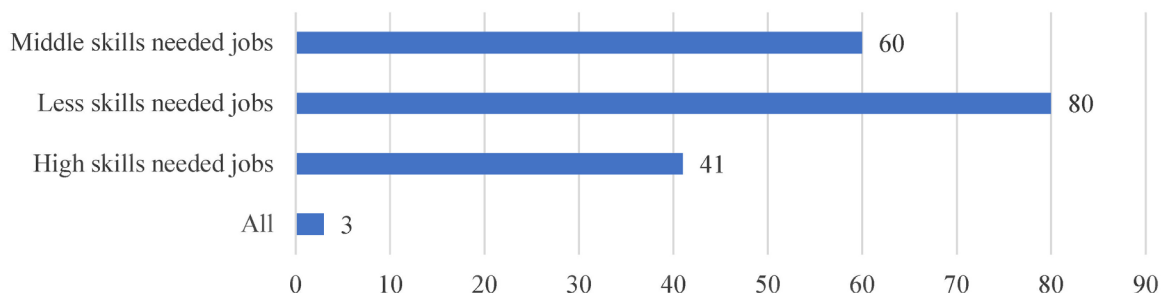
Figure 8.

What do you think after growing the impact of Artificial intelligence in business ...
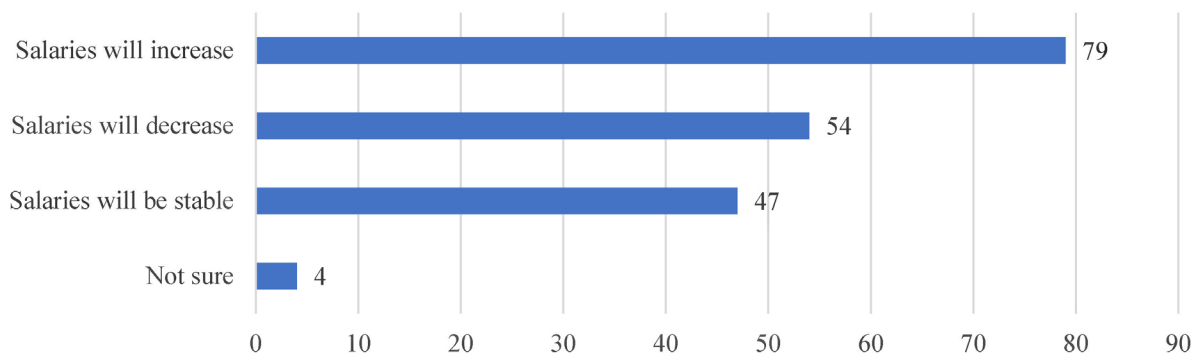
Figure 9.

The following question of the survey is What do you think after growing the impact of Artificial intelligence in business, salaries will (increase, stay stable or decrease)? Responses for the this question were following: 79 (43%) increase, 54 (28%) decrease, 47 (25%) stable, 4 (6%) Not sure.

The last question about AI is very simple, Do you think Artificial Intelligence is FUTURE and we should focus on it more? Respondents answered the following way: 130 (70%) Yes, 46 (25%) No, 8 (5%) Maybe.
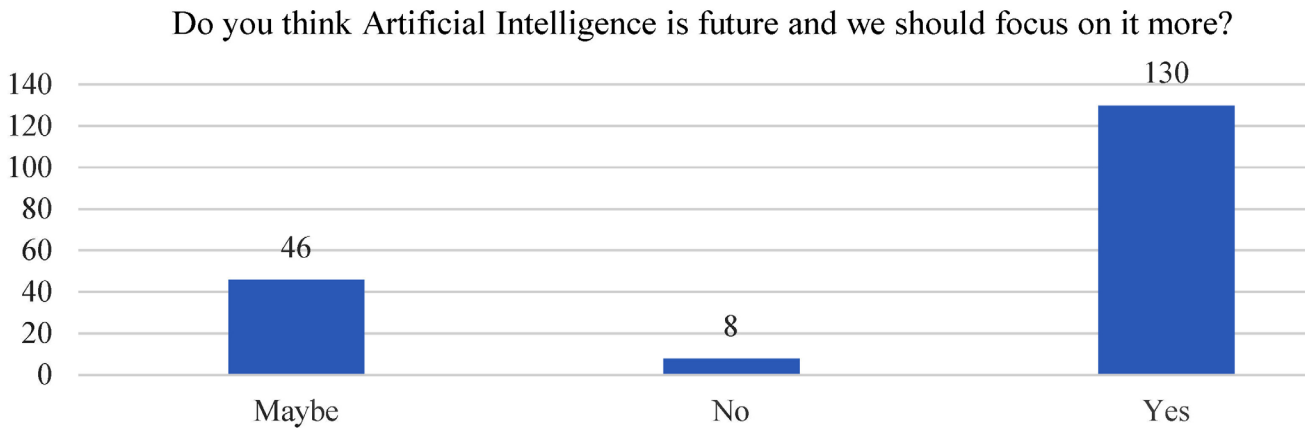
Do you think Artificial Intelligence is future and we should focus on it more?

Figure 10.

From the survey there are some conclusions can be made. First of all, people do believe that the importance of AI is growing in workplace and from survey it is clear that that is huge proportion of people (83%). At the same time 30% of people are not sure that they are afraid or not aftaid of impact of AI on their jobs whether twice more people think that they are not afraid of its impact and its nearly same number in male and female participants. Moreover, on average people give between 3 and 7 to the question how likely is their work can be replaced by AI (1-less likely, 10-most likely), and on average it is 5.2. Then, nearly half of people (45%) are not sure that they can replace people with AI, if computers can do work as people and 1/3 answered as Yes for this replacement. Aditionally, more than 2/3 people (68%) answered as AI will create many jobs in future and a bit less than 1/3 participants (28%) think that it will not. Moreover, 75% of respondents think that less- and middle-skill needed jobs will be replaced in future by AI. At the same time 43% think that salaries will increase and 28% decrease, 25% stable.

Conclusion

First of all, it is fact that from MIT studies the employment-to-population ratio decreases by 0.2 percentage points and salaries fall by 0.42 percent for every robot added for every 1.000 workers in the U.S., according to the study. To date, this has resulted in the loss of around 400.000 jobs. (MIT) This study's conclusion can be understood this way: today people believe that AI is the future, the role of AI in all spheres increase and it has huge impact on businesses. When general studies till know proves that the more AI is envolved in business, the more income unequality occurs, the more people become unemployed, but survey shows that now people do not think about such negatively about AI. Respondets think the more AI is involve in business, it will increase salaries, will create more jobs. Finally, they do not think mainly if they can replace or not employees by AI fully if they were boss and they think that mainly less- and middle-skilled employees will be replace by AI. This article is recommended for researches who work on topics about AI and its impacts to employment, labor and income equality.

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