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## Section 1. Art history and cultural studies

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### CINEMATOGRAPHY OF UZBEKISTAN IN THE YEARS OF INDEPENDENCE

**Abstract.** This article discusses the creative process in this area, the research of young artists in the creation of new films, the author's films in which the main character is a child-hero. From film directors T. Yunusov, Z. Musoqov, R. Muhammadjanov and U. Khamdamov's films created in the harmony of new themes, styles, forms and genres in accordance with the requirements of the time and the spirit of the time will be analyzed.

**Keywords:** art, plot, screenplay, metaphor, comedy, fiction, folklore.

Cinema the most popular and democratic form of art, is a sensitive and active art form that can quickly notice all the changes that take place in the life of society, in the minds of people, and express their attitude to them. In the 90s of the last century, Uzbekistan entered a new stage in its historical, socio-economic development, which was reflected in the search for a new theme, plot, new hero and their new interpretation in the spirit of modern cinema.

The new era, in terms of its theme, style, form and principles, revived the traditions and ancient values in line with the national mentality, as well as demanded a completely new national cinema with a new approach to artistic, aesthetic, cultural, spiritual and moral education of today's generation. It meant turning from painting life to reality, completely abandoning the old stereotypes, going deeper into human problems, pain, thoughts, feelings, psyche, and most importantly, opening the way to the heart of the viewer.

If we think about children's cinema in Uzbekistan, the most important task was to pass on the works of folklore, the rich literary heritage of the nation to the younger generation in the "language" of cinema in accordance with the spirit and requirements of the new age. A deeper approach to nationalism and research into the creation of a national character has prompted filmmakers to turn to rural life, where ancient values have been preserved. One of the films "Children of Tangalik" (scriptwriter R. Muhammadjanov, director T. Yunusov, cameraman N. Gulamov, artist S. Ziyov, composer M. Makhmudov). In the director's words, the film follows "the rhythm of life, its people, on a piece of our map like a coin". The folk songs "Let it rain" and "Kim oladi-yo, shuginani-yo", which have been passed down from generation to generation and absorbed into today's rural life, have now become popular youth songs due to the film. The protagonists of the film "Children of Coin" are 8-year-old Doston, who was left in the hands of his

grandmother in the village, and his older friends Nortoy and Zokir. In the film, each child's unique character unfolds as they encounter life's contradictions and face a variety of dramatic events. This happens on hot summer days when Zokir travels to the city with his friend Nortoy and Doston, who follows them in search of his mother ... In the solution of the film "Children of Tangalik" the quiet, peaceful, loving nature of the noisy city life and fast rhythm returns to the boundless nature.

The folk song sung at the end of it spreads far and wide, delighting everyone, inspiring the elderly and encouraging them to express their feelings in a plastic game. In the new era, the search for the mood and spirit of the times, the creation of modern films has led to the formation of new principles and renewal of traditions in Uzbek children's cinema. The young forces that entered the field in the 1990s, at the threshold of creativity, are not afraid of anything and do not hesitate to make bold authorial films. The sharpest social thought, the most relevant topic, the most serious idea, the philosophical meaning are conveyed to the audience in a unique form and style, in an understandable screen language. This creative process, called the "new wave" in Uzbek cinema, was started in the 1990s by film director Zulfiqor Musakov.

Z. Musakov is the most active and versatile director, who made a great contribution to the development of the national cinema of independent Uzbekistan. Creating in a mix of different genres and art forms is one of his unique creative styles. Deep idea, serious thought, up to the big problems of the time are expressed on the screen with childish naturalness and sincerity, as well as a combination of elements of humor, laughter, comedy, fiction. Maybe that's why "Abdullajon ..." (screenwriters Zulfiqor Musakov and Rixsivoy Muhammadjanov, director Z. Musakov, cameraman T. Mansurov, artist H. Khojikulov, composer M. Mahmudov, 1991), "Little doctor" (screenwriter and director Z. Musakov, cameraman A. Ismoilov, artist S. Ziyoy, composer A. Nazarov, 1998) and "Oyijon" (scriptwriters and directors

Z. Musakov and B. Odilov, cameramen A. Ismoilov, A. Ganiev, artist I. Litvinenko, composer A. Ergashev, 2001). If in the poetic films of the 60s of the XX century the environment was viewed from the child's point of view, in the cinematography of the years of independence the child is open-minded, ready to help, active, but "unforgivable sins" as in "Abdullajon ..." ruthless character. It's not hard to feel that in such films, laughter, deep meaning under humor, serious thought is hidden.

Through the film "Abdullajon ..." the genre of science fiction entered the Uzbek children's cinema. When there was no tradition in this field yet, the opportunities of the fairy tale genre, its peculiarities such as conditionality, metaphor, exaggeration were effectively used. This fantastic comedy is inextricably linked with real reality, the story takes place in rural life today. He was an ordinary boy with brown hair and white hair, who was no different from the people of the alien planet who flew to the Uzbek land, and seemed familiar to the audience. It also has a full range of human qualities, helping the villagers to ease their difficult lives, to make their dreams come true. As soon as you look at it, fantastic things start to happen in the village ... Like flying brooms in ancient fairy tales, flying mattocks make life easier for the villagers and bring them to the market in an instant. However, for the "unforgivable sin" the chairman of the collective farm will never fly ... Although contact with aliens is forbidden in the village, an ordinary farmer Bozorboy aka adopted him and named him "Abdullajon", wearing a national skullcap. The fact that the fantastic comedy "Abdullajon ..." raises serious issues in the life of the villagers with humor and laughter still attracts a large audience.

"... what can compare in durability with fantastic works? There is more human in the improbable and fabulous than in a real person", wrote the famous French writer Paul Valerie [1]. Doctor of Arts, Professor Dj. In one of Teshabaev's interviews: "I remember, what a huge achievement caused by Zulfikara Musakova's tape "Abdullajon ..." in her time,

according to the new and boldly translated folklore material on the screen” [2] he said.

The film “Oyijon” was shot in collaboration with Japanese cinematographers, in which a five- or six-year-old girl named Nargiz, who is not satisfied with her mother’s love, longs for her mother. This collaboration helped to define the structure of the film and to show the contrasting appearance, different architecture, historical monuments and geographical environment of the two countries, which are distant and different from each other. On the screen, one can see the skyscrapers of Japan, the traffic on the bridges, the autumn landscapes of Uzbekistan, more precisely, the quiet Samarkand, the world-famous historical monuments.

Despite the fact that Nargiz lives with her father and grandmother, she often visits the mother who died in the accident and the suffering of a childless woman in faraway Japan. shifts to human qualities such as acquisition. Here, in one of Japan’s narrow streets lined with flowers, a florist Japanese woman, Teko, who is saddened by her inability to be a mother, says, “Your happiness is beyond three seas”. His prediction came true and Teko will come to Uzbekistan as a tourist. Visiting the city of Samarkand, he sees the magnificent historical monuments on the famous Registan Square, observes the work of the artist who paints them on canvas. Nargiz, the daughter of an artist who brings food to her father every day, accidentally sees a Japanese woman, resembles her own mother, and even believes that she is her mother. Indeed, this woman looked like a photograph of a girl holding two drops of water. Even the fact that he has a spot behind his left ear surprises everyone. A Japanese woman is a guest in an Uzbek house and invites Nargiz to Japan ...

As good intentions, good dreams, and human qualities grow and develop from childhood, the imagination of a pure-hearted, sincere, imaginative, and pure-hearted Uzbek girl lays the foundation for the rapprochement of the peoples of the two countries and leads to philosophical conclusions.

With the opening of a wide path to creativity in the renewed Uzbekistan, new principles are emerging in children’s cinema. One of them is the fact that mature filmmakers also create on authored film. In this regard, the author’s film “The Old Man and the Grandson” (scriptwriter and director R. Mukhamadjanov, cameraman T. Mansurov, artist Z. Mirakhmedov, composer M. Mahmudov, 2008) by an experienced screenwriter Rixsivoy Mukhamadjanov, “cooked” in Uzbek cinema. Rixsivoy Mukhamadjanov began his career in the 1970s writing scripts for the film director M. Abzalov’s films “Duel under the plane tree” (1978), “Suyunchi” (1982). In films based on his screenplays, the image of children of different characters attracts attention. The great success of the films “Abdullajon ...”, “Children in Heaven” (2002, 2003), created in collaboration with the film director Z. Musakov, introduced the name of Rixsivoy Muhammadjanov to a wide audience. Inspired by such success, the screenwriter sets out on an authorial film and manages to create a uniquely child-like image, remaining true to his creative tradition.

“The Old Man and the Grandson” is a modern-day film about the internal contradictions of life in one of the Uzbek villages. His protagonists are Obid, a straightforward, determined character who has gone through a complicated life path, and a seven-year-old grandson named Ganisher. The grandfather is survived by three grandchildren. The only son lives in the city with another, leaving his family – his wife and three children. The daughter-in-law, who worked as a saleswoman in the store, fell ill and died of anxiety. After that, the grandfather and grandson lean on each other, always walking together. One of the distinctive national features of the Uzbek family is that three generations live in one family. This is an important factor in the transmission of our national traditions, customs, spirituality from father to son, from son to grandson – from generation to generation and live forever. In the film, when this tradition is temporarily broken, the spiritual upbringing of the grandchildren is continued through the grandfather.

Although Ganisher is still a child, he is a small man with a formed character, a participant in all events and happenings in the family, a quarrelsome and stubborn child. He fights injustice on his own, he takes his own pain from those who are offended. Episodes involving children in the film are funny, enriched with humor.

The paradoxical thinking of children of this age, that is, their ability to instantly move from reality to the unreal world, the ability to live in two senses at the same time, was captured by the director Rixsi-voy Mukhamadjanov and shown naturally and convincingly. The idea of the film became even brighter as humorous, comic elements entered the life film through a child character. The fact that funny, sad, dramatic events happen at the same time is a testament to the authors desire to portray life on a larger scale. The grandfather is not an admonisher, his simple and meaningful words of wisdom are an educational example for the grandson, the national expressions imprinted in the child's mind will inevitably continue in the language of future generations.

“The old man and the grandson” – on the one hand, is adapted to the perception of young viewers: in it, sad, tragic events are not explicitly indicated, but by certain characters, customs, and on the other hand, in the example of a family philosophical thought does not leave even a large audience indifferent.

The research of the young creative forces of Uzbekistan, which is being renewed, to create a new film, reveals topics that have not yet been mastered. Instead of ideal, fluffy protagonists, beautiful scenery and mythological life on the screens, the real reality, the real life with all its contradictions, rises to the surface. In this regard, the author's film “Hot Bread” (scriptwriter and director Umid Khamdamov, 2018), which explores the recent past, is noteworthy. The psychological drama of the generation of this period is illustrated by the example of a family in which women are left to “turn the wheel” of life in rural life on the slopes. Zulfiya, a teenage girl who is now entering adult life and has been taken from her boarding

school to her grandmother, is confronted with cruel dreams and hopes. Zulfiya needs her mother's love. She wants to live with her mother, who is looking for a job in the city. But the girl, who is looking for love, also sees a mother who has forgotten to hug her child, who is busy coping with imaginary difficulties, and who is mentally degraded by the blows of marriage. His dreams, hopes and dreams will crumble in the face of reality. Why do they lie? Why did they say that her uncle had “swallowed a fish in the lake” or that the mother of the bride said “she is dead” and that her grandmother hid and locked the phone? The teenage girl wants to know the truth. Sometimes he begins to “fantasize” about his father, who left his family ... Family life, hidden from the outside world, is slowly unfolding before the eyes of a teenage girl. When his uncle was alive, he found out that his grandmother was talking to him on the phone early in the morning. The contradictions between the inner world of the teenage girl and the outer life do not give her peace. The girl rebels ... These tensions escalate, leading to a clash between the granddaughter and the grandmother, and the collapse of the hot bread-baking oven.

The will of her grandmother, who was hospitalized, reveals another secret (a bust of Lenin is also hidden next to the telephone, a sign that the film is set in the 1990 s). The will of her grandmother, who saw a lot, did not undermine human pride in accordance with the national mentality, hid the negative situation in the family from prying eyes, kept it a secret and swallowed it, has a deep philosophical meaning. His teachings on nationality, family continuity, the future of the younger generation, and his destiny were aimed at his wife and daughter.

The most patient, calm woman in the film, who is accustomed to the stones of destiny, raises her children, and turns the wheel of life without complaining, even though she is on the shoulders of bringing home, is the mother-in-law of the teenage girl – her uncle's wife. Zulfiya's antipode can be described as a woman who is not in a hurry, who is absorbed in her calm demeanor, who adapts to the difficulties of life, who is

resilient and soft-spoken. In a family where the male is not visible, he brings “life”: he bakes bread in the oven, takes it to the teahouse, feeds the family. His words to Zulfiya, “You need to know everything in the family – how to cook, how to do laundry, how to bake bread in the oven,” were not just told. The film ends with a teenage girl, Zulfiya, struggling to make dough. The more the dough is punched, the more ripe the dough is, and this frame is a metaphor for the cruel shocks of the world to heal a person. In the middle of a vast expanse of sun-dried grass, a crystal clear lake gives a poetic spirit to the film “Hot Bread”. Clear water is a metaphor for purifying the human psyche, inner and outer world, and nourishing hope for the future.

When we look at the creative process in children’s cinema in Uzbekistan today, it is noteworthy that the boundaries of themes and genres are expanding, new principles are being formed, and literary works are being addressed in author’s films. Films of young filmmakers Sarvar Karimov and Nozim Jumaev based on the short stories “Riding the Yellow Giant” and “Magic Hat” by the famous writer, adventure and detective master Khudoiberdi Tukhtaboev. Erkinov’s “Talent”, Gayrat Akhmedov’s “Legend of Friendship”, Akbar Bekturdiyev’s “Bear” can be seen in the style of such films.

During the years of independence, the screen turned from a “happy childhood” in the Soviet era to a reality. The cruel world does not spare even a small person, the fate of orphaned children due to an accident, the ignorance of adults, topics that were previously hidden from the eyes of a young audience, are now beginning to see the screen. Film director Rustam Sadiev’s film “Don’t Cry” is on this topic. The same theme will be continued in the film “Baby Cry”. It is, of course, a positive thing that young artists are researching on the screen interpretation of real life, untouched by the problems of life, in accordance with the spirit of the times. But as for the generation of the XXI century, the question arises as to whether their aesthetic, cultural and spiritual upbringing lags behind the times, social development, dynamic changes, the speed of time.

Raising a well-rounded generation that meets the requirements of tomorrow in all respects is, first and foremost, the duty of parents, one of the means of education, including the effective use of the most impressive artistic opportunities is also a requirement of the time. The more attention is paid to the film industry dedicated to the younger generation, the more it will inevitably yield results in the future.

### References:

1. Paul Valeri. “On art”, Moscow, “Art”, 1976.– 139 p.
2. Teshabayev Dj. “Uzbekkino”: results and prospects, “News of the week” newspaper.
3. Mirzamuxamedova M. Uzbek children’s cinema: theme and interpretation. “Art” magazine.– T.: 2020.– 1.– P. 41–44.
4. Mirzamuxamedova M. Nationalism and folklore traditions in Uzbek animation // Social opinion, 2016.– No. 3.– P. 123–129.
5. Mirzamuxamedova M. Uzbek animation. Monograph. “Classic word”.– T.: 2014.

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## THE IMPORTANCE OF THE ARTIST'S WORK IN CINEMA ART

**Abstract.** The article analyzes the painstaking work of the artist, creating the image of any film, which must be done at every stage before creating a future film. This process explores the importance of the artist's work in creating the visual image of the film.

**Keywords:** cinema, artist, composition, color, sketch, hero, frame, image, graphics, style.

The creators of our cinema art have embarked on such noble and honorable deeds as sealing our ancient history, rich cultural heritage and spiritual values into films, restoring the image of great scientists of the past, revealing the scale of socio-political and spiritual reforms in our country. Today in the Resolution of the President of the Republic of Uzbekistan Sh. Mirziyoyev dated August 7, 2017 "On measures to further develop the national cinematography" [1] and in particular to pay special attention to artists, the tasks set out in the Resolution "On measures to further increase the efficiency of the fine and applied arts" [2].

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.

Whether it is an art, documentary, or science-fiction film, its pictorial appearance cannot be imagined without the work of an artist. Unlike a painter, a film artist focuses his or her skills on realizing the idea of a screenwriter and director. If the artist on the

bench personally chooses a theme for his future canvas and chooses the composition and colors at will, the film artist works as a member of the creative team creating the film, subject to a common goal and idea. Its place in feature film is very important and necessary. He was the first creator to animate the events and protagonists of a future film in sketches right after the script was read. To do this, he must know all the features and requirements of the art of cinema.

From the time film began to take shape as an art, it was noticed that it was very close to the fine arts. In feature film, applied art plays an important role in creating a heroic environment, a film situation. When the film goes out of the pavilions, especially when the film is in color, the landscape frames are reminiscent of landscape painting. The means of expression belonging to all kinds of fine arts have played an important role in the formation of cinema. However, the film did not copy them. Cinema, for example, has learned to create the color, the pictorial style of the film, which passes through the work of graphics (in black and white cinema), the work of painting (in color cinema), in which architecture played a special role.

From painting and graphics to film, more precisely, the cameraman learned to work with light, to put the composition of the frame in an artistically expressive way. Portraiture, which is a genre of painting, influenced the development of means of expression



such as general plan, medium plan, large plan. The role of the portrait genre in the emergence of large-scale planning is significant. To understand this, it is enough to stop the frame in which the protagonist is projected in the foreground. Then his closeness to the portrait in his painting is clearly visible. He also used his painting experience to create a film frame and a stage set. The sculptural experience helps the film to plasticize the image of the protagonist.

The creative connection of cinema with the types and genres of fine arts depends on the level of development of each of them, the principle that prevails in them, the creative thinking of the director and his visual perception, the high skill of filmmakers and cinematographers [4, 9].

The scope of a film artist's work is extensive. For this reason, the lead artist will have a dedicated team to help him realize the main idea at his disposal in the process of making the film. This occurs after the team is familiar with the artist's script. The artist's work in cinema is based primarily on the general and artistic concept of the future film. The process of studying the script, the artist explores the genre of the film, the amount and nature of the scenes that will be shot indoors and in nature. For example, if the film is on a historical subject, it should study the materials of that period, down to the smallest detail – the clothes and accessories. During the director's conversation with the cameraman about the upcoming film, the artist becomes more specific about the task at hand.

A film artist must have knowledge of all the visual means of this art in order to put his work in order. He must take into account the composition of the film, the scene of the films, their connections in the montage, and in this work he must use his professional skills, creative imagination, knowledge, artistic taste. After defining the task in the process of getting acquainted with the script and talking to the director, the artist gets to work. Its first stage is to create sketches for the film. These sketches reflect the artist's attitude to the events and protagonists of the film. Then the balance of character and charac-

ter of the future film, the color will be seen for the first time. A sketch is a work of art based on a script, theme, composition, color, and style. The basics of film plastic solution are embedded in the sketches. Artists differ in the specificity of their creative features and performance techniques.

Although the artist's work is subject to the script, the director's idea, and the specifics of the film, his creative signature can be seen not only in the sketches, but also in the finished film. Sketches and films created with the participation of the artist are not to be confused [3, 19].

Film artists don't just work for the screen. They often also take part in exhibitions with separate sketches and canvases as a brush master. Their non-cinematic creations reflect the trends of the fine arts. By applying this experience to cinema, the artist enriches his image world with new, unique qualities.

Well-known artist V. Yeremyan, who has a special place in the Uzbek fine arts, is one of the artists who could imagine the whole film in sketches until the last film. At the level of bench painting on those sketches, each of the sketches of the works is considered as an independent work, only the content and essence formed the basis of the future film. For him, there was nothing trivial about the upcoming film. Every detail, first expressed in sketches, then in decorations or dresses, was distinguished by its expressiveness and reliability. No matter how many times he drew juozor and teahouses in a series of films, they didn't reciprocate. In all, it stems from dramaturgy, and each time finds its unique expression in interiors, creating new cinematic images in different architectural solutions. An example is the teahouse in the comedy "Nasriddin in Bukhara" by Russian director Ya. Protazanov, directed by V. Yeremyan.

In the teahouse, Nasriddin is selling antiques. The view of the teahouse in the poor neighborhood is also poorly described by the artist: the walls are dry, the couch is crumbling and unfit for use. But the most important thing on this plate is the stairs. It is placed in the center of the decor. Nasriddin's trade

is heating up on the same ladder. He takes the items donated by the poor to the stairs, shows them off, and calls the buyers.

Although the roles in this film, directed by Ya. Protazanov, were played mainly by Russian actors, the work is full of national spirit. At the same time, the fruit of the artist's work is great. V. Yeremyan understood the role and place of the artist in cinema. He was well aware that in order to reveal the idea and images of a film, the artist must achieve consistency and expressiveness in his work. For him, for example, it was very important that the created sketches, decorations, the actors used for their own creations. At the beginning of the film "Takhir and Zuhra" Bohir Babakhan carries his son Tahir, who was born on the same day as his daughter, to the khan's palace. Bohir market stalls are crowded. All our attention is focused on Bohir, his mood. "While not all of the shops decorated by the artist are detailed, it was a vital factor for the actor to enter the role with all his being and achieve the naturalness of the performance" [4, 31].

N. Ganiev's film "Takhir and Zuhra" is a vivid example of what is the work of not only the artist, but also the cameraman, director and actors, so we will focus on them again and again in this guide. However, as we talk about the artist in this section, we will continue this theme. For the first time in "Takhir and Zuhra" the pictorial title, which is an important feature of cinema, is used effectively. In the film, the events take place on the stairs several times. It represents not only the scene, but also a certain dramatic meaning in itself. The ladder, that is, this figurative image, serves as a step that deepens the events that take place in it.

As work on the film begins, the artist and cameraman, together with the director, select the locations to be taken in nature. The landscape, nature is neutral in the film, can simply serve as a background. But if they choose skillfully, the film can also acquire dramatic significance, fully reflecting the atmosphere of the events or the emotions of the protagonists.

The artist also works with props in each film. At the same time, the equipment and items surrounding the heroes must be chosen by him in such a way that they serve the justice of the environment. For example, artificial things, fruits, etc. cannot be used as in the cinema, theater. So everything in the film has to be original. The artist's work should focus on creating a living environment for the events and characters to come to life, revealing the overall idea of the film. But even more important is to create the perfect image of the heroes. In addition to decorations, nature, landscape, props and costumes for the heroes also play an important role. Creating costumes for heroes is a complex process. When working on them, it is necessary to take into account everything – the specific scene, the period, the identity of the actor who must wear the costume, the angles and plans that define the specific aspects of each film.

The film studios that started the development of Uzbek cinema are the Bukhkino and Sharq Yulduz film factories established in 1924–1925. Russian filmmakers K. Gertel, M. Doronich, Ch. Sabinsky, O. Ferelix, A. Dorn and others have greatly assisted in the creation of Uzbek feature cinema. Nabi Ganiev, who worked as an assistant to Russian filmmakers who created the first films of the Sharq Yulduzi film factory, founded the Uzbek national cinema. The first representatives of the Uzbek cinematography are N. Ganiev, R. Pirmuhamedov, K. Yormatov, E. Hamraev and others. They, in cooperation with Russian masters of the former Soviet Union, have been actively involved in raising the status of Uzbek cinema.

In the historical moments of Uzbekistan's independence, the ability to communicate with its time and audience live, to see the process of reforms in key areas of the nation's life, to address the existing problems, began to bring cinema to the forefront of social life. This, in turn, led to research into the creation of national works, the emergence of new creative experiences. Taking a creative approach to the tried and tested traditions of screen art, the possibilities of the genre, as well as advancing new principles of forma-

tion and content, relying on tested aesthetic and artistic models, intensified efforts to create works of cinematography in interesting and impressive genres and styles [5, 12]. The works of Nabi Ganiev, the founder of Uzbek cinema, and Komil Yormatov, the people's Artist, who introduced Uzbek art to the world, will remain the bright pages in the history of Uzbek cinema.

In today's Uzbek cinema, certain efforts to expand the possibilities of style and genre are developing. It is a great responsibility for us, the filmmakers, to ensure that the overall picture of Uzbek feature cinema, the level of artistic skill, in general, is developed at a mature level. In addition, the creation of films that objectively analyze today's reality, its basic principles, the bold introduction of the image of the heroes of the new historical period in feature films, the spiritual and aesthetic impact on the audience. Today, the role of the film artist in the development of modern feature film in our country is invaluable.

Clothes play an important role in a feature film. The dress helps to understand the image of the period, the character of the protagonist, as well as his tastes, interests, which nation he belongs to. Creating costumes for heroes is a complex process. When working on them, it is necessary to take into account everything – the specific scene, the period, the identity of the actor who must wear the costume, the angles and plans that determine the specifics of each scene in the film [6, 14].

In the early days of Uzbek cinema, film costumes had a strict social character. Depending on the protagonist's wealth, materials were chosen to sew the dress. As our cinema developed, costume artists emerged. Until then, V. Eremyan had to do all the work himself. Nevertheless, his work on costumes can be considered the highest example of the work of a costume designer. The costumes he created are based on the characters of the heroes. Karabatir's cunning mind and anger were revealed not only by Sh. Burhanov's great skill, but also by the clothes he wore. The black dress evokes the feeling of hiding and abstracting Karabakh's true intentions and plans from view.

Through his art, the filmmaker helps to reveal the unique aspects of the film's protagonists and environment. What kind of fabric the dress is made of, even the most insignificant details, play a big role in this. Dresses are first born in sketches or simple drawings. After agreement with the director, the fabric is selected and production begins in the studio's sewing workshop.

In addition to the staging artist and costume designer, she also works as a make-up artist. Movie makeup is different from theater. If the make-up is given thicker in the theater, the focus will be on making it more subtle in the cinema. The makeup, the dress helps the actor to enter the image. If the makeup is exaggerated, or vague, the appearance of the role on the screen will turn out to be fake. Applying make-up in cinema does not mean changing the image of the actor (except in fairy-tale films), but emphasizing the originality of the image, giving it separate lines to increase its impact. Make-up is also used in the film to cover some of the flaws in the actor's face and skin. If the make-up artist knows the essence of the image, the dramaturgy, he can find the most suitable make-up. So the choice of makeup is determined by the drama of the future film. Make-ups are different. For example, make-up, which determines the age or nationality, requires a portrait resemblance, as well as make-up that combines comic and cartoon features.

The make-up artist determines the character of the make-up depending on the shooting conditions, plans, angles, lighting, ensuring that it is more or less complete. If there is a large plan (outside the screen) the makeup should be slightly noticeable, while in the general and middle plans it will be completely different. For a make-up artist, it is very important to observe not only the plans, but also the angles, how the lighting is set when shooting. Because makeup depends on that too.

In animated cinema, the work of the artist is unique. Its function is determined by the picture or puppet film. For a one-part cartoon that lasts a total of ten minutes on the screen, the artist will

have to draw nearly five thousand pictures of the characters in different movements and appearances. In these paintings, the artist must reveal not only the course of events, but also the characters. These pictures are then taken according to the plot at the desired rhythm and tempo, and shown to the audience.

In the puppet film, special puppets are made. This is the work of a separate group of artists. Others create an environment in which a group of artists moves the protagonist-puppet. Such intricate and painstaking work of artists is always appreciated by both young and old audiences. The computer capabilities that have come into cinema today have made the job

much easier. Now films are also made on the basis of computer graphics.

It's hard to imagine feature and animated films without artists. They create the visual world of the film. The cinematographer is also involved in the creation of the film so that the audience can see this world on the screen.

In conclusion, it should be noted to what extent can we assess the work of our artists in the art cinema of our country today? So, is the filmmaker doing the same thing among the creators of modern feature films? When an artist works in a film and completes the tasks mentioned above, the film is considered to have achieved its goal.

### **References:**

1. Resolution of the President of the Republic of Uzbekistan No. 3176. "On measures to further develop the national cinematography". 07.08.2017.
2. Resolution of the President of the Republic of Uzbekistan No. 4688. "On measures to further increase the efficiency of the fine and applied arts". 21.04.2020.
3. Abulqosimova X. Basics of cinematography.– T.: "National Encyclopedia of Uzbekistan". State Scientific Publishing House, 2009.
4. Abulqosimova X. History and theory of cinema and radio.– Tashkent. 2008.
5. Abulqosimova X. Once again about Uzbek cinema // Gulistan. 1999.– No. 5.
6. Abulqosimova X. Cinema and fine arts // Art. 1999.– Issue 1.

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## **CURRENT SITUATION OF READING CULTURE OF VIETNAMESE STUDENTS IN SOME UNIVERSITIES OF SOCIAL SCIENCES AND HUMANITIES**

**Abstract.** This article is aimed to study the problems of reading and improve reading culture of students in the study of social sciences and humanities disciplines. For this study, the author inherits the previous related research works, on the basis of the analysis and synthesis of the obtained research outputs and use a method of sociological investigation by questionnaires. The study found that Vietnamese students spend too little time reading documents for study while they surf daily on social media. Most of the surveyed students' digital literacy and information literacy are limited.

**Keywords:** reading culture, Vietnam, students, digital literacy, information literacy, reading habits.

### **1. Introduction**

The world today is undergoing great unprecedented changes. The fourth industrial revolution is and will continue to create strong changes, affecting all aspects of human life in the 21<sup>st</sup> century. To meet the requirements for industry 4.0, training issues high-quality human resources in Vietnam are more important than ever. Development of reading culture will have a positive impact on the development of human resources, effectively contributing to accelerating the process of industrialization and modernization of the country. Therefore, it is time to properly recognize the reading culture, especially the development of reading culture for students [6].

However, over the last twenty years the reading status, the role of reading culture, the attitude of society to it around the world, has changed dramatically. The decline of interest in reading is a worldwide trend of globalization of media and the rapid development of the entertainment industry, displacing reading and as a prestigious source of information and as a pleasant and prestigious form of leisure [3]. The problem of reading among students and young people is one of the urgent problems of our time

(Sadykova, Yashina & Sharafieva) [4]. Nowadays reading of students is in a state of ambiguous transformation (Volkova) [9].

The Hindu (2004) indicates that as technology develops, reading habits are changing day by day. Today, while technology is steadily controlling personal lives, the habit of reading paper books is rapidly decreasing. Instead, they spend more hours on electronic means. Browsing the internet, using fun handheld devices, sending messages, and participating in social media seem like a routine of the day. This makes reading in a quiet corner of the library or home an ancient idea for young people [5]. In an information booming society, students can search and read documents from many different sources by many different means, especially documents in a digital environment. The reading needs of students are also very diverse, including books, textbooks, dissertations, scientific articles, reports, and statistics.

With above reasons, this research will examine the situation of reading culture of students in some universities of social sciences and humanities in Vietnam. On the basis of analyzing the survey results,

the author proposes some solutions to improve the efficiency of developing reading culture for students.

## 2. Concept of reading culture

Reading culture is a problem that many researchers around the world are interested in. There have been quite a lot of researches related to reading culture. The concept of reading culture is expressed in many different aspects, but in general it can be seen that reading culture is approached under two angles: reading culture as a culture class of the community in a certain period and reading culture as a cultural behavior of each person in society.

According to Lera A. Kamalova & Natal'ya D. Koletvinova [3]), the culture of reading includes:

1) the rational organization of the process of reading depending on the text, the broader context of reading and the properties of the reader;

2) deep, accurate, clear and complete understanding and appropriation of the content of the text, accompanied by emotional empathy, critical analysis and creative interpretation of the read work;

3) search, analysis and selection of text (books, electronic documents, databases, search engines on the Internet, etc.) for reading in accordance with the interests and capabilities of the reader, and also for the purpose of reading;

4) a variety of ways (oral, written) and language means saving read work on native and foreign languages (statement, judgment, report, plan, abstract, abstract, abstract, abstract, etc.);

5) the culture of reading of the reader is implemented in the actions of the reader as a manifestation of his compassion, co-thinking, co-creation with other people in society, subject to the laws of nature and society [3].

In the digital environment, reading culture consists of three components: reading needs and habits, digital literacy (ability to use tools, digital means, some software to exploit and disseminate information) and information literacy (ability to identify information needs, ability to locate information, find information, evaluate information, use information,

analyze and synthesize information, understanding of issues economic, legal, and ethical related to use and sharing of information) [7].

## 3. Research methods

For this study, the author used the following research methods:

– Analysis and synthesis: The author inherited the previous related research works, on the basis of the analysis and synthesis of the obtained research outputs.

– Sociological investigation by questionnaires.

To determine the current situation of reading culture of students in some universities of social sciences and humanities in Vietnam, the author conducted a survey by 600 students at three universities, including Hanoi University of Culture, VNUHCM – University of Social Sciences and Humanities, VNU – University of Social Sciences and Humanities. The number of questionnaires given out was 600 and the collection was 588, reaching 98%. Out of 588 students responding to the survey, there were 206 first year students, accounting for 36.9%; 167 second year students, accounting for 29.2%; 150 students in the third year, accounting for 26.9% and 65 students in the fourth year, accounting for 11.7%.

## 4. Research results and discussions

### *Reading needs and habits*

The reading need is a fundamental concept in library operations. Libraries, whether public, scientific, children's, specialized, or university libraries, must explore and identify reading needs and find services that satisfy their needs. The habit of reading is a series of conditioned reflexes that come from practice. Reading habit is reading behavior that is repeated many times in life and practice. It is a defining behavior in life and it is not available, but is the result of daily reading diligence of each individual. To understand the needs and habits of students to read documents, the author surveyed contents including: reading time, reading purpose, content of reading, type of document and language to read.

About the time to read the document. The author posed the question: What do you often use your

free time for? With this question, students can have many different options. The results showed that 501 students, accounting for 98.8%, use their free time to access social networks. Next is 362 students, accounting for 64.9% choose to watch TV and listen to music. 262 students often work part-time during their spare time. 156 students, accounting for 27.9%, choose to play games. Playing sports and participating in extracurricular activities, the club has the same percentage of students choosing with 24.4% of which only 253 students choose to search and read documents. Thus, the activity of searching and reading documents is only ranked fourth among activities and only by nearly 50% compared to the choice of accessing social networks.

Furthermore, in order to know the time spent reading the documents, the author asks: How many hours per day do you spend reading the documents? Survey results show that 45.57% of students surveyed spend 1 to 2 hours a day searching and reading documents. The number of students who only spend less than 1 hour to read documents accounts for 37.07% while the number of students who spend 2 to 3 hours reading documents per day is only 11.05%. Only 6.29% of students surveyed spent 3 hours or more reading documents. The above results show that students spend much less time reading documents than required by studying. As a rule, students who study for 1 hour in class must study and read documents for 2 hours by themselves. On average, a student per day in class is from 2 to 3 hours and so they will have to spend 4 to 6 hours reading documents and self-study.

About the purpose of reading the document. The research raises the question: What is your reading purpose? With this question, students can choose from several options. Survey results show that the vast majority of students surveyed read documents for the purposes of learning and scientific research with 87.58% and 25% respectively. The number of students reading documents for entertainment purposes is 311/588 students, accounting for 52.89%.

Demand for document content. Since all surveyed students are studying humanities and social sciences, their reading needs will also reflect the specifics of their careers. The survey results show that 58.5% often read documents about the specialized fields they are trained. 42.17% of students choose to read literary art documents. 49.48% of students questioned need to read recreational and sports documents. Foreign language documents are also chosen by a large number of students to use with 31.8%. Documents on science, technology and informatics are seldom selected by students with 14.45% and 7.31%, respectively.

Requirements for document type, language and document format. When asked about what kind of documents students would read for scientific research and learn, the majority of students correctly identified textbooks, reference books, monographs, and journals. Specifically, 65.47% of students will read the textbook, followed by 61.73% of students reading reference books, 38.42% of students reading monographs, 32.31% of students wishing to read the research results are published in scientific journals. However, many students have not yet determined what types of documents will be used for the purposes of learning and scientific research, so 314 students, accounting for 53.4%, choose to read online newspapers, 20.23% choose to read recreational materials and 16.66% of students choose to read common documents. The above results reflect that more than half of the students still use electronic newspapers and entertainment materials for the purpose of learning and scientific research. Regarding the language of documents, the survey results show that the vast majority of them read documents in Vietnamese with 96.93% of students being asked. 32.82% of students wish to read documents in English. 3.23% of students can read documents in Chinese. Regarding document formats, the number of students regularly reading electronic documents is the majority and the number of students choosing to read paper documents tends to decrease. Specifically, 92.34% of students like to read

electronic documents while 50.85% of students have the need to regularly read documents on paper. This result reflects the general trend that the demand for reading electronic documents is increasing as digital information sources and network access devices are becoming more and more popular, especially among the younger generation.

### ***Digital literacy***

Nowadays with the development of science and technology, electronic/ digital documents are becoming more and more popular. This resource allows information users to be accessed via the internet. To exploit digital resources effectively requires users to be equipped with digital literacy. According to UNESCO (2018), digital literacy is defined as the ability to use digital devices, communication applications and networks to access and manage information. It allows people to create and share digital content, communicate and collaborate, and solve problems to effectively and creatively improve themselves in life, study, work, and social activities in general [8].

In this study, the author surveyed students' digital literacy in terms of frequency of internet use, the means used to access the internet, the tools used by students to search electrical documents and the ability to find electronic documents on the internet. With the question of how often do you access the internet? 93.54% of students surveyed said that they access and use the internet every day. 4.93% of students use the internet several times a week. 1.19% of students only use the internet several times a month while there are 2 students, accounting for 0.34% of students who do not use the internet. The above survey results show that the vast majority of Vietnamese students access and use the internet every day, higher than the global rate of 64.2% [2]. To access the internet, 92.86% of students said they use mobile phones, followed by laptops with 60.88%. Only 5.44% of students use desktop computers and 2.55% of students use computers in libraries to access the internet. These results show that today the most popular means of internet access for students

are mobile phones and laptops. Students are less and less using search tools at the library.

Besides the frequency of using the internet and the equipment used to access the internet, the author surveyed students on their use of tools to find electronic documents and the ability to search electronic documents. With the question: Which tools do you regularly use to search electronic documents, the survey results show that 537/588 students are asked, accounting for 91.33%, often use search engines such as Google, Bing, Yahoo, Ask.com, ... Only 22.79% of students surveyed said they often use the library's OPAC.

Moreover, today electronic documents are popular online with many different file formats such as doc, docx, pdf, mp3, mp4, exe, ppt, pptx, ... To exploit and use electronic documents effectively, it requires trusted users to know specialized software to read each format and know how to search for some popular file formats on the internet. In this study, the author only raised one question: To find full text documents in pdf file format on the internet, which search command do you use? The survey results show that only 48.64% of students chose the correct command as filetype: pdf while 24.15% of students use the command file type: pdf. 19.22% of students use the command filetype: doc and 11.05% use the site: pdf command. This result shows that students' ability to find information on the internet is quite limited even though they use the internet every day.

### ***Information literacy***

The 1989 American Library Association (ALA) Presidential Committee on Information Literacy formally defined information literacy (IL) as attributes of an individual, stating that "to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information" [1]. Nowadays, with the development of information and communication technology, online resources are extremely plentiful. This requires that users not only have the skills to read traditional documents, but also evaluate, use and share various information and



sources, understand economic and legal issues, and ethics related to the use and sharing of information.

In this study, the author surveyed students' information skills in terms of selecting and evaluating information, methods of reading documents, sharing information, critical thinking, understanding of plagiarism and quote. Experience has shown that before reading, users need to make a general assessment of the appropriateness of the document to the research topic. If they read in detail a document that has not been pre-screened, it will most likely take time and effort for information that is not of high scientific significance. To find out about students' choice of documents before reading, the author asks: Do you choose documents before reading? The results showed that the overwhelming majority with 87.07% of students choose documents before reading and only 12.93% of students said they did not choose documents before reading. This means they will read any documents without thinking. This reflects that only a small number of students do not use critical thinking skills in the process of selecting and reading materials.

Furthermore, in order to select suitable documents for reading, users must also know the skill of evaluating information found on the internet and evaluating information sources. When searching for information in databases, publishing agency, can be assured of the reliability and scientific value of the documents presented. For search engines, a more rigorous evaluation of the search results is required, consisting of two steps: quick screening to select documents that might be suitable; general assessment to confirm reliability and conformity. The evaluation of information should be based on criteria such as: author's reputation, reliability of information sources, time of publication, accuracy of information, references cited in documents, purpose, scope and opinion of the author. To the question: What criteria do you base on to evaluate information found on the internet? The criterion selected by the most students is "accuracy of information" with 73.8%, followed by the "purpose of the article" criterion with 54.93% of

students choosing. The criteria "objectivity", "subject area", and "updating" have approximately the same percentage of students choosing 47.44%, 46.25% and 45.74%. Criterion "information about the author" was least selected with 199/588 students, accounting for 33.84%. Reality shows that in order to evaluate the quality of information on the internet, users need to rely on many different criteria and at least all of the above criteria.

Before reading, we need to clearly define the purpose of reading the document, preliminarily review the document to be read before going into every detail. What is a document reading motivation? For example: reading for entertainment, reading for general understanding of an issue, reading for in-depth research on a problem, reading for a definition, reading to clarify an issue, .. Second is what content readers need to care about? These are aspects of the problem that have been identified in the selection of documents to read. What type of information is needed? Statistics, research results, illustrations, synthesis reports. With the purpose of reading the document in mind, it's still not time to read all the details. Should read through the entire document to preliminary assess the content and opinions the author wants to present. Sometimes, this phase also helps determine the suitability of the document for reading, to decide whether to go into detail or to skip the document. At this point, it is advisable to look carefully at the summary of the document, read the main and sub-headings of the document to get an overview of the relationships between all of the key concepts and the focus of the document. To test students' reading skills, the author asked: When reading specialized documents, which methods do you usually read? The option of "skimming to see what you need after reading it carefully" was chosen by 183/588 students, accounting for 31.12%. The option of "carefully reading the whole text, recording summaries of the main readings" was chosen by 405 students, accounting for 68.88%. This result shows that 2/3 of the students questioned do not have a

method of reading specialized documents for the purpose of learning and scientific research.

While reading the document, we may not understand some of the content and we need to communicate with others. In this regard, the research raised the question: If you do not fully understand the content of the document, what do you usually do? Survey results show that 61.73% of students choose the solution “talking with friends”; 47.62% of students said that they should “keep reading it many times”; 27.21% of students choose the option “ask and talk with lecturers”. Especially, only 11.22% of students think that they will “stop reading” if they do not understand.

A reference quote is an idea or a paragraph drawn from another document to illustrate and protect the point in your article. It is imperative that the writer specify the source of the information when quoting a reference. This requirement makes no exceptions for any source of information: books, articles, encyclopedias, audio-visual materials, websites, etc. as well as type of information such as: comments, discussions, conclusions, pictures, tables of data. When drafting scientific documents, especially in research reports, researchers need to rely on known research results, ideas and theories to defend their views. Citing references when using other people’s scientific information in their articles, for many reasons such as: respecting the author’s copyright; limit “plagiarism”; help readers to easily identify the resources used (through the reference list). To the question: When using other people’s ideas in your research do you cite the source? The research results show that 55.27% of students surveyed are aware that they must indicate the source. However, 35.71% of students said that sometimes they just remember and refer to the source. In particular, 6.63% of students said that it is not necessary to indicate the source of the document they used in their writing.

Other than citations, bibliographies provide detailed information about the documents that have been read by the author and that are cited in the

article. The list of references along with citations in the article are important factors for identifying what information is from the writer and what information is quoted by the writer. The results showed that only 22.79% of the students surveyed said they understood the citation regulations while 67.17% of the students said they knew but did not understand. In particular, 10.03% of the students admitted that they did not know anything about the regulations for citing scientific documents.

### **5. Some solutions to develop reading culture for students**

On the basis of analyzing research results, the author proposes a number of solutions to develop an effective reading culture for university students in Vietnam as follows:

Universities should propagate and disseminate to raise awareness of lecturers and students about the role and benefits of reading culture; build and apply solutions to stimulate reading needs, form reading habits for students, develop digital literacy and information literacy for students.

Lecturers need to renew their teaching methods, test and evaluate in a student-centered direction, develop self-study skills, critical thinking, and information analysis skills for students. Teaching methods must make students read textbooks are required to grasp the basic knowledge if they want to complete learning tasks; Read documents to supplement and expand the knowledge of each subject if they want to become good students.

University libraries need to coordinate with lecturers to integrate their information literacy and digital skills into their training programs.

Universities need to implement digital transformation, develop digital resources, set up a variety of library information services to meet the needs of remote access and the need to read digital documents.

### **6. Conclusion**

Research results show that nowadays, students’ reading culture has changed from reading traditional documents to reading digital documents. Using mo-

bile phones and laptops to access the internet becomes popular with students and becomes a daily demand. However, students spend less time reading documents for study and scientific research. Students spend more time on social media and surfing the web than reading documents. Most students do not have the habit of reading. Students' information literacy such as read-

ing skills, critical thinking skills, information searching and assessment skills, understanding of plagiarism and reference citation are limited. To develop a reading culture for students in a digital environment requires universities to simultaneously innovate activities including teaching methods, library and information services, and development of digital resources.

### References:

1. American Library Association Presidential Committee on Information Literacy, Final Report, American Library Association, Chicago. 1989.
2. Internet Usage and World Population Statistics (2021). Accessed on 12/4/2021 at: URL: <https://www.internetworldstats.com/stats.htm>
3. Kamalova Lera A. & Koletvinova Natal'ya D. "The Problem of Reading and Reading Culture Improvement of Students Bachelors of Elementary Education in Modern High Institution", *International Journal of Environmental & Science Education*, – 11(4). 2016.– P. 473–484.
4. Sadykova A. G., Yashina M. E. & Sharafieva A. D. "Citation as a stimulus to boost students' communication skills at the English lessons", *English Language Teaching*, – 7(12). 2014.– P. 12–25.
5. The Hindu. "Whither the reading habit?", *Online India National Newspaper*, Monday July, 12. 2004.
6. Trần Thị Minh Nguyệt. *Giáo dục văn hóa đọc cho trẻ em lứa tuổi nhi đồng ở Việt Nam: nghiên cứu trường hợp trên địa bàn Hà Nội*, Đề tài nghiên cứu khoa học cấp Bộ, Bộ Văn hóa, Thể thao và Du lịch, Hà Nội. 2015.
7. Truong Dai Luong. "Developing a reading culture in the digital environment", *International Education and Research Journal*, – 7(3). 2021.– P. 23–24.
8. UNESCO (2018). "Digital skills critical for jobs and social inclusion". Accessed on 12/4/2021 at: URL: <https://en.unesco.org/news/digital-skills-critical-jobs-and-social-inclusion#:~:text=Digital%20skills%20are%20defined%20as,to%20access%20and%20manage%20information>
9. Volkova E. A. Transformation reading student youth. Abstract of the dissertation on competition of degree of candidate of pedagogical Sciences: – Krasnodar, 35. 2012.

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## **SPECIAL EFFECTS IN MODERN UZBEK ANIMATED FILMS**

**Abstract.** This article analyzes the use of special effects in the modern process of Uzbek animation – mechanical and visual effects, as well as changes in the image of the film under their influence. The mastery of modern Uzbek animation masters is also revealed.

**Keywords:** animation, special effect, 2D – 3D animated films, color, image, texture, graphics, visual, artist, animator.

Today, the desire and interest in creating films rich in computer animations is growing, and animators, animators are faced with serious requirements and complex tasks. The main thing is that in animation it is possible to create impossible actions and effects. For the modern animation screen, special effects are used to create images, images, events and happenings, various movements. It is also possible to fly, change shape and recreate in its magical world. The results of this are also noticeable in the animated films created in our country.

As a result of the work carried out in Uzbekistan to develop the industry, animated films in 2D and 3D technologies are being created using special effects. Based on the achievements of Uzbek animation over the past period, over the past decade, Uzbek animation has begun to create films using modern technologies, in particular, special effects in computer graphics.

E. Popov, a researcher, writes about the application of modern technologies in the art of animation, “a modern animated work as a wonderful symbiosis represents all possible types of art and technological innovations. These high concentrations are artistic images and scientific achievements that have a high impact on the spirit of the audience as a stream that penetrates deep into the mind through various ideas” [2, 3]. For the modern animation screen, special effects are used

to create images, images, events and happenings, various movements. For example, various cataclysms in nature (sudden changes in nature, social life, upheavals, catastrophes, catastrophes), fantastic fantasy characters, fictional events, happenings and actions – says M. Stepanova [3, 5]. Also, computer animation and special effects for animators in the creation of animated films, the pursuit of the ability to use new modern technical means will further develop the industry.

According to Belgian director R. Serve, the stylistic possibilities of computer animation are still very limited and it will not replace the traditional forms of animated films, but will evolve with them. Animation is a form of visual thinking in which the artist’s work is inextricably linked to his or her professional technical knowledge [1, 149].

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.

Taking into account the achievements of Uzbek animation over the past period, in the next ten years, Uzbek animated films will move to the creation of films using modern technologies, in particular, special computer effects. Focusing on the importance of

special effects in computer animation, the researcher S. Soltani writes that at the initial stage, special effects of the computer were a novelty that was surprising to the audience, attracting attention and benefiting filmmakers [4, 12]. Against this background, the special effects of the computer are, on the one hand, a tool for enjoyment and, on the other hand, an integral part of the formation of a new type of human thinking. In this sense, special effects have become an integral part of modern cinema. A number of animated films with special effects are being created by existing animation studios in our country. In particular, the fact that private studios are creating films rich in special effects and the growing demand for it is developing healthy competition among existing studios. As a result, the number of animated films rich in special effects is growing. Examples are “The Cat with the Light” (2), “Zoroaster” (2005), “The Fat Lover” (2009), “The Brave Chef” (2018), “The Adventures of Aqltoy” (2014), “Rustam” in 3D animation. and Said” (2015) and “Kenja Botir” (2017).

Among these films, the animated film “Dovyurak oshpaz” (2018) by director N. Tulahodjayev uses a special effect to increase the sensitivity of the characters. The first appearance of this in the work is reflected in the film’s exposition, in the effect of “steam” coming out of a boiling kettle in the kitchen – “fire” burning underneath.

The use of effects in the plot of the film is expressed in accordance with the style of the work. Through these effects, the film’s director, artist and editor tried to convey the plot dynamics of the work more clearly and understandably. The film is interpreted in a rich and interesting way in the fairy tale genre. The protagonist of the picture, the Traveler, remains able to understand the language of animals due to a mysterious event. As a result, they come into contact with animals such as mice, sparrows, cats, ants, turtles, which appear in the allegorical image.

The film is about moral qualities such as kindness, mutual assistance, love, honesty. In the character, movement and dialogues of the protagonists of

the work, the actor is impressively expressed through the rhythm of the voice, special effects and music. Among these tools, special effects are of particular importance and serve to increase the sensitivity in the expression of plot events. As S. Soltani writes in his research, special effects are technical tools used in cinema that serve to create images that are not present in reality on stage and can create the illusion of reality in the viewer. For example, various natural disasters, fantasy characters, random non-existent events, happenings and actions [4, 5].

In the film “Brave Chef”, the movement of the characters is solved in a plastic image through the skill of the artist-animator. This aspect is especially reflected in the character, behavior, facial expressions, emotions and intonation of the protagonists. In the film exposition, the event that takes place in the royal palace serves as a knot in the work, which is resolved in the development of the dynamics of the protagonists. The image of the space (background) in the film scenes changes in the course of the plot of the work. The space in the royal palace is very bright by the artist A. Gvardin: it is mainly painted in light green, yellow and other colors. This can quickly attract the attention of the audience on the one hand, and on the other hand can have a negative impact on the psychology of the young audience.

In the space of the traveler’s cooking scene for the king, the texture on the wall, the kettle boiling on the fire, the surrounding jug, the sand, the pot, the color and shade of the vegetables in the bag are in place. In this environment, the background is reflected in a separate plan, combined with the image of the characters and details in the foreground. Smoke coming out of a boiling pot, a special effect present in the computer functions was used in the footage to cook the Passenger fish and then. That is, the Traveler’s sense of taste and sneezing is represented by faint barcode lines like tiny star-shaped lightning bolts. This effect is used in the next scene, i.e. the king is also in the fish tasting scene. The next plot takes place in a natural landscape, and the effect of “fire” in the burning frame of the ant’s

nest is interpreted differently from the level of the image in the background. That is, although the image and fire in the background are close in color, but far from the style of interpretation.

The filmmakers use special effects in some scenes, such as “smoke” in the scene of the spill, “waves” in the scene of the ring’s fall, “lightning”, “rain”, “cloud” in the form of fine lines and interpretation. It is noteworthy that it is skillfully expressed. In the film, special effects and music are expressed as an additional means of expressing the movement, character and mood of the characters. In the course of events, heroes with true human qualities achieve their goals, and those who are greedy and selfish are punished. In this animated film, the creators used special effects, which differed from the previous works, such as “Farkhod and Shirin”, “The Epic of the Flying Vulture”, “Sword Brave”. The special effects used in graphic computer animation are expressed through the skill of the animator and editor, depending on the capabilities of the computer program. While in the traditional animation of the past, creators faced a number of difficulties in creating special effects, today such tools are easily solved using a computer.

The ability to use ready-made effects available in computer programs shows a high level in 3D animation compared to 2D animation. This includes the film “The Adventures of Akltoy” (2014), created in 3D technology by a private studio “Cinema Service”. The film is based on the project of Dilshod Dustmukhamedov and the scripts of M. Ibrokhimova, Z. Yuldasheva, E. Shoyimkulov.

The film is dedicated to the study of the names of the main characters in English in the “Country of Tilbilistan” by sisters Akila and Olimtoy. The film also shows that today children lose interest in books and spend most of their time playing computer games. The plot and environment interpreted in the film frames are depicted in a modern way. Although the characters are modeled in 3D graphics, but these two characters are depicted in a very close-knit image. It is observed that the characteristic points in their appearance have not

been fully resolved. For example, the structure of the eyes, eyebrows, nose, mouth, hair and body of Akila and Olimtoy are the same in shape. They are distinguished only by their dress and character. But the scenes are well constructed in terms of composition, and the plot twists are interpreted richly with strong dynamics. In the course of events, the scene of the protagonists moving from one room to another is associated with a visual effect. The application of a high-level effect in the scene of the penetration of objects, objects and characters into the book further enlivened the frame.

Created in computer graphics, this work is expressed in the dynamics that quickly attract the attention of young viewers. The depiction of light and shadows in the scenes of the film “The Land of Tilbilistan”, the mood of the characters is interpreted in proportion to the atmosphere of the frame. The frame scenes are rich in bright colors and the vibrancy is achieved by the fact that the colors depicted in the plot do not repeat each other. Further creation of films in this direction will encourage the young generation to be educated in the national character and to learn a foreign language from the very beginning. This film is the next work of the studio’s experimental film created in 3D technology, which will be changed and updated in all respects.

In recent years, special effects have become more widely used in films created in 3D technology. A good example of this is the animated film “Rustam and Said” (2015) by the private studio “Tomato Intertainment”. The events of the work are a topical issue for the whole period, and educational aspects such as respect for the elders and morality of young people are covered. The film depicts the friendship of schoolchildren Rustam and Said and their moral flaws through the actions of the protagonists. Created in 3D technology, the characters of this film are solved in a unique character and dynamics. The first shots of the film are expressed in a unique way, that is, in the background 2D on the stage, and the characters are expressed in 3D, and the character and behavior of the characters are visible from the first scenes. Scenes depicting the heroes’ destructive

actions, such as throwing an object from above to frighten a female passenger and cutting flowers from an old gardener's tree, are interpreted as the introductory part of the film. The small details of the work are carefully crafted by the filmmaker, and the image of the characters is based on a prototype.

Special effects (fire, smoke) served as an auxiliary tool in expressing the movement of the protagonists, increasing the effectiveness of the plot. Unlike other films created in 3D technology, the filmmakers felt the unique texture and texture of every detail on stage. For example, the unique shape, color, and movement of tree branches and leaves have found a natural solution. Also, small details such as the softness and shape of the grass, the transparency of the drinking vessel, the line and movement of the hair and eyebrow fibers of the heroes are also expressed in accordance with the frame space. Although animation was skillfully used in the creation of the protagonists' movement, it seems that in addition to the above-mentioned texture and texture, the features of the object were not taken into account in the expression of the characters' costumes. In the costumes of the protagonists, the originality of the material, its flexibility, the folds are not depicted in accordance with the texture of the background.

As the events unfold, a special effect is applied to the scene where Rustam and Said pass from the space on the bus to a scary, lonely environment. Such effects are also significant in that they serve to integrate the two spaces with each other. In particular, the lonely atmosphere in the frame is reflected in the light of a lamp flashing in the dark, the fire burning around, the shadows and light in the objects. In expressing the space typical of the plot of the work, the artist created an environmentally friendly image through contrasting colors. The dark space is represented by cool colors like dark blue, brown, black, and the light space is represented by bright colors such as light green, yellow, red, and blue. However, the level of light is also determined by the shadows of the heroes.

In depicting the development of the protagonist's movement in the next frame, the creators expressed

a special effect: radiating like lightning in the form of a sphere and looking like smoke. This effect represents the culmination of the plot line and makes a turn to the events of the film. Also, a similar-looking effect served to return the protagonists to a real-life space. While facial expressions and emotion in the character of the characters do not give the expected result, these aspects are complemented by action. But because the facial structure of the characters is expressed in almost the same form, the images have lost their diversity. Such forms are also repeated in the scenes between the frames. For example, the characters of a girl, an old man and an old woman on a bus appear in the next frame in the same form as the characters standing at a station. These aspects can also be seen in the image of bullying children.

In this film, special effects are highly expressed by the skill of animators. The level of use of special effects in a modern animated film can be observed not only in a drawing computer or three-dimensional animation, but also in a combination, that is, in a film created using both 2D and 3D technologies in one work. The special effects created in the two technologies differ in aspects such as material, image, color. This can be clarified by analyzing the animated film "Boynak" (2015) by a talented young director-artist, animator J. Turdikhodjaev. The film is aimed at audiences of all ages, about the arrival of a puppy named Boyonak in a new family and the protection of pets from various disasters, using a special effect from the very first frames of the film.

The scenes of the film are bright: depicted in blue, light green, and ocher, and Collar Chickens struggles to protect itself from hawks. In this process, a special effect was used to increase the sensitivity of the movement at the scene of the puppy jumping and attacking the hawk. That is, in the scene of the necklace running with high-speed power, a light, dark blue, green, and yellow light-emitting effect is applied in a curved line around the protagonist in the background. These plots are created in a 3D way, and in the next frame, the events that take place in the imagination of the protagonists are expressed in an

interesting way with a 2D method. The necklace is interpreted in the drawing (two-dimensional) image to be his companion and protector in any situation with the little master. At the same time, in this scene, the growth of the Boy is reflected in the development of the frame. In the course of events, in the frame after the drawing, a special effect was applied to the detail of the sun shining and the leaves of the tree flying in all directions, creating a scene-specific atmosphere on the stage. In this process, there are shortcomings in the expression of the movement of the characters.

In this computer-generated scene, small elements of a special effect were used in the plot of the sun shining, lightning, rain, change of weather and snowfall, cold: rain was expressed through lines, snow dots. The representation of the plot in this scene has an image typical of the level of the young audience. Character dynamics scenes in 3D have a more plastic image than scenes created in 2D. But that doesn't mean the film's animation is done at a high level. At the same time, it seems that the characters are not based on the principle of exaggeration in the expression of behavior, facial expressions and emotions. Because in a 3D animated film, not a multiplier, on the contrary, actions are created by many animators. In this way, animators take a technical approach rather than an artistic image in expressing an image or action. As a result, the original character of the animated image is not revealed and is limited to moving as an artificial puppet.

In a modern animated film, special effects help with the script and plot, but don't create it. Special ef-

fects are the artist's unique palette. Because in creating such effects it goes directly to the palette. With computer technology having such capabilities, the artist creates some convenience for the animator. Also, "computer technology allows the viewer to enter the abstract world, to experience a new virtual reality, and not only has the effect of attracting their attention, but also changes thinking, enriches the imagination and creativity" [3, 5]. The plot of the film, created on combinatorial technology, is mainly created in 3D by a group of animators, while the scenes of the hero's thoughts, imagination and dreams, created in 2D, are composed in a unique way in the style of film director-artist J. Turdikhodjaev. Scenes created in such a colorful way attract the viewer and show interesting images in a series of shots.

There is a growing interest in the use of computer effects in our national films. However, despite the fact that on the basis of modern programs created 2D and 3D films of animation studios "Cinema Service", "Futurist", "Pomidor Intertainment", "Astir" and the first full-length film created by SUE "Cartoon Studio", these films still fully meet modern requirements. It cannot be said that he can give. This is due to the lack of experienced, specialized staff, which has a negative impact on the full development of the industry. It is difficult to develop any field, whether it is scientific or creative, without qualified personnel. In modern animated films, computer graphics are the most pressing problem, with expert shots that can create works rich in powerful, special effects.

### References:

1. Asenin S. Mudrost vymysla. Mastera multiplikatsii o sebe i svoem iskusstve. – Moscow: Art, 1983. – 207 p.
2. Popov E. A. Animation production: typology and evolution of imagery. Author's abstract of the dissertation for the degree of Candidate of Arts. – Moscow: VGIK. 2011. – 32 p.
3. Stepanova M. A. Computer special effects on the material of the Hollywood cinema of the last decade of the XX century. Author's abstract of the dissertation for the degree of Candidate of Arts. – Moscow: VGIK. 2005. – 20 p.
4. Soltani S. X. Traditsii natsionalnoy kultury i sovremennyye kompyuternyye tekhnologii v animatsionnom iskusstve. Author's abstract of the dissertation for the degree of Candidate of Arts. – Moscow: VGIK. 2003. – 20 c.



## Section 2. Medical science

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### RESULTS OF THE BURNOUT SYNDROME COMPARATIVE ANALYSIS AMONG DOCTORS AND NURSES

**Abstract.** The author conducted a study to determine the burnout syndrome between doctors and nurses using the method of K. Maslach and S. Jackson. The study involved 91 doctors and 40 nurses. Summing up the interim results of the analysis, it becomes clear that with increasing age and work experience, doctors and nurses experience emotional exhaustion, but professionalism.

**Keywords:** burnout syndrome, professional activity of medical workers, stress, psychotherapy.

In the modern world, the profession of a doctor requires both physical health and psychoemotional stability, since the daily work of medical workers is associated with the impact of complex stressful factors, which leads to overload and rapid physiological and mental exhaustion [1, 105], the so-called burnout syndrome of doctors. Doctors' emotional burnout syndrome is a syndrome of emotional exhaustion, depersonalization, and decreased personal achievement that can occur among specialists engaged in various types of 'helping' professions. All doctors are approximately prone to burnout, primarily those who care for cancer patients, patients with immunodeficiency and resuscitation teams. Studies on the prevalence and severity of emotional burnout syndrome among doctors in Europe, Asia, and North America show that the factors that form emotional burnout include the psychological atmosphere in the work team, responsibility for the result of long work shifts, age (especially for doctors aged 20 to 40 years), and an intense perception of professional responsibilities. In addition, there

are studies that will determine a direct link between emotional burnout and an increase in the number of medical errors among therapists, surgeons, anesthesiologists and interns of various specialties [2, 63–74] and [3, 14–18].

The primary prevention of burnout is the correct organization of work, training in stress management skills and relaxation techniques, participation in special training, the use of rational psychotherapy, group psychotherapy sessions is possible [4, 21].

It is no secret that during the pandemic; the problem of emotional burnout of doctors increases. Conducted research and a survey by Medscape (USA), which was attended by more than 12,000 doctors of more than 29 specialties, on average, 42% of doctors report signs of burnout syndrome, which corresponds to the indicators of the previous year. However, the impact of COVID-19 on different specialties was different. Last year, among the leading specialties in terms of burnout was urology, neurology, nephrology, endocrinology and family medicine.

This year: resuscitation (51% – today, 44% – in the 2019 report), rheumatology (50% – today, 46% – in the 2019 report) and infectious diseases (49% – today, 45% in the last year report). The main causes of burnout are such signs as too much bureaucracy, too many hours at work, increased computerization, low wages, insufficient psychological compensation (lack of a sense of respect from the administration, colleagues, and patients) [5].

**Materials and methods:** We conducted a study to determine the burnout syndrome between doctors and nurses using the method of K. Maslach and S. Jackson. The study involved 91 doctors and 40 nurses working in Yunusabad, Yakkasarai and Mirzo Ulugbek family polyclinics in Tashkent. The study was conducted by conducting a questionnaire, which consisted of 22 questions, each of which was evaluated on a point system from 0 to 6, where 0-the statement occurs “never”; “1” – very rarely; “2” – rarely;

“3” – sometimes; “4” – often; “5” – very often; “6” – always. The greater the sum of the points on each scale separately, the more the respondent expressed various aspects of “burnout”, the severity of “burnout” can be judged by the sum of the points on all scales. The sum of points for “Emotional exhaustion” – answers on points 1, 2, 3, 6, 8, 13, 14, 16, 20, “Depersonalization” – answers on points 5, 10, 11, 15, 22, “Reduction of personal achievements” – answers on points 4, 7, 9, 12, 17, 18, 19, 21. The average values are determined, the results are summarized and a comparative analysis of the results is performed.

**Results and discussion:** According to the analysis of work experience, it was revealed that among doctors, 38 (42%) have work experience of up to 15 years, 52 (58%) more than 15 years. Among nurses, 27 (65%) have a work experience of up to 15 years, 14 (35%) more than 15 years (Figure 1).

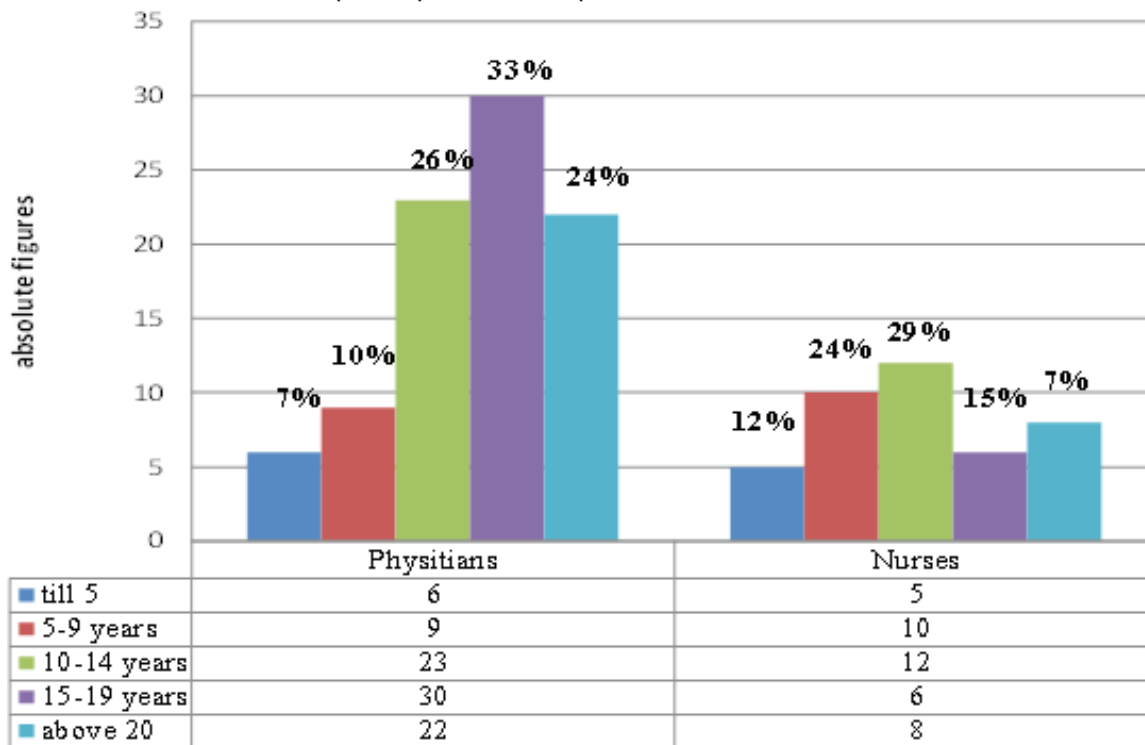


Figure 1. Distribution of participants by work experience

The results of the questionnaire and the calculated average score showed that among doctors, the highest average scores were observed for such statements

as, ‘I easily communicate with patients and their relatives regardless of their social status and character (4.3 points)’; ‘I have a lot to do in a day (4.2 points)’; ‘I can

easily create an atmosphere of goodwill and optimism in relations with my colleagues and in relations with my patients (4.1 points)'. Among nurses, high average scores were found for 'I have many plans for the

future', 'I believe in their implementation (5.2 points)', 'I easily communicate with patients and their relatives, regardless of their social status and character', and 'I can still achieve a lot in my life by 5 points'.

Table 1. – The results of a questionnaire on professional “ burnout»

Statement	Doctor	Nurse
1. I feel emotionally drained.	2	1
2. By the end of the working day, I feel like a dead lemon.	3,1	2,2
3. I feel tired when I get up in the morning and must go to work.	2,8	2,0
4. I have a good understanding of how my patients feel, and I use it for more successful treatment.	3,9	4,1
5. I communicate with my patients only formally, without unnecessary emotions and strive to reduce the time of communication with them to a minimum.	3,1	3,6
6. I feel energized and emotionally uplifted.	2,5	4,7
7. I know how to find the right solution in conflict situations with patients and their relatives.	4	4,8
8. I feel depressed and apathetic.	2,6	1,6
9. I can positively influence the well-being and mood of patients (patients).	3,7	4,7
10. Recently, I have become more callous (insensitive) toward patients.	2,6	1,1
11. As a rule, the people around me demand too much from me. They tire me rather than please me.	3,5	2,4
12. I have many plans for the future, I believe in their implementation.	4	5,2
13. I am experiencing an increasing number of frustrations in life.	3,7	2,4
14. I feel indifference and loss of interest in many things that pleased me before.	2,9	1,6
15. Sometimes I do not care what happens to some of my patients.	1,8	0,8
16. I want to be alone and take a break from everything and everyone.	3,2	2,7
17. I can easily create an atmosphere of goodwill and optimism in my relationships with my colleagues and in my relationships with my patients.	4,1	5,0
18. I easily communicate with patients and their relatives, regardless of their social status and character.	4,3	5,0
19. I have a lot to do in a day.	4,2	4,5
20. I feel at the limit of my abilities.	3,8	2,2
21. I can still achieve a lot in my life.	4	5,0
22. Patients, as a rule – are ungrateful people.	3	4,0

The burnout syndrome includes 3 main components: emotional exhaustion, “Psychoemotional exhaustion” – the process of exhausting the emotional, physical, and energy resources of a professional working with people. Exhaustion manifests itself in

chronic emotional and physical fatigue, indifference and coldness toward others with signs of depression and irritability.

“Depersonalization” is a specific form of social disadaptation of a professional working with people.

Personal distance is manifested in a decrease in the number of contacts with others, increased irritability and intolerance in communication situations, negativity toward other people.

“Reduction of personal achievements” – a decrease in the sense of competence in their work, dissatisfaction with themselves, a decrease in the value of their activities, a negative self-perception in the professional sphere. The emergence of feelings of guilt for their own negative manifestations or feelings, a decrease in professional and personal

self-esteem, the appearance of a sense of self-failure, indifference to work. A decrease in the level of work motivation and enthusiasm for work with altruistic content. The state of the motivational sphere is assessed by such indicators as the productivity of professional activity, optimism and interest in work, self-assessment of professional competence and the degree of success in working with people.

A comparative study of the results of the level of “burnout” revealed that more doctors “burn out” than nurses (Figure 2).

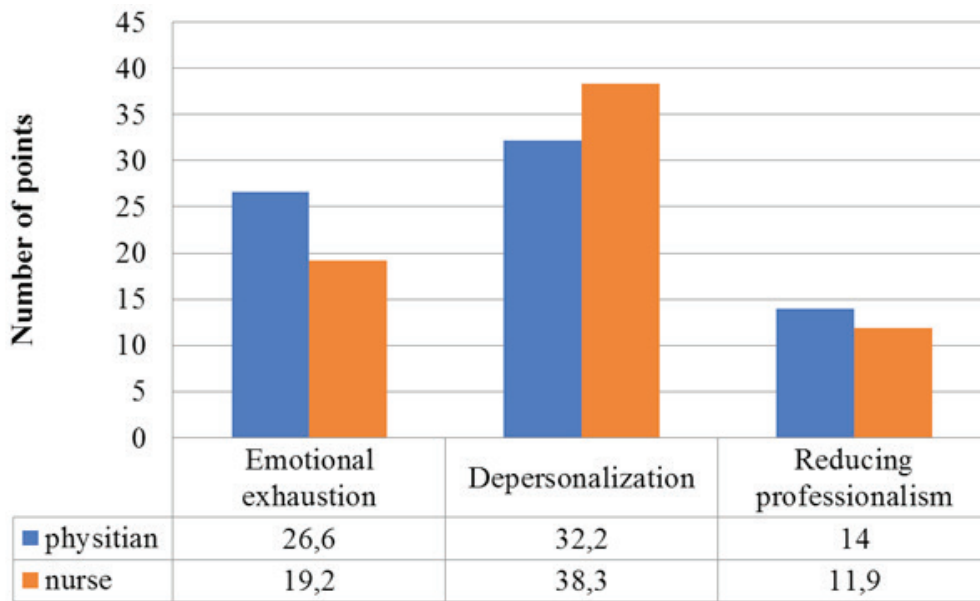


Figure 2. Burnout results for such indicators as emotional exhaustion, depersonalization and reduction of professionalism.

Currently, the burnout syndrome is included in the category of the International Classification of Diseases (ICD-10: Z73 – “Stress associated with

difficulties in maintaining a normal lifestyle”). The results of the values for professional burnout tests by their degree are shown in Table 2.

Table 2. – The results of the values for the tests of professional burnout by their degree

Indicators	Doctors		Nurses	
	Psychoemotional exhaustion	Average values		Low values
Depersonalization	Average values			Average values
Reduction of personal achievements		High values	Low values	

**Conclusions:** Thus, the analysis of the data reflected shows that among doctors, the average level of psychoemotional exhaustion and depersonalization

has an average value and a high value of the reduction of personal achievements. Among nurses, psychoemotional exhaustion and reduction of personal

achievements have a low value, and depersonalization has an average value. The distribution of doctors according to the level of emotional exhaustion due to professional activity is shifted to the area of high indicators, and nurses-close to normal.

Summing up the interim results of the analysis, it becomes clear that with increasing age and work experience, doctors and nurses experience emotional exhaustion, but professionalism increases (at least in terms of self-perception).

### **References:**

1. Boyko V. V. The syndrome of “emotional burnout” in professional communication. St. Petersburg: Peter; 1999.– 105 p.
2. Maslach K. Professional burnout: how people cope. Article 1978.
3. Kosarev V. V., Babanov S. A. Occupational diseases “Infra-M”, “University textbook”.
4. Sirota N A., Yaltonsky V. M., Yaltonskaya A. V., Moskovchenko D. V. “Emotional burnout of doctor”, Vestnik\_ – No. 4. 2017.
5. URL: <https://www.medscape.com/slideshow/2021-lifestyle-burnout-6013456>.

## Section 3. Pedagogy

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### THE ROLE OF MOTIVATION IN LEARNING FOREIGN LANGUAGE

**Abstract.** Interest in the motivational aspect of learning a foreign language has increased significantly in recent years in all disciplines related to language in one way or another — not only in psychology and pedagogy, but also in linguodidactics, methods of teaching foreign languages at school, and psycholinguistics. In order to properly adapt to the current situation, when Europe becomes a single multinational, multicultural and multilingual whole, representatives of society at all its levels must realize the importance of learning foreign languages, since the study of languages is a way to foster tolerance, the ability to cooperate, to achieve mutual understanding between peoples, respect for the individual regardless of his race, national, religious, political affiliation.

**Key words:** Motivational aspect, linguodidactics, psycholinguistics, methods of teaching foreign languages, internal motivational tendencies.

The problem of motivation is particularly relevant in both native and foreign psychology and methods of teaching foreign languages. On the one hand, this is because the need to introduce psychological research into practice, access to real human behavior, to its regulation, today requires knowledge of the laws of human behavior and, especially, in relation to motives and their implementation. On the other hand, there is a need to reveal the connections of the internal motivational tendencies of a person to action with the social determination of his psyche.

A review of the works of domestic and foreign psychologists shows that at present, psychology has accumulated data both for clarifying some initial positions, and for further, broader and in-depth research of motivation problems. Let's take a closer look at some of the main provisions directly related

to the term, the definition of the concept of "motivation". First of all, it is necessary to identify the meaning of the concepts "motivation" and "motive"; next, it is logical to proceed to the establishment of the interaction between motivation as a psychological process and the types of motives in general, as well as in relation to a foreign language; finally, it is necessary to consider the problem of motivation in domestic and foreign psychology and methods of teaching foreign languages.

Currently, motivation as a mental phenomenon is interpreted in different ways. In one case—as a set of factors that support and guide, i.e., determine behavior, in another case — as a set of motives, in the third—as an incentive that causes the activity of the organism and determines its direction. Thus, S. Y. Golovin identifies the interests, values and ide-

als of the individual as the meaning-forming factors of motivation: “In a person, the source of the development of motives is the boundless process of social production of material and spiritual values. Such potential motives in ontogenesis are the values, interests, and ideals inherent in a given society, which, if internalized by the individual, can acquire a motivating force and become real motives” [Golovin, 2001: 381]. In addition, motivation is considered as a process of mental regulation of a specific activity, as a process of motive action and as a mechanism that determines the occurrence, direction and methods of implementing specific forms of activity, as a total system of processes responsible for motivation and activity [6].

Motivation is an internal psychological characteristic of a person, which is expressed in external manifestations, in the attitude of a person to the surrounding world, various types of activities. The educational and cognitive motivation of younger students is their active approach to learning, the realization of the desire to learn well. In order for a child to have a strong internal motivation “I want to learn well”, it is necessary that everyone says to themselves: “I can do it! I will succeed!>

There are five other types of motivation:

1. Target motivation-what is needed for this activity, what it is aimed at and with the help of which it is carried out, is well absorbed.

2. Motivation for success — if the subject “succeeds”, then it is studied with double interest. Motivation in learning foreign languages increases significantly if the prospects for using knowledge are realized not only in the classroom, but also in extracurricular activities.

3. Regional motivation-the language quickly reacts to all social changes in the life of a particular country. It reflects the customs and customs of the country. All this is of great value for understanding the social nature of language.

4. Aesthetic motivation helps to make learning a language a pleasure.

5. Instrumental motivation takes into account the temperament of students and allows each student to express themselves in their favorite type of work. [2, 95]

Whether we know it or not, every moment of our lives we are motivated to do something: whether to satisfy physiological needs (to eat, to sleep) or spiritual needs (to write poetry, to go to the theater, to paint landscapes). If there is no motivation at all, it means that the person is dead. If a person knows that he needs to achieve something, that is, he is motivated to satisfy his need — he can move mountains. In a fight, the winner is not the one who is stronger in physical parameters, but the one who wants to win more. A sports team can have talented players, but playing is gray and faded. To win, you need the will to win, that is, motivation. The history of wars can provide many examples when a superior and better-armed army lost a battle because it was less motivated to win.

The problem of motivation in teaching arises in every school subject. However, the problem of motivation to learn foreign languages in secondary school is particularly acute. Researchers of the question of motivation give data on its decline from class to class. At the same time, it is noteworthy that until the moment of learning a foreign language and at the very beginning, students usually have high motivation. They want to express themselves in a foreign language with their peers; it is tempting to recite poems and sing songs in a foreign language; reading, learn about other countries. Many children see in learning a foreign language something “adventurous”, penetration into a new unfamiliar world; the opportunity to reincarnate is attractive: “I am a speaker of my native language”, “I am a speaker of a foreign language”. In short, almost everyone has a desire to speak a foreign language, to be able to communicate directly, through a book and correspondence. But now the process of mastering a foreign language begins and the attitude of students changes, many are disappointed. After all, this process involves a period of accumulation

of “building material”, a stage of inevitably primitive content, overcoming various difficulties, which postpones the achievement of the goals that were dreamed of. [4, 23]

The successful start of learning a foreign language contributes to the creation of a high motivation to learn foreign languages. The success of teaching and the students' attitude to the subject largely depend on how interesting and emotional the teacher conducts the lessons. Of course, in the process of teaching foreign languages to primary school students, the game is of great importance. The more appropriate the teacher uses game techniques, visual clarity, the more interesting the lessons are, the more firmly the material is absorbed.

In terms of methodological continuity, it is desirable to ensure a smooth transition of children from one stage of education to another, avoiding the loss of formed skills and injuring children as little as possible. This can be most easily achieved if, throughout the entire course of learning a foreign language, you adhere to a single learning strategy that ensures clear formulation and achievement of the learning goals of each stage in the interaction between them. This interaction is achieved through end-to-end programs and the use of manuals that consistently lead the child from preschool to primary school and from primary school to secondary school.

Mastering a foreign language at school involves intensive activity of the student. One of the factors of ensuring the student's performance is the appropriate motivation. Among the aspects that increase the level of motivation, it is necessary to highlight, first of all, the constantly maintained interest of students in the process of mastering a foreign language, its effectiveness, as well as the use of various teaching methods that meet the needs of middle-level students in the novelty of the material studied and the variety of exercises performed. The use of a variety of teaching methods helps to consolidate language phenomena in memory, create more persistent visual

and auditory images, and maintain the interest and activity of students. Let's look at some techniques for developing motivation to learn a foreign language at the secondary level of education.

O. A. Kolesnikova notes that “the role-playing game is a conditional reproduction by its participants of real practical activities of people, creates conditions for real communication, so the effectiveness of training here is primarily due to the explosion of motivation, increased interest in the subject” [3, 14]. Further, the author details the positive aspects associated with the use of role-playing games in the lesson: “role-playing motivates speech activity, as students find themselves in a situation where the need to say something, ask, find out, prove, share something with the interlocutor is actualized. Unlike a dialogue or a play that teaches how to say something, a role-playing game answers the questions of why (motive) and why (goal) you need to say something” [3, 14]. Thus, the focus of students' attention becomes the content of the conversation, which helps students to clearly see that the language can be used as a means of communication and, as a result, role-playing contributes to the formation of students' communicative competence, the necessary communication skills in a foreign language: “In games, students master such elements of communication as the ability to start a conversation, support it, interrupt the interlocutor, at the right time to agree with his opinion or refute it, the ability to purposefully listen to the interlocutor, ask clarifying questions” [3, 15].

In addition, the author notes that “the game activates the desire of children to contact each other and the teacher, creates conditions for equality in speech partnership, destroys the traditional barrier between teacher and student; the game allows timid, insecure students to speak and thereby overcome the barrier of uncertainty” [3, 15], thereby making a certain contribution to the formation of educational cooperation and partnership in the classroom. Semyonova also notes the significant educational opportunities of role-playing games: “Role-playing can be regarded



as the most accurate model of communication, since it imitates reality in the most essential features and in it, as in life, the speech and non-speech behavior of partners is intertwined” [5, 16].

The use of these methods and techniques is effective in the event that students ‘ interest in learning a foreign language decreases, then it is possible to arouse their cognitive interest, to awaken them spiritually. All children are close to the spirit of knowledge, the spirit of communication and teamwork,

and they need to express themselves in creativity, fantasy, play, competition.

Thus, summing up the work done, I would like to say that the formation of cognitive motivation to learn a foreign language is facilitated by the use of active teaching methods: problem, research, game.

In conclusion, I want to quote from the statement of the greatest humanist of the XX century, Mother Teresa: “We can’t do great things. We can only do small things, but with great Love.”

### References:

1. Головин С. Ю. Словарь психолога-практика.– М.: Харвест, 2001. – 976 с.
2. Искрин С. А. Моделирование ситуаций общения в процессе обучения иностранному языку. Иностранные языки в школе.– 2004, № 2.– С. 95.
3. Колесникова О. А. Ролевые игры в обучении иностранным языкам /Иностранные Языки в Школе.– 1989. – № 4. – С.15.
4. Зайцева М. В. Мотивация и некоторые пути её повышения. М., ИД «Первое сентября», 2003.– С. 23.
5. Семёнова Н. В. Раннее обучение иностранным языкам в школе // Первое сентября, Английский язык.– 2004.-№ 32 – С. 43.
6. Фрэнкин Р. Мотивация поведения: биологические, когнитивные и социальные аспекты. – СПб.: Питер, 2003. – 651 с.

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## MODERN REQUIREMENTS FOR THE PROFESSIONAL COMPETENCE OF TEACHERS OF FOREIGN LANGUAGES

**Abstract.** In the psychological and pedagogical theory and practice of teaching foreign languages, the terms “competence” and “competence” are often interpreted as synonyms and are considered as the result of learning, achieving a certain level of language proficiency. Moreover, linguists are more likely to talk about the relevant competence, and psychologists-competence. Competence is a category belonging to the sphere of relations between knowledge and practical activity of a person. According to the definition of B. Y. Elkonin, competence is a qualification characteristic of an individual taken at the time of his inclusion in the activity.

**Keywords:** Competence, sociolinguistic competence, linguistic competence, discursive competence, socio-cultural competence, social competence, strategic competence.

Competence — the quality of a person who has completed a certain level of education, expressed in the readiness (ability) on its basis for successful (productive, effective) activities, taking into account its social significance and the social risks that may be associated with it. The competence of the individual is, in fact, potential. It manifests itself in human activity and is to a certain extent relative, because its assessment is usually given by other entities (for example, employers), whose competence, in turn, may be questionable [5, 45].

Competence involves a whole range of personal qualities of a person, including not only cognitive and operational-technological components, but also motivational, ethical, social, and behavioral. Competence is always personally colored by the qualities of a particular person, and assumes minimal experience in the application of competencies by the individual.

The communicative competence includes six sub competencies:

Sociolinguistic competence, that is, the ability to choose, use and transform language forms depending

on the purpose and situation of communication, the social roles of communication participants according to the sociolinguistic rules of discourse construction and the requirements of the speech context. These features are identified at the level of vocabulary, grammar, phonetics, speaking style, paralinguistic, and sign language. In general, the sociolinguistic parameter implies the adequacy of the statements of the communication situation.

Linguistic competence, which implies knowledge of vocabulary units and possession of grammatical rules, through which vocabulary units are transformed into meaningful utterances. Within the framework of linguistic competence, there are lexical, grammatical, semantic and phonological components.

Discursive competence, that is, the ability to understand and reproduce coherent foreign language utterances, logically, consistently and convincingly build your speech, correctly using lexical-grammatical and phonetic language in meaningful communication models [5, 45].

Socio-cultural competence, which includes knowledge about the stereotypes of speech and non-

speech behavior, their compatibility and incompatibility with the stereotypes of the native language; skills of identifying country-marked language units and their correct use in speech, the ability to choose an acceptable style of speech behavior and cope with unclear moments in the speech of native speakers in the context of communication. In modern science, the term “socio-cultural” is often replaced by the term “intercultural”. In other words, intercultural competence is knowledge of the cultural characteristics of native speakers, their habits, traditions, norms of behavior and etiquette, the ability to understand and adequately use them in the process of communication, while remaining a native speaker of another culture.

Social competence, that is, the ability and desire to interact with others, confidence in yourself and in your abilities to communicate, as well as the ability to put yourself in the other’s shoes and cope with emerging problem situations [2, 78].

Strategic competence, that is, the ability to use verbal and non-verbal means to compensate for the gaps in the skills and skills of using the language. I.e., these are the strategies that a person resorts to if communication has not taken place. Strategic competence also considers the abilities and qualities that include linguistic and sociological observation and sociability. The latter is a whole complex of properties: speech contact, speech tact, communicative flexibility and variability of speech and somatic behavior.

In practice, only some of the components of the systemic, holistic concept of “communicative competence” — linguistic and sociolinguistic—are most often implemented. Further consideration of competencies and subcompetencies will help to clarify the features of the formation of competencies in students studying a foreign language. So, based on the above, competence includes a set of interrelated personality qualities (knowledge, skills, skills, methods of activity), set in relation to a certain range of subjects and processes and necessary for high-quality productive activity in relation to them [7, 96].

Communication is an act of communication, a connection between two or more individuals based on mutual understanding, the communication of information by one person to another or to a number of persons.

Communicative competence includes knowledge of the necessary languages, ways of interacting with other people and events, skills of working in a group, knowledge of various social roles in the team. The student should be able to introduce himself, write a letter, a questionnaire, a statement, ask a question, and conduct a discussion.

Language competence involves knowledge of the language itself, its structure and functioning, language norms, including spelling and punctuation. The formation of competence is inextricably linked with the cognitive and emotional development of the student and includes several components — basic foreign language competencies, which are characterized by certain sets of knowledge, skills and abilities.

Competence for a student is an image of his future, a reference point for mastering. For the development of students’ competencies to the optimal level, it is necessary to fill the identified competencies with didactic content, search for optimal psychological and pedagogical conditions for their formation in the process [6, 36].

In the model of psychological development of a person, the concept of “competence “is applied to situations in which a person has a need to solve problems, minimizing the cost of their resources for a” unit “ of a useful result. The formation of competencies is carried out by means of the content of education, thanks to which the student develops abilities and has the opportunity to solve real problems in everyday life — from domestic to industrial and social.

Educational competence involves the assimilation of a student not separate from each other knowledge and skills, but the mastery of a complex procedure, in which for each selected area there is a corresponding set of educational components that have a personal-activity character [5, 45].

Educational competence is understood as a set of semantic orientations, knowledge, skills, skills and experience of the student's activity in relation to a certain range of objects of real reality, necessary for the implementation of personally and socially significant productive activities.

We define competence as an intellectually and personally determined experience of a person's social and professional life, based on competencies. Thus, we consider competence to be a certain potency, a prerequisite. The ability of a person to actualize this potency in a particular situation indicates the presence of competence. The formation and development of competence is a long process, which is not limited by any time frame, nor by the forms of general or professional education. Competence is a sign of a socially mature, well-formed personality [2, 78].

1. General cultural competences. The range of issues in relation to which the student must be well — informed, have knowledge and experience of activity, these are the features of national and universal culture, the spiritual and moral foundations of human life and humanity, individual peoples, the cultural foundations of family, social, social phenomena and traditions, the role of science and religion in human life, their impact on the world, competence in the household and cultural and leisure sphere, for example, the possession of effective ways of organizing free time. This also includes the student's experience of mastering the scientific picture of the world, expanding to a culturological and universal understanding of the world.

2. Educational and cognitive competencies. This is a set of competencies of the student in the field of independent cognitive activity, including elements of logical, methodological, general educational activities, correlated with real cognizable objects. This includes knowledge and skills of organizing goal-setting, planning, analysis, reflection, and self-assessment of educational and cognitive activities. In relation to the studied objects, the student learns creative skills of productive activity: obtain-

ing knowledge directly from reality, mastering the techniques of actions in non-standard situations, heuristic methods of solving problems. Within the framework of these competencies, the requirements of the corresponding functional literacy are determined: the ability to distinguish facts from speculation, the possession of measurement skills, the use of probabilistic, statistical and other methods of cognition [1, 87].

3. Information competencies. With the help of real objects (TV, tape recorder, telephone, fax, computer, printer, modem, copier) and information technologies (audio-video recording, e-mail, media, Internet), the ability to independently search, analyze and select the necessary information, organize, transform, save and transmit it is formed. These competencies provide the skills of the student's activity in relation to the information contained in the academic subjects and educational areas.

4. Communication skills. They include knowledge of the necessary languages, ways of interacting with surrounding and remote people and events, skills of working in a group, and knowledge of various social roles in a team. The student must be able to introduce himself, write a letter, a questionnaire, an application, ask a question, conduct a discussion, etc. For the development of these competencies in the educational process, the necessary and sufficient number of real objects of communication and ways of working with them [7, 96].

5. Social and labor competencies mean the possession of knowledge and experience in the field of civil and social activities (performing the role of a citizen, observer, voter, representative), in the social and labor sphere (consumer, buyer, customer, manufacturer), in the field of family relations and responsibilities, in matters of economics and law, in the field of professional self-determination. This includes, for example, the ability to analyze the situation in the labor market, to act in accordance with personal and public benefit, to possess the ethics of labor and civil relations. The student learns the mini-

imum necessary skills for life in modern society of social activity and functional literacy [5, 56].

In conclusion we can say that, the fundamental goal of teaching a foreign language is aimed at the formation of a foreign language communicative competence, including language, speech, socio-

cultural, compensatory and educational-cognitive competencies. This is an integrative learning goal with a clear practical focus. In order to achieve this goal in practice, the modern method of teaching foreign languages uses a communicative approach, which we will consider later in our work.

### References:

1. Грушевицкая, Т. Г. Основы межкультурной коммуникации: учебное пособие / Т. Г. Грушевицкая, В. Д. Попков, А. П. Садохин. – М.: Юнити, 2007. – 352 с.
2. Гудков Д. Б. Межкультурная коммуникация: проблемы обучения. Лекционный курс для студентов РКИ / Д. Б. Гудков. – М., 2006. – 120 с.
3. Казарцева О. М. Культура речевого общения: теория и практика обучения: Учеб.пособие / О. М. Казарцева, – М., 1998. – С. 10.
4. Елизарова, Г. В. Формирование межкультурной компетенции у студентов в процессе обучения иностранным языкам [Текст]: автореф. / Г. Р. Елизарова. – С-П, 2001. – 16 с.
5. Кричевская К. С. Прагматические материалы, знакомящие учеников с культурой и средой обитания жителей страны изучаемого языка / К. С. Кричевская // Иностранные языки в школе. – 2006. – № 1. – С. 13–17.
6. Шапов, А. Н. Коммуникативно-когнитивный подход в обучении лексической стороне речи на уроках немецкого языка / А. Н. Шапов // Иностранные языки в школе. – 2008. – № 4. – С. 21–28.
7. Шеина, И. М. Лингвистические предпосылки успешности межкультурной коммуникации: монография / И. М. Шеина. – М.: Научная книга, 2009. – 190 с.

## Section 4. Political science

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### **GEOPOLITICAL AGENDA OF SILK ROAD TRANSPORT CORRIDORS: INTERESTS OF UZBEKISTAN AND DIVERSIFICATION OF TRANSPORT UNITS**

**Abstract.** In this article analyzed of difference versions for the development of transport corridors with the participation of Uzbekistan from the point of view of the geopolitical and geo-economic interests of the Republic of Uzbekistan. In this sense, an objective analysis of the existing international transport corridors passing through Uzbekistan is given; the main trends of Uzbekistan's participation in various transport projects are considered. The article makes a number of conceptual conclusions and identifies promising directions for the development of transport corridors of the Silk Road, geopolitically beneficial for Uzbekistan.

**Keywords:** geopolitics, Silk Road, transport corridors, diversification, transport policy, Central Asia, SCO, PRC, Uzbekistan.

The establishment of convenient and shortest communications with the centers of world trade has become a strategically important task of the Republic of Uzbekistan since the first years of its independence. The mutually beneficial integration of the national transport system into the system of international transport corridors is being successfully implemented. As the crossroads of all land and air communications in the region, the republic has unique opportunities to participate in international transit. Work is being actively carried out to modernize and increase the capacity of the internal transport system. Significant funds are annually allocated from the budget of the republic for the reconstruction and repair of existing ones, as well as

the construction of new roads, bridges and related infrastructure.

Issues of international and regional interconnection have always been and remain relevant for Central Asia, including our country, which does not have direct access to seaports. Uzbekistan initially supported the Belt and Road Initiative, the implementation of which is an important factor in the sustainable development of our countries. In this regard, the domestic researcher Zh. Artykov rightly notes that "one of the most priority issues for Uzbekistan is the development of transport corridors to seaports, international markets, the construction of oil and gas pipelines. It is necessary to determine what urgent measures to take to

ensure the efficient operation of these routes, and what alternatives are optimal and priority in future activities” [1].

E. Yu. Vinokurov, V. G. Lobyrev, A. A. Tikhomirov and T. V. Tsukarev — a group of leading economists — the authors of an analytical study entitled “Transport corridors of the Silk Road: the potential for growth in freight traffic through the EAEU” (2018) also note that “further growth of rail container traffic between the European Union and China is expected” and come to the conclusion that that “railway container transportation has advantages (compared to sea) in the following indicators: speed (timing) of transportation, regularity (rhythm) of transportation, reliability (guaranteed delivery on time and safety of the cargo), the ability to deliver the cargo by means of a vehicle to any point” [2].

In connection with the above, we believe that in order to attract additional cargo traffic between the EU and the countries of Central Asia, including Uzbekistan, it is necessary to further develop the transport infrastructure and eliminate existing customs barriers, develop and introduce electronic waybills, develop digital technologies for cargo handling and information exchange.

Currently, Uzbekistan’s foreign trade cargo transportation is carried out along the following main transport corridors:

corridor 1 – in the direction of the ports of the Baltic states (in transit through Kazakhstan and Russia) – Klaipeda (Lithuania), Riga, Liepaja, Ventspils (Latvia), Tallinn (Estonia);

corridor 2 – in the direction of the EU countries, through Belarus and Ukraine (in transit through Kazakhstan and Russia) – border checkpoints Chop (Ukraine) and Brest (Belarus);

corridor 3 – to the Ukrainian port of Ilyichevsk (in transit through Kazakhstan and Russia), with access to the Black Sea;

corridor 4 – in the direction of the Transcaucasian corridor (in transit through Turkmenistan, Ka-

zakhstan and Azerbaijan), with access to the Black Sea, which is known as the TRACECA corridor;

corridor 5 – to the Iranian port of Bandar Abbas (in transit through Turkmenistan) with access to the Persian Gulf;

corridor 6 – eastward through the Kazakh-Chinese border crossing (Dostyk / Alalshankou) to the eastern ports of China, as well as the Far Eastern ports of Nakhodka, Vladivostok, etc.;

corridor 7 – to Chinese ports (in transit through Kyrgyzstan) with an outlet to the Yellow, East China and South China Seas;

corridor 8 – in connection with the settlement of the Afghan problem, new prospects are opening up for the development of southern alternative transport corridors to the Iranian and Pakistani ports of Bandar Abbas, Chahbahar (IRI), Gwadar and Karachi (IRP) in transit through Afghanistan [3].

Note that in addition to railway transport, the SCO member states, including Uzbekistan, actively use road transport. In particular, in his speech at the opening ceremony of the 11th China Fair on Investments Abroad, SCO Secretary General V. Norov noted in particular that “more than 13 million km of highways have been laid on the territory of the Organization’s countries, or almost 20% of all world highways” [4].

The integrated system of transport policy is a strategic resource for the foreign economic activity of the states of the Central Asian region. In this regard, the initiative of the President of the Republic of Uzbekistan Sh. M. Mirziyoyev on the economic feasibility of establishing an end-to-end tariff for railway transportation along the route: ports of the Yellow Sea – Central Asia – Europe, voiced in his speech at the Second International Forum “One Belt, One Road” (April 27, 2019) provides for an integrated approach to the management system in the field of transport policy [5].

Over the past 15 years, the PRC has been actively promoting various projects of transport and communication corridors, economic cooperation,

cooperation and integration, both within the framework of bilateral and multilateral relations. Today, the Chinese initiative for the Silk Road Economic Belt within the framework of the “One Belt, One Road” strategy is one of the most discussed topics among analysts, economists and international experts.

The idea of creating the Silk Road Economic Belt (One Belt, One Road) project was put forward by the President of the People’s Republic of China Xi Jinping during a speech at Nazarbayev University (Astana, Kazakhstan) as part of a state visit to the Republic of Kazakhstan from 6 to 8 September 2013 g. [6]

Speaking about the New Silk Road, it should be understood that China is implementing two comprehensive strategies: the Silk Road Economic Belt and the 21st Century Maritime Silk Road. On land, the initiative focuses on the joint construction of a new “Eurasian bridge” and the development of economic corridors “China-Mongolia-Russia”, “China-Central Asia-Western Asia” and “China-Indo-China Peninsula” through international transport routes, key cities on the entire route and key economic industrial parks as platforms for cooperation. At sea, the initiative focuses on the joint construction of seamless, safe and efficient transport routes connecting major seaports [7].

The Republic of Kazakhstan, the Kyrgyz Republic, the Islamic Republic of Pakistan, the Russian Federation, the Republic of Tajikistan and the Republic of Uzbekistan, following the meeting of the Council of Heads of State of the SCO Member States (Bishkek, June 13–14, 2019), confirming support for China’s “One Belt, One way” (BRI), highly appreciated the results of the Second BRI International Cooperation Forum (Beijing, April 25–27, 2019). They noted the ongoing work on the joint implementation of this project, including efforts to link the construction of the Eurasian Economic Union and OBOR [8].

In the context of the globalization of the world economy, transport alongside with the financial

sphere acts as the most important lever of integration processes. About half of the world’s container traffic is in three directions: Asia-North America, North America-Europe and Europe-Asia.

The latter is especially promising for Uzbekistan. The sea transport of containers along the Eurasian continent cannot grow indefinitely. There are a number of restrictions to this: for example, in the future, the capacity of the Suez Canal and Gibraltar may become limited due to increased traffic and environmental problems. In this regard, experts are already considering the issue of diversifying part of the container traffic between Europe and Asia along the land route, and the transport communications of Uzbekistan will play an important role in this [9].

International transport terminals and logistics centers should take a special place in attracting transit cargo. These centers should coordinate the activities of various types of transport, which is very important in the conditions of Central Asian countries that do not have access to the open sea. Accordingly, logistics centers should be created at the intersection of the main transit corridors and, in essence, perform the functions of the so-called “dry ports”.

The Silk Road of the 21st century from the Asia-Pacific region to Europe is a boon for the economy as a whole and for the countries through which it will pass. These are additional jobs, the development of infrastructure and tourism, an increase in living standards, and political stability.

Modern Uzbekistan, located in the very heart of Central Asia, contributes to the preservation of security and stability in the region and has the most diversified and dynamically growing national economy, plays a key role in the formation of regional transport infrastructure.

The Republic of Uzbekistan pays great attention to the development of transport and infrastructure communications within the country, the creation of a system of transit corridors, the development of new, efficient routes connecting the existing large international and actively emerging promising mar-



kets. In adopted on the initiative of the President of the Republic of Uzbekistan Sh. M. Mirziyoyev “Strategies of actions for the further development of the Republic of Uzbekistan” one of the key directions for increasing the competitiveness of the national economy is determined by the conduct of an active investment policy aimed at implementing projects in the field of transport and communication infrastructure. In this regard, we believe that the participation of Uzbekistan in the One Belt, One Road project presents opportunities for the implementation of strategic goals.

Note that for Uzbekistan, OBOR is of interest not so much as the possibility of attracting investments in certain specific projects, but as an opportunity to ensure greater connectivity of the country’s transport system with existing and planned transport corridors in the Central Asian region. This should, in the medium and long term, reduce transport costs, ensure a reduction in the time and cost of transporting export and import goods for Uzbek business, and in the future, turn Uzbekistan into one of the most significant transport hubs in Eurasia.

## Conclusion

Thus, the “One Belt, One Road” project is a systemic program of the PRC government for the long term, which, of course, cannot be implemented in one day and only by the forces of China. A whole range of work is required for all interested countries. It is necessary to consistently, step by step, step by step go out to large-scale cooperation. OBOR will become an effective lever for the further growth of the well-being of peoples, the development of trade and economic relations between the states of the region, as well as the countries of the EU, Central, South and Southeast Asia.

“One Belt, One Road” for Uzbekistan is an opportunity to ensure further diversification of transport routes for export / import and transit of goods through the conjugation of national plans for the development of the transport sector with the implementation of a wide range of alternative transport corridors passing through the region, based on a system of international agreements and regulations that provide fast and cost-effective movement of goods and services.

## References:

1. Artykov Zh. Yu. Transport Routes of Uzbekistan and their role in solving interstate problems // “Yzbekiston Respublikasi milliy havfsizlik muammolari va barkaror rivozhlanish shartlari” maussidagi tyrtinchi ilmiy-amali konferentsiyasi materiallari. / Mas’ul mu’arrir A. Fayzullaev.– T.: ZHIDU, 2004.
2. Silk Road transport corridors: the potential for growth of cargo flows through the EAEU.– St. Petersburg: EDB Publications, 2018.– 10 p.
3. Transport corridors // <https://mift.uz/ru/menu/transportnye-koridory> –2021.– 24 Feb.
4. The SCO Secretary General took part in the XI Foreign Investment Fair in China. <http://rus.sectsc.org/news/20191130/604299.html>.– 2019 – – 30 Nov.
5. Shavkat Mirziyoyev: our peoples should actually feel the results of joint efforts. // <https://president.uz/ru/2533>.– 2019. – 27 Apr.
6. Ambassador of the People’s Republic of China to the Republic of Uzbekistan: “The Silk Road Economic Belt” will provide benefits to the peoples of China and Uzbekistan. <http://china-uz-friendship.com/?p=2500>.– 2019.– 24 Sep.
7. The initiative “One belt – one road” and water resources / / Information collection.– T.: SIC ICWC, 2017.– No. 49. Oct.– 8 p.

8. Information message on the results of the meeting of the Council of Heads of State of the Shanghai Cooperation Organization (Bishkek, June 13–14, 2019) <http://rus.sectsco.org/news/20190614/550898.html>. – 2019. – June 14.
9. Transport strategy of Uzbekistan and the formation of institutions for the implementation of a unified transport policy // <https://nuz.uz/ekonomika-i-finansy/42040-transportnaya-strategiya-uzbekistana-i-stanovlenie-institutov-dlya-realizacii-edinoy-transportnoy-politiki.html>.

## Section 5. Agricultural sciences

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### THE EFFECTIVENESS OF THE USE OF BIOSTIMULANTS IN THE CULTIVATION OF PEANUTS

**Abstract.** The peanut, also known as the groundnut, goober (US), pindar (US) or monkey nut (UK), and taxonomically classified as *Arachis hypogaea*, is a legume crop grown mainly for its edible seeds. It is widely grown in the tropics and subtropics, being important to both small and large commercial producers. It is classified as both a grain legume and, due to its high oil content, an oil crop. In this article, the analysis of the field experiments conducted in the Tashkent province, which was aimed at improving the technology of high-quality production was given. In the field experiments, the effect of Microzym-2 biostimulator on growth, development, yield elements, yield and seed quality of local peanut varieties “Salomat” (control) and “Mumtoz” was studied.

**Key words:** biostimulants, plant growth, peanut (*Arachis hypogaea*), fertilizers, Salomat, Mumtoz, production, yield, oil content.

#### Introduction

World annual production of shelled peanuts was 44 million tonnes in 2016, led by China with 38% of the world total. Atypically among legume crop plants, peanut pods develop underground (geocarpy) rather than above ground. With this characteristic in mind, the botanist Carl Linnaeus gave peanuts the specific epithet *hypogaea*, which means “under the earth” [7].

The peanut belongs to the botanical family Fabaceae (or Leguminosae), commonly known as the

legume, bean, or pea family [1, 2]. Like most other legumes, peanuts harbor symbiotic nitrogen-fixing bacteria in root nodules [6]. The capacity to fix nitrogen means peanuts require less nitrogen-containing fertilizer and improve soil fertility, making them valuable in crop rotations.

The countries with the largest walnut cultivation in the world are the United States, China, India, Argentina, Brazil, South Africa, Russia, Italy, Spain, Australia, and the Caucasus. In these countries,

scientific research has been conducted on ecological testing of new varieties of walnuts, selection and proper placement of varieties suitable for soil and climatic conditions of each region, cultivation of high and quality crops, storage, processing and export [5]

### Materials and methods

Field studies were carried out at the experimental station of Tashkent State Agrarian University. The experimental station is located near Tashkent, in the upper part of the Chirchik river, Kibray district of the Tashkent region, at an altitude of 481 m above sea level, 41°11" northern latitude and 38°31" east longitude. The terrain of the site is uneven, slightly wavy, with a general slope to the Salar canal. Irrigation water was pumped from the Bozsu channel. The soil of the experimental site is long-irrigated sierozem, non-saline, with a low content of humus 0,9–0,7%, nitrogen 0,082–0,066%, phosphorus 0,153–0,139%, potassium 1,33–1,30%.

The climatic conditions of Tashkent province are continental and arid. However, the climatic conditions are specific, the air temperature decreases from the plains of the region to the mountainous areas, and the amount of atmospheric precipitation increases. In the plains and hills, the temperature of the winter months is unstable, fluctuating over the years. The coldest month in the region is January, with temperatures ranging from 0°C to –29°C. The amount of atmospheric precipitation in the region also varies. In the plains, the annual precipitation is 261–316 mm, in the foothills 366–435 mm, and in the mountains 700–895 mm. The sum of the useful seasonal temperatures required for the care of field crops in April–October averages 2200–2400 °C and the duration of non-cold days averages 235–240 days. The highest rainfall is in winter and spring, averaging 400–500 mm. The average annual rainfall is 510–520 mm, so it is recommended to irrigate field crops.

**Field and laboratory experiments.** In conducting field and laboratory experiments, phenological observations, biometric measurements and yield determination, the methodological manuals “Methods

of State Variety of Agricultural Cultivation”, “Methods of Field Experiments”, “Scientific Research in Botany” were used. Agrophysical and agrochemical analysis of soils was carried out on the basis of “Methods of agrochemical, agrophysical and microbiological research in pollinated cotton fields”. The data obtained in the field experiments were analyzed mathematically statistically using Microsoft Excel program based on the method of B. A. Dospekhov [10, 11].

Field experiments were conducted in the conditions of typical gray soils of the Tashkent State Agrarian University agricultural research and educational experimental farm (2014–2016). The field experiments are annually tested and evaluated by a special commission of the Uzbek State Agrarian University and the Tashkent State Agrarian University. Ammonium nitrate from nitrogen fertilizers ( $\text{NH}_4\text{NO}_3$ –33–34% nitrogen), amorphous from phosphorus fertilizers ( $\text{NH}_4\text{H}_2\text{PO}_4$ –11–12% nitrogen, 46–60% phosphorus), potassium chloride from potassium fertilizers (KCl–57% potassium) were used to feed peanuts. Nitrogen in amorphous was taken into account in determining the annual norms of mineral fertilizers.

**Description of the “Mumtoz” variety.** The L-5 X ICGV-94088 (India) collection was created by mass selection. The main authors are M. E. Amanova, A. S. Rustamov, Sh. Nigam, R. F. Mavlyanova, Z. I. Kholiqulov. It belongs to Virginia, and the plant is semi-erect, moderately branched. The shape of the large dukka is fat, wavy, the surface is slightly deep, pale yellow, the skin is medium-rough, the middle is slightly narrow, the seam is medium. The color of the seeds is dark red, oblong-oval in shape. The variety is medium-ripe, ripening in 138–145 days. Yields average 27–28 q/ha. Weight of 1000 seeds is 686.0–710.0 gr. Suitable for assembly with mechanism. Legume has a high adhesion of 5.0 points, maturity of 80.0%. The fat content of the grain is 48.5%, the protein is 18.0%. The variety is resistant to agricultural diseases and insects. Entered into the State Register in 2006 [6–9].

**Description of the “Salomat” variety.** Uz008418 was created by mass selection from the collection sample, and the main authors are M. E. Amanova, A. S. Rustamov, Sh. Nigam, and Z. I. Kholiqulov. It belongs to the Valencia variety type, the plant grows upright, the stem is of medium height, the pods are large. The shape of the pod is wavy, slightly deep, pale yellow, the skin is medium-rough, the nut is 3 to 4 seeds, the middle is slightly constricted, the stitch is medium, the color of the seed is dark red, oblong-oval. The variety is medium-ripe, ripening in 138–140 days. The weight of 1000 seeds are 540.0 g.

The variety is large-fruited, large-grained and productive. Suitable for assembly with mechanism. Legume has a high adhesion of 5.0 points, ripeness of 85.0%. The fat content of the grain is 50.0%, protein is 17.0%.

### Results and discussion

**Effect of Microzym-2 biostimulator on change of leaf level of peanut varieties** The period

of flowering-legume formation in peanut varieties is the period of formation of the highest leaf level during the development process. In the experiment, the effect of the biostimulator and mineral fertilizers on the leaf surface of the peanut varieties, “Salomat” and “Mumtoz” was studied. In the experiment conducted in 2012, before sowing the seeds with biostimulator “Microzym-2” in the 3rd variant, the leaf area of the variety “Salomat” was 27.2 thousand  $m^2/ha$ , followed by 28.5 thousand  $m^2/ha$  in 2013, 27.7 thousand  $m^2/ha$  in 2014, and an average of 27.8 thousand  $m^2/ha$  in three years. In the 9th variant of the “Mumtoz” variety treated with Microzym-2 biostimulator before sowing, the seeds were 26.3–27.4 and 26.9 thousand  $m^2/ha$ , respectively.

The control was compared to the 7th variant at the expense of the biostimulator, accordingly, the leaf levels were higher by 1.6–1.9 thousand  $m^2/ha$  in the control variant (Table 1).

Table 1. – Influence of Microzym-2 biostimulator on change of peanut leaf level

№	Experi- mental variants	Terms of use			Leaf level of one peanut plant one plant	Leaf level thousand $m^2/ha$		
		before sowing seeds	blossom- budding period	mineral fertilizers kg/ha		2014	2015	2016
“Salomat” variety								
1	Control	–	–	–	0,229	25,4	26,8	26,2
2	Control	–	–	$N_{150}P_{150}K_{100}$	0,325	37,8	39,6	38,5
3	Microzym-2	30 l/t	–	–	0,226	27,2	28,5	27,7
4	Microzym-2	30 l/t	40 l/ha	–	0,236	28,3	29,5	29,1
5	Microzym-2 +NPK	30 l/t	–	$N_{150}P_{150}K_{100}$	0,316	38,1	40,4	39,8
6	Microzym-2 +NPK	30 l/t	40 l/ha	$N_{150}P_{150}K_{100}$	0,321	38,8	41,5	40,7
“Mumtoz” variety								
7	Control	–	–	–	0,214	24,7	25,5	25,1
8	Control	–	–	$N_{150}P_{150}K_{100}$	0,338	40,1	41,7	40,8
9	Microzym-2	30 l/t	–	–	0,213	26,3	27,4	26,9
10	Microzym-2	30 l/t	40 l/ha	–	0,220	26,9	28,2	27,4
11	Microzym-2+NPK	30 l/t	–	$N_{150}P_{150}K_{100}$	0,333	40,5	42,7	41,3
12	Microzym-2+NPK	30 l/t	40 l/ha	$N_{150}P_{150}K_{100}$	0,343	42,6	44,2	43,5

In the “Salomat” variety, before sowing the seeds with the biostimulator “Microzym-2”, and during flowering and budding, extra-root feeding, that was sprayed on the plant leaves in the form of a suspension in variant 4. The plant leaf area was 28.3 thousand m<sup>2</sup>/ha, in 2015–29.5 thousand m<sup>2</sup>/ha and 29.1 thousand m<sup>2</sup>/ha in 2016 and an average of 29.0 thousand m<sup>2</sup>/ha in three years. In the “Mumtoz” variety, the leaf level per hectare was 26.9, 28.2, 27.4 thousand m<sup>2</sup>/ha in the 10th variant and it was on average 27.5 thousand m<sup>2</sup>/ha in three years.

The leaf level per hectare was higher by 1.3–1.7 thousand m<sup>2</sup> in the “Salomat” variety. In the experiment, the leaf level per hectare was 38.8 thousand m<sup>2</sup> in 2014, 41.5 thousand m<sup>2</sup> in 2015 and 41.5 thousand m<sup>2</sup> 2016 in the 5th variant, in which was sown with seeds of “Salomat” variety with biostimulator “Microzym-2” and mineral fertilizers were applied at the rate of N<sub>150</sub>P<sub>150</sub>K<sub>100</sub> kg/ha. It was noted that in 2016, 40.7 thousand m<sup>2</sup> and in the “Mumtoz” variety, the average leaf area was 1.5–2.4 thousand m<sup>2</sup>/ha higher. It was observed that the biostimulator Microzym-2 was more effective when used in combination with mineral fertilizers than when used in its pure form. In “Salomat” variety, the leaf level was 38.8, 41.5 and 40.7 thousand m<sup>2</sup> in the experiment period, and the average for the period was 40.3 thousand m<sup>2</sup> in the variant 6 and 12, in which the biostimulator Microzym-2 before sowing, during flowering and budding and feeding with mineral fertilizers at the rate of N<sub>150</sub>P<sub>150</sub>K<sub>100</sub> kg/ha were applied.

Due to the biostimulator “Microzym-2” and mineral fertilizers, it was observed that in the 6th variant, compared to the 1st control variant, the leaf level was 13.4, 14.7 and 14.5 thousand m<sup>2</sup>/ha in those years and on average 14.2 thousand m<sup>2</sup>/ha in three years. When comparing variant 6 with variant 2, in which mineral fertilizer N<sub>150</sub>P<sub>150</sub>K<sub>100</sub> kg/ha was used, it was that the differences in plant leaf level was reduced. In particular, in variant 2, the leaf level was 37.8–39.6–38.5 per year and on average 38.6 thousand m<sup>2</sup>/ha in three years, while

in variant 6, due to the use of biostimulator “Microzym-2” an additional 1.0–1.9–2.2 and an average leaf level of 1.7 thousand m<sup>2</sup>/ha was recorded in three years. In summary, when comparing varieties, it was identified that the demand for nutrients in the “Mumtoz” was high, and in the 12th variant the highest leaf level is formed, and in the years of experimentation with the navigation “Salomat” was an average of 2.7–3.8 thousand m<sup>2</sup>/ha.

The highest legume yield was observed in “Mumtoz” in 12th variant, which were 31.8 q/ha, 34.8 q/ha and 33.1 q/ha for 2014–2016, respectively. Furthermore, the average yield of “Mumtoz” variety was higher by 3.9 q/ha than the yield of “Salomat”, 29.3 q/ha. The see oil content of the “Salomat” was 46.9% in the control variant 1, whereas it was higher by 0.9% in the 4th variant due to Microzym-2, followed by 3.3% higher seed oil content in the variant 6, in which mineral fertilizers N<sub>150</sub>P<sub>150</sub>K<sub>100</sub> kg/ha were used. Due to the biological properties of the “Mumtoz” variety, the amount of oil in the seeds was slightly lower than the “Salomat” variety. In the control variant 2, the oil content in the seeds was 45.1%. It was identified that the use of biostimulator “Microzym-2” in combination with mineral fertilizers was more effective than in pure form, and accordingly, the amount of oil in the seeds of this variety was the highest in options 11 and 12, accounted for 47.6% and 48.4%, respectively.

### Conclusions

The average yield of “Mumtoz” variety was higher by 3.9 q/ha than the yield of “Salomat”, 29.3 q/ha. The see oil content of the “Salomat” was 46.9% in the control variant 1, whereas it was higher by 0.9% in the 4th variant due to Microzym-2, followed by 3.3% higher seed oil content in the variant 6, in which mineral fertilizers N<sub>150</sub>P<sub>150</sub>K<sub>100</sub> kg/ha were used. Due to the biological properties of the “Mumtoz” variety, the amount of oil in the seeds was slightly lower than the “Salomat” variety. In the control variant 2, the oil content in the seeds was 45.1%. It was identified that the use of biostimulator “Microzym-2” in combina-

tion with mineral fertilizers was more effective than in pure form, and accordingly, the amount of oil in the seeds of this variety was the highest in options 11 and 12, accounted for 47.6% and 48.4%, respectively.

### References

1. Atabayeva Kh., Khudaykulov J., Nurbekov A., Kassam A. Plant Science. Fan ziyosi, Tashkent-2021.P.406.
2. The Plant List: A Working List of All Plant Species. Royal Botanic Gardens, Kew and Missouri Botanical Garden. 2013. Retrieved February 13, 2015.
3. USDA GRIN Taxonomy, retrieved June 29, 2016.
4. Domonoske, Camila (April 20, 2014). "A Legume With Many Names: The Story Of 'Goober'". NPR.org. National Public Radio. Archived from the original on June 6, 2020.
5. www.hort.purdue.education. Retrieved September 29, 2015.
6. "Oil crops for production of advanced biofuels". European Biofuels Technology Platform. Archived from the original on September 9, 2015. Retrieved September 28, 2015.
7. Peanut (groundnuts with shell) production in 2019. FAOSTAT, Food and Agricultural Organization of the United Nations, Statistics Division. 2020. Retrieved February 28, 2021.

## Section 6. Physics

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### **THEORETICAL ANALYSIS OF MULTIPHOTON INTERBAND ABSORPTION OF POLARIZED LIGHT IN CRYSTALS WITH A COMPLEX ZONE (Part 1)**

**Abstract.** A calculation was carried out to investigate the spectral dependence of the coefficient of interband multiphoton absorption of light in narrow-gap semiconductors of the In Sb type in the Kane model, where the contributions of intermediate states located in the subbands of light and heavy holes, in the subband of spin-orbit interaction of the valence band, and also in the conduction band in many a quantum process without taking into account the effect of coherent saturation. Since in semiconductors of the InSb type, the energy distance between the adjacent lower and upper conduction bands is significantly greater than the widths of the forbidden or spin-split bands. This makes it possible to carry out calculations in the two-band Kane approximation.

**Keywords:** semiconductor, coefficient of interband multiphoton absorption of light, two-band Kane's approximation.

Currently, the main research in the field of multiphoton absorption of light is carried out in wide-gap semiconductors, since a number of their physicochemical properties have been studied in depth and in more detail. In this respect, the multiphoton effects occurring in narrow-gap crystals have been

little investigated both in theoretical and experimental aspects. The main reason for this is that the theoretical research of a number of photon-kinetic phenomena in narrow-gap crystals requires the use of not only the Luttinger-Kohn approximation, but also the multiband Kane approach. In the case, theo-



retical calculations are performed using matrices of at least  $6 \times 6$  or  $8 \times 8$ .

Next, we will determine the expression for the coefficient of multiphoton absorption of light ( $K^{(N)}(\omega, T)$ ) using the perturbation theory [1]. In the calculations, we will take into account that  $H$  the effective carrier Hamiltonian consists of two components, one of which  $H^0$  is an unperturbed Hamiltonian, the eigenvalue  $E_n^{(0)}$  and the eigenfunction  $|\psi_n\rangle$  of which are known, in the second ( $H'$ ), it takes into account the interaction of the carrier system with the electromagnetic field, i.e. ... electron-photon interaction, so

$$H = H^0 + H'. \quad (1)$$

In the general case, in perturbation theory for the diagonalization of the effective carrier Hamiltonian, a unitary operator of the form  $e^{-S}$  is chosen, under the action of which a diagonal (or quasi-diagonal) Hamiltonian is formed, i.e.  $\tilde{H} = e^{-S} H e^S$  where  $S$  is some operator. In this case, the diagonal components of the matrix elements  $\psi_m | \tilde{H} | \psi_l$ , calculated using the wave functions of the current carriers in the Kane model [3; 4], are nonzero, and the off-diagonal ones are zero.

As a result, the multiphoton absorption coefficient conditioned by interband optical transitions in narrow-gap semiconductors of light can be calculated using the following relation

$$\begin{aligned} K_{summi}^{(N)}(\omega, T) &= \sum_{c, m'_c; v, m'_v} K_{c, m'_c; v, m'_v}^{(N)}(\omega, T) = \\ &= \frac{N \hbar \dot{E}}{I^N} \sum_{c, m'_c; \zeta, m'_\zeta; v, m'_v} W_{c, m'_c; \zeta, m'_\zeta; v, m'_v}^{(N)}. \end{aligned} \quad (2)$$

$$\begin{aligned} M_{mm'}^{(3)} &= -\frac{1}{2} \sum_{l, m''} \left[ \frac{H'_{ml} H'_{lm''} H'_{m''m'}}{(E_{m'} - E_l)(E_{m''} - E_l)} + \frac{H'_{mm''} H'_{m''l} H'_{lm'}}{(E_m - E_l)(E_{m''} - E_l)} \right] + \\ &+ \frac{1}{2} \sum_{l, l'} H'_{ml} H'_{ll'} H'_{l'm'} \left[ \frac{1}{(E_m - E_l)(E_m - E_{l'})} + \frac{1}{(E_{m'} - E_l)(E_{m'} - E_{l'})} \right], \end{aligned} \quad (4c)$$

$$M_{mm'}^{(4)} = \frac{1}{2} \sum_{l, m'', m'''} \frac{1}{(E_{m''} - E_l)(E_{m'''} - E_l)} \left[ \frac{H'_{mm''} H'_{m''m'''} H'_{m'''} H'_{lm'}}{E_m - E_l} + \frac{H'_{ml} H'_{lm''} H'_{m''m'''} H'_{m''m'}}{E_{m'} - E_l} \right] - \quad (4d)$$

Here  $K_{c, m'_c; v, m'_v}^{(N)}(\omega, T)$  is the partial light absorption coefficient corresponding to each interband optical transition, when calculating which it is necessary to sum over all intermediate states;  $K_{summi}^{(N)}(\omega, T)$  is the resulting coefficient of multiphoton light absorption, which is determined by summing over all initial ( $|\nu, m'_\nu\rangle$  ( $m'_\nu = \pm 3/2, \pm 1/2$ )), intermediate ( $|\zeta, m'_\zeta\rangle$ ) and final ( $|c, m'_c\rangle$  ( $m'_c = \pm 1/2$ )) states,  $W_{c, m'_c; \zeta, m'_\zeta; v, m'_v}^{(N)}$  is the probability of the transition of current carriers from the valence band to the conduction band through intermediate states, and it is defined as

$$\begin{aligned} W_{c, m'_c; \zeta, m'_\zeta; v, m'_v}^{(N)} &= \\ &= \frac{2\pi}{\hbar} \sum_{\zeta, m'_\zeta} \left| M_{c, m'_c; \zeta, m'_\zeta; v, m'_v}^{(N)}(\mathbf{k}) \right|^2 \cdot [f_c(\mathbf{k}) - f_{v'}(\mathbf{k})] \cdot \\ &\cdot \delta(E_c(\mathbf{k}) - E_{v'}(\mathbf{k}) - N\hbar\omega), \end{aligned} \quad (3)$$

where intermediate states  $|\zeta, m'_\zeta\rangle$  can be located both in the conduction band and in the subbands of the valence band: in the subband  $|\nu_{hh}, m'_{hh}\rangle$  ( $m'_{hh} = \pm 3/2$ ) of heavy holes and in the subband of  $|\nu_{lh}, m'_{lh}\rangle$  ( $m'_{lh} = \pm 1/2$ ) light holes, as well as in the subband  $|SO, m'_{SO}\rangle$  ( $m'_{SO} = \pm 1/2$ ) of spin-orbit splitting, the composite matrix elements of interband optical transitions are designated as  $M_{c, m'_c; \zeta, m'_\zeta; v, m'_v}^{(N)}(\mathbf{k})$  and for  $N = 1, 2, 3, 4$  are determined by the relations

$$M_{mm'}^{(1)} = H'_{mm'}, \quad (4a)$$

$$M_{mm'}^{(2)} = \frac{1}{2} \sum_l H'_{ml} H'_{lm'} \left[ \frac{1}{E_m - E_l} + \frac{1}{E_{m'} - E_l} \right], \quad (4b)$$

$$\begin{aligned}
& -\frac{1}{2} \sum_{l,l',m''} \left[ \frac{H'_{ml} H'_{ll'} H'_{lm''} H'_{m''m'} \left( \frac{1}{E_m - E_l} + \frac{1}{E_{m'} - E_{l'}} \right) + \frac{H'_{mm''} H'_{m''l'} H'_{ll'} H'_{l'm'} \left( \frac{1}{E_{m''} - E_{l'}} + \frac{1}{E_m - E_l} \right)}{(E_{m'} - E_l)(E_{m''} - E_{l'})} \right] - \\
& -\frac{1}{24} \sum_{l,l',m''} H'_{ml} H'_{lm''} H'_{m''l'} H'_{l'm'} \left[ \frac{8}{(E_m - E_l)(E_{m'} - E_{l'})(E_{m''} - E_{l'})} + \frac{8}{(E_{m'} - E_l)(E_{m''} - E_{l'})(E_m - E_l)} + \right. \\
& + \frac{4}{(E_m - E_{l'}) (E_{m''} - E_l)} \left( \frac{1}{E_m - E_l} + \frac{1}{E_{m''} - E_{l'}} \right) + \frac{4}{(E_{m'} - E_{l'}) (E_{m''} - E_{l'})} \left( \frac{1}{E_{m'} - E_{l'}} + \frac{1}{E_{m''} - E_{l'}} \right) - \\
& - \frac{1}{(E_{m''} - E_l)(E_{m''} - E_{l'})} \left( \frac{1}{E_m - E_l} + \frac{1}{E_{m'} - E_{l'}} \right) - \frac{3}{(E_m - E_l)(E_{m'} - E_{l'})} \left( \frac{1}{E_{m''} - E_l} + \frac{1}{E_{m''} - E_{l'}} \right) \left. \right] - \\
& - \frac{1}{(E_{m''} - E_l)(E_{m''} - E_{l'})} \left( \frac{1}{E_m - E_l} + \frac{1}{E_{m'} - E_{l'}} \right) - \frac{3}{(E_m - E_l)(E_{m'} - E_{l'})} \left( \frac{1}{E_{m''} - E_l} + \frac{1}{E_{m''} - E_{l'}} \right) + \\
& + \frac{1}{2} \sum_{l,l',l''} H'_{ml} H'_{ll'} H'_{l'l''} H'_{l''m'} \left[ \frac{1}{(E_m - E_l)(E_{m'} - E_{l'}) (E_m - E_{l''})} + \frac{1}{(E_{m'} - E_l)(E_{m''} - E_{l'}) (E_{m''} - E_{l''})} \right],
\end{aligned}$$

$f_c(\mathbf{k}) [f_{V_l}(\mathbf{k})]$  is distribution function of electrons (holes) in the band with energy  $E_c(\mathbf{k}) [E_{V_l}(\mathbf{k})]$  in the conduction band (in branch  $l(hh, lh, SO)$  of the valence band),  $v(c, V_l, SO)$  is the eigenvalue of the projection of the angular momentum operator on the z-axis of the momentum of the digital zone of the ordinal range [3; 4],  $H'_{mm'}$  are matrix elements of  $\vec{A} \cdot \vec{p}$  electron-photon interaction, calculated with respect to the basis wave functions [3; 4] and it is determined using relations (4, a-d), in particular  $H'_{ll'} = \frac{e}{im_0\omega} \left( \frac{2\pi I}{n_\omega c} \right)^{1/2} (\vec{e} \cdot \vec{p})_{ll'}$ ,  $\vec{p}$  is the momentum operator,  $\vec{A}$  is the vector potential of the electromag-

netic wave,  $I$  is the light intensity,  $n_\omega$  is the exponent refraction of the medium at a frequency of  $\omega$ .

To simplify further calculations, we assume that the energy spectrum of current carriers is spherically symmetric, that is, proportional to the square of the wave vector of the current carriers. We also assume that for narrow-gap crystals the matrix elements of the type  $(\vec{e} \cdot \vec{p})_{ll}$  momentum operator is quantitatively equal to  $m_0 P_{cV} / \hbar$ . As a result, we obtain a relation that makes it possible to calculate the spectral and temperature dependences of the coefficient of multiphoton absorption of light due to interband optical transitions

$$W_{c,m'_c;V,m'_V}^{(N)} = \frac{1}{\pi \hbar} \left( \frac{e}{m_0 \omega} \right)^{2N} \left( \frac{2\pi I}{nc} \right)^N (k_{c,m_{V_l}}^{(N\omega)})^3 (N\hbar\dot{E} - E_g)^{-1} \left| \mathfrak{R}_{c,m'_c;V,m'_V}^{(N)}(k_{c,m_{V_l}}^{(N\omega)}) \right|^2 \times \left[ f(E_c(k_{c,m_{V_l}}^{(N\omega)})) - f(E_{V_l}(k_{c,m_{V_l}}^{(N\omega)})) \right], \quad (5)$$

where  $k_{c,m_{V_l}}^{(N\omega)} = \left[ \frac{2m_c m_{V_l}}{m_c + m_{V_l}} \right] (N\hbar\omega - E_g)$  is the wave vector of the final state electron passing from the subband of the valence band to the conduction band, where photons with energy  $N\hbar\omega$  are absorbed,  $m_c(m_{V_l})$  is the effective mass of current carriers in the band  $c(V_l)$ ,  $\left| \mathfrak{R}_{c,m'_c;V,m'_V}^{(N)}(k_{c,m_{V_l}}^{(N\omega)}) \right|^2$  is the value determined by the integral

$\int_{-1}^1 d\cos(\theta) \int_0^{2\pi} d\varphi \int_0^\infty k dk^2 \sum_{\xi, m'_\xi} \left| M_{c,m'_c;V,m'_V}^{(N)}(k, \theta, \varphi) \right|^2$ , and its components are expressed by the following relations

$$\mathfrak{R}_{c,m'_c;V_l,m'_{V_l}}^{(1)}(k_{c,m_{V_l}}^{(1\omega)}) = (\vec{e} \cdot \vec{p})_{c,m'_c;V_l,m'_{V_l}}, \quad (6a),$$

$$\begin{aligned}
& \mathfrak{R}_{c,m'_c;V_l,m'_{V_l}}^{(2)}(k_{c,m_{V_l}}^{(2\omega)}) = \\
& = \sum_{\xi, m'_\xi} (\vec{e} \cdot \vec{p})_{c,m'_c;V_l,m'_{V_l}} (\vec{e} \cdot \vec{p})_{\xi, m'_\xi; V_l, m'_{V_l}} [E_{\xi, V_l}(k_{c,m_{V_l}}^{(2\omega)}) - \hbar\omega]^{-1}, \quad (6b)
\end{aligned}$$

$$\mathfrak{R}_{c,m'_c;V_1,m'_V_1}^{(3)}(k_{c,m_V_1}^{(2\omega)}) = \sum_{\zeta,m'_\zeta;\xi,m'_\xi} (\vec{e} \cdot \vec{p})_{c,m'_c;\zeta,m'_\zeta} (\vec{e} \cdot \vec{p})_{\zeta,m'_\zeta;\xi,m'_\xi} (\vec{e} \cdot \vec{p})_{\xi,m'_\xi;V_1,m'_V_1} \times [E_{\zeta,V_1}(k_{c,m_V_1}^{(3\omega)}) - 2\hbar\omega]^{-1} [E_{\xi,V_1}(k_{c,m_V_1}^{(3\omega)}) - \hbar\omega]^{-1}, \quad (6c)$$

$$\mathfrak{R}_{c,m'_c;V_1,m'_V_1}^{(3)}(k_{c,m_V_1}^{(2\omega)}) = \sum_{\zeta,m'_\zeta;\xi,m'_\xi;\zeta',m'_\zeta'} (\vec{e} \cdot \vec{p})_{c,m'_c;\zeta,m'_\zeta} (\vec{e} \cdot \vec{p})_{\zeta,m'_\zeta;\xi,m'_\xi} (\vec{e} \cdot \vec{p})_{\xi,m'_\xi;\zeta',m'_\zeta'} (\vec{e} \cdot \vec{p})_{\zeta',m'_\zeta';V_1,m'_V_1} \times [E_{\zeta,V_1}(k_{c,m_V_1}^{(4\omega)}) - 3\hbar\omega]^{-1} [E_{\xi,V_1}(k_{c,m_V_1}^{(4\omega)}) - 2\hbar\omega]^{-1} [E_{\zeta',V_1}(k_{c,m_V_1}^{(3\omega)}) - \hbar\omega]^{-1}, \quad (6d)$$

Below we will use the Kane model in narrow-gap crystals. According to this model,  $(\vec{e} \cdot \vec{p})_{c,m'_c;V_1,m'_V_1}$  matrix elements characterizing optical transitions occurring from the subbands of heavy and light holes in the valence band to the conduction band do not depend on the wave vector of current carriers [2]. In particular,  $(\vec{e} \cdot \vec{p})_{c,m'_c;c',m'_c}$  matrix elements will be less than  $(\vec{e} \cdot \vec{p})_{c,m'_c;V_1,m'_V_1}$  matrix elements for interband optical transitions in the region located near the cen-

ter of the Brillouin zone. This type of optical transition occurs due to  $(\vec{k} \cdot \vec{p})$  mixing zones [3–5]. As a result, the matrix element of the optical transition is proportional to  $(\hbar P_{cV} / (m_0 E_g)) (\vec{e} \cdot \vec{p})_{c,m'_c;V_1,m'_V_1}$ , and its share in the multiphoton absorption coefficient of light absorption is relatively small.

If we take into account that, according to the method for calculating the effective mass [3,4], we have the relation  $p_{cV} = \hbar m_0 P_{cV} / \hbar$ , then the coefficient of multiphoton absorption of light has the form

$$K^{(N)}(\omega, T) = \frac{\sqrt{2} E_g^3}{8\pi^2 \hbar f^3 P_{cV}^3} \left( \frac{4\pi^2 N^2 \hbar^2 e^2}{n_\omega E_g^2} \frac{\hbar^2 e^2}{m^2 c} \right)^N \frac{(N\hbar\omega / E_g - 1)^{1/2}}{(N\hbar\omega / E_g)^{2N-1}} \times \left[ f(E_c(k_{c,m_V_1}^{(N\omega)})) - f(E_{V_1}(k_{c,m_V_1}^{(N\omega)})) \right] \sum_{m'_c, m'_\zeta, m'_\xi, m'_V} \mathfrak{R}_{c,m'_c;V_1,m'_V}^{(N)}(k_{c,m_V_1}^{(N\omega)})^2 \quad (7)$$

Using (7), we can analyze the spectral dependence of the multiphoton light absorption coefficient

for a specific case. This case will be covered in our next work.

### References:

1. Landau L. D., Lifshits E. M. Quantum Mechanics (Nonrelativistic Theory). – Vol. III. – M.: Fizmatlit, 2004. – 800 p.
2. Arifzhanov S. B., Ivchenko E. L. Multiphoton absorption of light in crystals with the structure of diamond and zinc blende // FTT. 1975. – Vol. 17. # 1. 81–89 b.
3. Bir G. L., Pikus G. E. Symmetry and deformation effects in semiconductors. – M.: Media, 2012. – 584 p.
4. Ivchenko E. L., Rasulov R. Ya. Symmetry and real band structure of semiconductors. – Tashkent. Fan, 1989. – 126 p.
5. Rasulov R. Ya., Akhmedov B. B., Muminov I. A., Umarov B. B. Crystals with tetrahedral and hexagonal lattices. Fergana. Classic. 2021. – 129 p.

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## THEORETICAL ANALYSIS OF MULTIPHOTON INTERBAND ABSORPTION OF POLARIZED LIGHT IN CRYSTALS WITH A COMPLEX ZONE (Part 2)

**Abstract.** For specific cases, the spectral and temperature dependences of the coefficient of interband multiphoton absorption of light in narrow-gap direct-gap semiconductors are calculated. Optical transitions occurring in the presence of even and odd photons were calculated in the spherically symmetric approximation in the energy spectrum of current carriers.

**Keywords:** semiconductor, optical transition, photon, two-band Kane's approximation.

The first works on two-photon interband transitions in crystals were carried out in the early 1960 y., shortly after the appearance of lasers [1–3]. When calculating the matrix elements of two-photon transitions in crystals, perturbation theories were used in the field of an unpolarized electromagnetic wave [2; 3], where the two-band Kane model was used.

In [4–8], both theoretically and experimentally, the linear-circular dichroism (LCD) of two- and three-photon absorption of light in crystals of cubic symmetry was investigated, but the question of spectral and temperature researches of multiphoton interband absorption of polarized light in narrow-gap crystals in the three-band Kane approximation remained open.

In the first part of this article, a general expression is obtained for the spectral and temperature depen-

dence of both the probability of multiphoton optical transitions and the coefficient of multiphoton absorption of polarized light in narrow-gap crystals. Based on the results obtained in the first part of this work, below we will carry out a theoretical analysis of cases when this odd and even number of photons is involved. It should be noted that in further calculations (to simplify the solution of the problem) we will not focus on multiphoton optical transitions with simultaneous absorption of two photons, i.e. we will assume that photons are absorbed separately. If we pay attention to the fact that in quantitative calculations the conservation law for multiphoton absorption of light energy is described by a function  $\delta\left(\frac{\hbar^2 k^2}{2m_c} + E_g + \frac{\hbar^2 k^2}{2m_{v_i}} - N\hbar\omega\right)$  with which it is possible to determine the dependence of the wave vector

of electrons in the final state on the band parameters and on the frequency of light, then for expression (6) mentioned in part 1, we get:

$$\Re_{c,m'_c;V,m'_V}^{(N)} \left( k_{c,m_{V_1}}^{(N\omega)} \right) = \frac{(\vec{e} \cdot \vec{p})_{c,m'_c;V,m'_V} \left| (\vec{e} \cdot \vec{p})_{c,m'_c;V,m'_V} \right|^{N-1}}{(-1)^{(N-1)/2} 2^{N-1} \left[ \left( \frac{N-1}{2} \right)! \right]^2 (\hbar\omega)^{N-1}}. \quad (1)$$

In particular, the spectral and temperature dependence of the coefficient of multiphoton absorption of light in the presence of an odd number of photons is determined by the expression

$$K^{(2N-1)}(\omega, T) = C_{2N-1} F_{2N-1} \left( (2N-1)\hbar\omega / E_g \right) \hbar^{2(N-1)} \times \frac{P^{4N-5}}{n^{2N-1} E_g^{8N-7}} \left[ f \left( E_c \left( k_{c,m_{V_1}}^{(2N-1,\omega)} \right) \right) - f \left( E_{V_1} \left( k_{c,m_{V_1}}^{(2N-1,\omega)} \right) \right) \right], \quad (2)$$

where

$$C_{2N-1} = \sqrt{2} \left( \frac{e^2}{\hbar c} \right)^{2N-1} \frac{N^{8N-6} \pi^{2(N-1)} 2^{1-2N}}{f^3 [(N-1)!]^4} f_{4N-2},$$

$$F_{2N-1} \left( \frac{(2N-1)\hbar\dot{E}}{E_g} \right) = \left( \frac{(2N-1)\hbar\dot{E}}{E_g} - 1 \right)^{1/2} \cdot \left( \frac{(2N-1)\hbar\dot{E}}{E_g} \right)^{7-8N}. \quad (3)$$

$$\Re_{c,m'_c;V,m'_V}^{(2N)} \left( k_{c,m_{V_1}}^{(2N\omega)} \right) \approx \frac{2N}{2(N-1)!} (\vec{e} \cdot \vec{p})_{c,m'_c;V,m'_V} \left| (\vec{e} \cdot \vec{p})_{c,m'_c;V,m'_V} \right| \frac{2(N-1)m_0(m_c + m_V)\hbar k_{c,m_{V_1}}^{(2N\omega)}}{m_c m_V (\hbar\omega)^{2N-1}} \times \left[ f \left( E_c \left( k_{c,m_{V_1}}^{(2N,\omega)} \right) \right) - f \left( E_{V_1} \left( k_{c,m_{V_1}}^{(2N,\omega)} \right) \right) \right]. \quad (4)$$

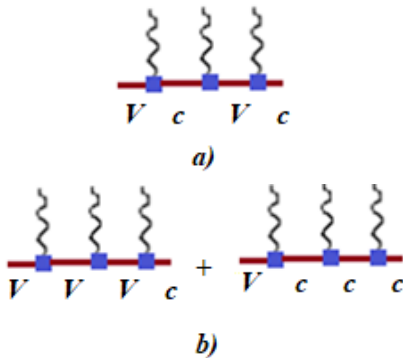


Figure 1. Schematic representation of optical transitions between three types of interband (a), between subzones of one zone (b)

Figure 2 shows the plots of function  $F_{2N-1} \left( \frac{(2N-1)\hbar\dot{E}}{E_g} \right)$  describing the spectral dependences of the light absorption coefficient for three- and five-photon optical transitions corresponding to the optical transitions described in Figure 1. It can be seen from (Fig. 2) that in narrow-gap crystals the spectral dependence of the three- and five-photon light absorption coefficients passes through a maximum, and with an increase in the photon energy, the maximum values of the functions  $F_N(x)$  are shifted towards low frequencies. This is due to the fact that, in narrow-gap crystals, not only the matrix elements of optical transitions, but also the densities of states of current carriers depend on the ratio  $\frac{(2N-1)\hbar\dot{E}}{E_g}$ .

A quantity characterizing the absorption of an even number of photons.

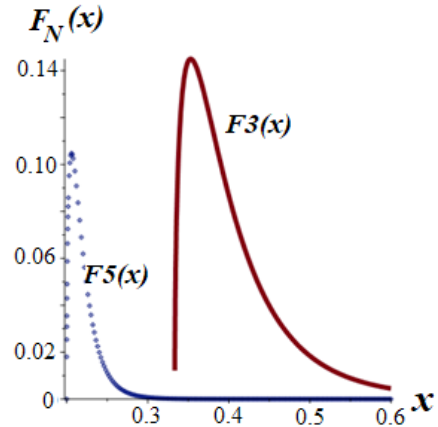


Figure 2. Graphs of functions  $F_N(x)$ , describing the spectral dependence of the light absorption coefficient in the case when the number of single photons is odd:  $x = N\hbar\omega / E_g$

In this expression, the spectral dependence strongly depends on the frequency of light (with respect to case  $(2N-1)$ ) because the quantity  $\mathfrak{R}_{c,m'_c;V,m'_V}^{(2N)}$  depends on the wave vector  $k_{c,m'_V}^{(2N\omega)}$  in the presence of an even number of photons, while for an odd number of photons such dependence (4). As a result, the coefficient of multiphoton absorption of light with the participation of an even number  $(2N)$  of photons is determined as follows

$$K^{(2N)}(\omega, T) = C_{2N} F_{2N} \left( \frac{2N\hbar\omega}{E_g} \right) \hbar^{2N-1} \frac{P^{4N-3}}{n^{2N} E_g^{8N-5}}, \quad (5)$$

where

$$C_N \approx \left( \frac{e^2}{\hbar c} \right)^N N^{4N} \pi^{N-1} 2^{N-1} \sqrt{2} [(N-1)!]^2 f_{2N-2} f^{-1}, \quad (6)$$

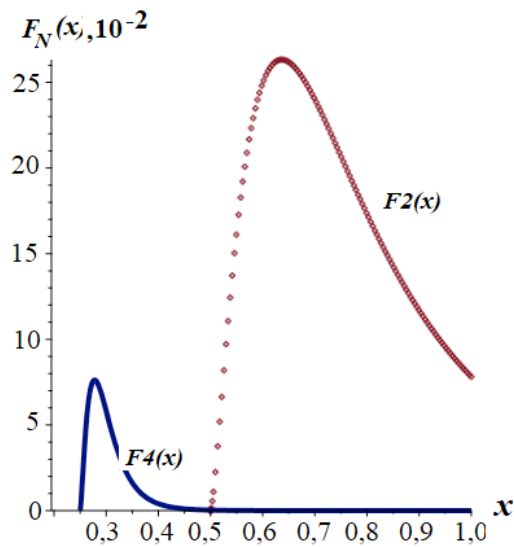


Figure 3. Graphs of the function  $F_N(x)$  for different values  $N$  :  $x = N\hbar\omega / E_g$ .

For a more detailed analysis of the results in (Fig. 5) shows the graphs of function  $F_N(x)$  for different values:  $x = N\hbar\omega / E_g$ , where the same dependences are obtained, shown in (Fig. 2, 3).

$$F_N = (N\hbar\omega / E_g - 1)^{3/2} / (N\hbar\omega / E_g)^{4N-1}. \quad (7)$$

In (fig. 3) it is shown that plots of  $F_{2N}(x)$  functions from  $x = \frac{2N\hbar\dot{E}}{E_g}$ , which describe the light absorption coefficient for two- and four-photon (see Fig. 4) optical transitions  $\left( x = \frac{2N\hbar\dot{E}}{E_g} \right)$ . It can be

seen from Fig. 3 that in narrow-gap crystals the spectral dependence of the two- and four-photon absorption coefficients of light passes through a maximum and it shifts to the region of low frequencies as the photon energy increases.

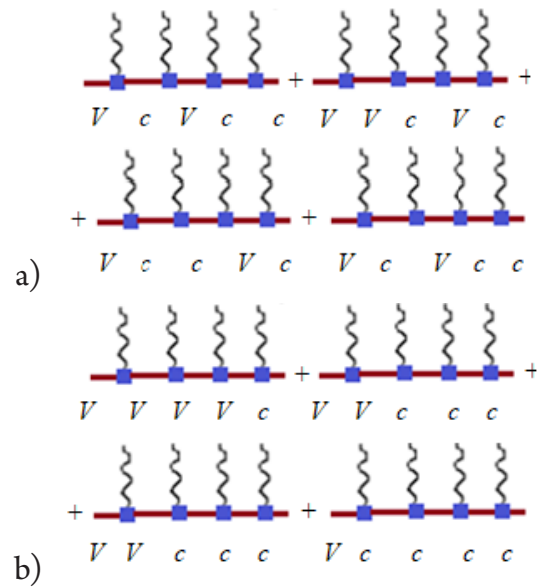


Figure 4. Schematic representation of four-photon optical transitions: three interband and one intraband (a), one interband and three intraband transitions (b).

Now, based on the above results, we present the spectral dependence of the coefficients of two- and three-photon absorption of light.

$$K^{(N=2)}(x) = K_{20} (2x)^{-5} (2x-1)^{3/2},$$

$$K^{(N=3)}(x) = K_{30} (3x-1)^{1/2} (3x)^{-9}, \quad (8)$$

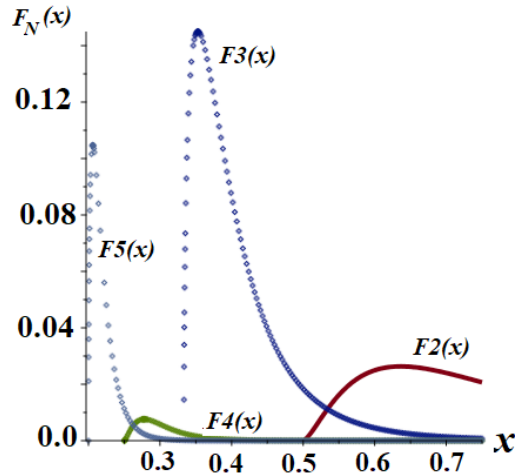


Figure 5. Function dependence  $F_N(x)$  on for different  $x = N\hbar\omega / E_g$

Here  $x = 3\hbar\omega / E_g$ ,  $K_{20} = 0.4 \frac{\hbar P_{cV}}{n^2 E_g^3}$   
 $K_{30} = 5,5 \frac{\hbar^2 P_{cV}^3}{n^3 E_g^7}$ . In particular,  $K_{30} = 73.8 \frac{m^3}{GWt^2}$  as-  
 sumes the value InSb (see Table 1). In quantitative  
 calculations, the fine structure constant is taken into  
 account equal to  $e^2/(\hbar c) = 1/137$ . Figures 6 and 7  
 show, as an example, the spectral dependences of the  
 coefficients of two and three-photon absorption of  
 light in a narrow-gap semiconductor In As.

It can be seen from these results and (Figures 5–7)  
 that with an increase in the frequency of light, the co-  
 efficient of multiphoton absorption of light first in-  
 creases and reaches a maximum, and then decreases.  
 This is due to the specificity of the Kane model used  
 to research the band structure in narrow-gap crystals.  
 In particular, in the Kane model, some off-diagonal  
 matrix elements of the momentum operator do not  
 depend on the wave vector of current carriers, which  
 does not occur in the Luttinger-Kohn model.

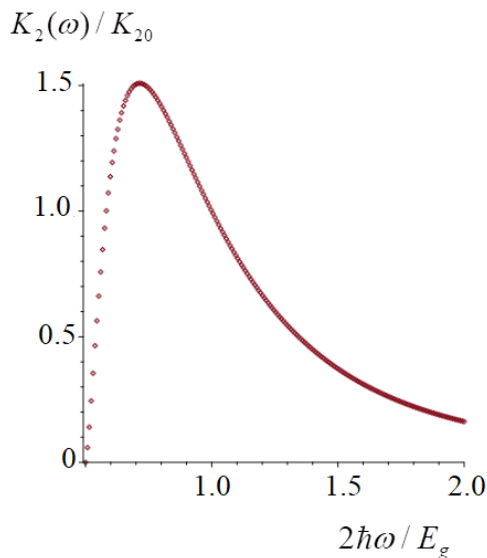


Figure 6. Spectral dependence of the coefficient  
 of interband two-photon absorption  
 $K^{(N=2)}(2\hbar\omega / E_g) / K_{20}$  in a narrow-gap  
 semiconductor

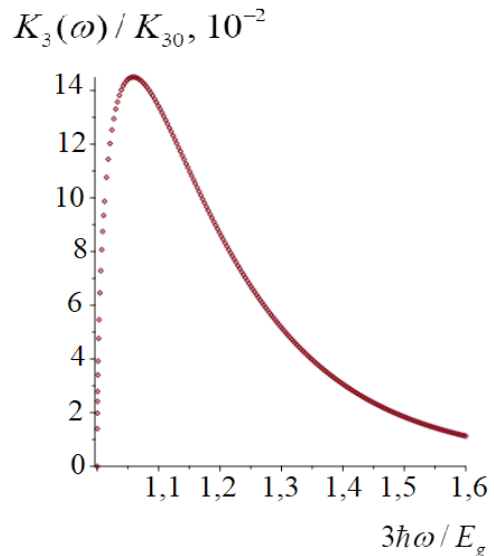


Figure 7. Spectral dependence of the coefficient  
 of interband two-photon absorption  
 $K^{(N=3)}(3\hbar\omega / E_g) / K_{30}$  in a narrow-gap  
 semiconductor

Table 1. – Numerical values of the band parameters of some semiconductors

Crystal	InSb	GaAs	InAs
$E_g$ (eV)	0.235	1.519	0.417
$E_p$ (eV)	23.3	28.8	21.3
$\Delta_{SO}$ (eV)	0.81	0.34	0.39
$\gamma_1$	34.8	6.98	20.0
$\gamma_2$	15.5	2.06	8.5
$\gamma_3$	16.5	2.93	9.2
$m_{SO}/m_0$	0.11	0.172	0.14
$n$	3.95	3,42	3.42

### References:

1. Miller A., Johnston A., Dempsey J., Smith J., Pidgeon C. R. and Holah G. D. Two-photon absorption in In Sb and Te // J. Phys. 1978. – 12. – P. 4839–4849.
2. Comparee C. R., Pidgeon B. S., Wherrett A. M., Johnston J. Dempsey, and A. Miller. Two-photon absorption in zinc-blende semiconductors // Phys. Rev. Lett. 42, 1785–1788 (1979), and references therein.
3. Braunstein R. and Ockman N. Optical double-photon absorption in CdS// Phys. Rev. A 134, 1964. – P. 499–507.
4. Rasulov R. Ya. Polarization optical VA photovoltaic effects in semiconductors with linear and nonlinear absorption of light. Dissertation for thesis for doctor's degree phys.-math. sciences. – St. Petersburg. 1993.– 206 p. (in Russian).
5. Ivchenko E. L. Two-photon absorption and optical orientation of free carriers in cubic crystals // FTT. 1972. – T. 14. – Issue 12. – FROM. 3489–3485. (in Russian).
6. Beregulín E. V., Dvornikov D. P., Ivchenko E. L., Yaroshetskiy I. D. Polarization properties and linear-circular dichroism in nonlinear light absorption in  $A_2B_6$  semiconductors // FTP.1975.– T. 9. – No. 5. –P. 876–886. (in Russian).
7. Arifzhanov S. B., Ivchenko E. L. Multiphoton absorption of light in crystals with the structure of diamond and zinc blende // FTT. 1975. – Vol. 17. # 1. – P. 81–89 p. (in Russian).
8. Rasulov R. Ya. Linear circular dichroism in multiphoton interband absorption in semiconductors // FTP.– St. Petersburg, 1993.– T.35.– Issue 6.– P. 1674–1678. (in Russian).
9. Rasulov V. R. Rasulov R. Ya., Eshboltaev I. Linearly and circular dichroism in a semiconductor with a complex valence band with allowance for four-photon absorption of light // Physics of the Solid State.– Springer, 2017.– Vol.59.– No.3.– P. 463–468.



## Section 7. Philology and linguistics

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### FEATURES OF IMPORTANT THEMES IN LITERATURE

**Abstract.** This article will help you in solving the problem that arose after the writers gained the independence. The article reveals the general educational role of literature and addresses the theme of searches for the way to create a modern personality. The scientific article is devoted to the study of centuries-old spiritual treasures, monuments, and advanced traditions of the people. The author looked deeply into modernity and paid special attention to the definition of eternal, growing, educated problems from the variety of phenomena that arise. This issue is still poorly studied and therefore requires a deeper study. The article provides a detailed analysis of the writer's attitude to civic activity in future, to people's fate. The article will be very useful information for future writers.

**Keywords:** literature, tradition, writer, spiritual treasure, problem, people.

The educational and calm nature of literature is due to the deeper presentation of the era realities, the more complete and complex contemporaries characteristics. And it is not necessary to limit the truth of the era to the volume of the most recent years. It is also necessary to understand the meaning of the contemporary image. Today's people are not neutral souls who have nothing to do with the past or the future. In order for an advanced person of our time to make a breakthrough in his own way, to leave an example and a mark, it is necessary to fully immerse himself in the precious traditions of the past. It would be naive to think that "I will get to finish at once" and it is impossible.

A good tradition that passes from yesterday to the present is not just a bare reality, which can only be described and remembered, but a living wealth that gives the content, purpose of our existence today, a vital need for life. It has long been known that a person's intelligence or judgment is distinguished from that way how the country, people approach the path, experience. In this regard, it is necessary to take into account the peculiarities of the image of a modern person.

Since the article is a complex work that requires scientific training, the following scientific methods were used:

- 1) analysis;
- 2) comparative typological;

- 3) systematization;
- 4) complex.

The paths of past life are like a ladder that goes up. Undoubtedly, people rely on the experience of the past to find a clean and natural path, so that they will not go astray in future. For this reason, the higher the tower, from where a person can see the past, the more he will see the nobility and errors of the past era. And it is difficult to believe that a person who does not respect the centuries-old spiritual heritage, monuments, and advanced traditions of the people will do something good for society. The ability to respect good habits was the most distinctive feature of humanity, the ability to take good steps only by basking in the achievements of the past, in short, the ability to teach in the «book of memory» of fairy tales.

When we talk about loyalty to traditions, we are not just talking about some progressive rituals left over from ancient centuries. It is necessary to fight for the revival of the advanced traditions and consciousness that have been revived, developed, and improved over the past half-century, in the time of independence. It should symbolize the most desirable characteristics of the advanced generation, which is firmly rooted in the social, social, ethical, aesthetic, and principles formed over the years of independence.

“A deep look at the times and the analysis of the most viable, growing, and knowledgeable problems of the emerging phenomena is a criticism of how wise the writer is to the civic activity, the people’s fate, and the braid movement. As much as it is necessary to remember the experience of history in order to comprehensively understand the processes of life today, relations between people, contradictions, and struggles, it is necessary to think about what will happen tomorrow. An honest, resourceful writer cannot ignore the streets of society, the dialectics of people’s character, the evolution of spiritual successes and losses” [1, P. 165].

To focus the realities of the modern era in the work means to raise the problems of facing the peo-

ple and the community, which must be solved in the future. We are more interested in knowing certain people in life, their aspirations, methods of struggle, the nature and direction of their actions than in the isolated existence of groups. Therefore, only a work that has found a link between the present and the future will have a modern appearance.

“Life itself has a strong pace, creates many surprises and situations. In the case of Kazakhstan, many examples prove it. Let’s take the issue of economical, forced use of land wealth and its wastefulness and degradation. There is a very deep lining to this problem, which, from the outside, seems to be solved only by economic institutions. The treasure of the Earth is necessary not only for the present, but also for the future community. There is no man who does not depend on the treasure. So, is it possible to remain an observer of this priceless wealth – if the land is devalued by some heads of institutions, left untreated and subject to erosion” [3, P. 56]?

Today’s topic is interesting and difficult only for a persistent seeker, a brave observer. Often there are faults in oral works that reflect the truth of criticism, criticism of conflicts, making unverified conclusions, examining life only from individual aspects. This is due to the fact that a lot of works written on this topic are remarkable, but they often do not show a new quality. Of course, every writer works according to his talent, according to his goal. This is an obvious thing. We are talking about creative activity, research, and broad mindedness. In this regard, the pace of development of our literature is often ignored.

“It is well known that literature can never tell the phenomenon of life completely. But there will be a lot of events, adventure problems that no one can ignore. The inability of the writer to deal with the problems that await his wit, intervention, artistic accumulation and “judgment”, for whatever reason, does not bring honor to literature” [3, P. 56].

It is obvious that the search for the creation of a modern personality brings great progress and new images to our literature.

Until the recent time, the common denominator met in many works was the discrepancy in transmission of the inseparable connection between the social life of a person and his personal life. In some works, the main object is to show the work done by the hero in production or in an institution, but in some works, on the contrary, only the hero's individual's sadness, feelings and intuition are being interested. This "loss" also had its own reason, a secret. It is natural that where life is not fully assimilated by matter, the structure of the work will look like a

house without finishing. From the outside, it is clear that the "private" and "public" appearance of the heroes leads, of course, to such "double-sided" forgery. The person's attitude, intervention, desire towards each case and phenomenon is reflected in the truth. It is not taken into account that there is no need to divide the life of a hero into two systems.

Even in order to find the natural body of life among the thick line of phenomena, writers have to go through a lot of experience and learn from the traditions of true literature.

### References:

1. Duissenov M. Collection of multi-volume works: novellas.– Kyzylorda: Kyzylorda-Kanagaty, 2016.– Vol. 4.–508 p.
2. Works of Negimov S. In five volumes by S. Negimov. – Nur-Sultan: Folio, 2020. – 400 p.
3. Kemelbayeva A. Soz hikmet. Essay, articles, interviews / A. Kemelbayeva.– Almaty: Dastur, 2016. – 556 p.

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## **INFLECTIVE PERSONALITY AND INFLECTIVE NARRATIVE IN COURT DISCOURSE**

**Abstract.** The article examines the communicative modes of English court discourse. The author analyses the inflective subtype of the narrative communicative mode. The organization of the inflective narrative and the linguistic means that create it are singled out.

**Keywords:** court discourse, communicative mode, inflective narrative, inflective personality, linguistic means.

### **Introduction**

Until recently, it was common to treat law as something that exists, but the language was considered to be as a form of expression of law, as something that is subject to law. However, the discursive turn has shifted the focus on the study of phenomena of the language through the discourse analysis, which is study of Language in its socio-cultural and interactive aspects [1, 55]. As a result, a new relationship has developed within the dichotomy language law: law is inextricably linked to words. Moreover, law cannot exist at all without linguistic expression. The set of presumptions that form the basis of a litigant's thinking, both legal and linguistic, determines the appearance of meaning in the text produced by courtroom speech. The involvement of participants in the process of creating law is one of the specific characteristics of judicial discourse. There may also be objections, since participants of all discourses are involved in the creation of one kind of discourse or another – political discourse, mass media discourse, theatrical discourse, pedagogical discourse, etc. However, in judicial discourse there is a hope for truth, an expectation of “just retribution” from the law, which is an essential *modus operandi* of human existence in principle. As a semiotic model, justice manifests its significance when a drama is “played

out over expected justice, in which retribution for the violation of the prohibition is recounted, hence any criminal case is a story about the struggle of evil against good and affirmation of ethical choice in favour of good” [2, 25]. Therefore, it is important for senders of speeches in court to link their roles and their speaking activities to a position of good, a position of affirmation of truth in the eyes of the jury, the audience, and witnesses. In that regard, we hypothesise that the key trial players create a specific communicative mode in order to achieve their communicative goal pursued. To confirm our hypothesis, let us put forward the following aim: investigation communicative modes in court discourse. With this aim in mind, we are going to focus on such objectives as: 1) to establish communicative modes in court discourse; 2) to describe the organisation of the communication modes in court discourse.

### **Materials and methods**

Being aware of the fact that the court discourse covers a number of communicative modes, which cannot be analyzed within the same article, we reduced our research by one communicative mode – inflective communicative mode and the way of its organization.

Thus, the first stage involves a random selection of factual material. The second one – analysis of the

selected material in terms of key characters. The third stage requires structuring the findings received. Accordingly, to carry out our research, we selected and described the language material which was used in the two speeches (17,030 symbols including blanks) delivered by the prosecutor Mr. Eric Warner (Amadou Diallo Trial, 2000) and by the prosecutor Thomas F. Norman (Dan White Trial, 1979). The speeches are opening statements that were presented during the trials.

In the process of investigation, the following research methods were used: linguistic observation and analysis as well as cognitive method, pragmatic analysis method, critical discourse analysis method. We'd like to emphasise the method of discourse analysis. It investigates the language not merely as a way to create and convey meanings of words but to achieve a certain effect.

### Results and discussion

The way of speaking in court discourse is determined by a strictly established ritual and the role of each participant of the trial, which cannot be changed. Therefore, each participant is recommended a different "style of speech behavior", according to O'Barr's terminology, prescribed by the ritual of court proceedings. In his essay "Linguistic Evidence: Language, Power, and Strategy in the Courtroom" (1982), O'Barr identifies such styles of speech behaviour in the courtroom as powerful speech and powerless speech. These styles of speech behaviour manifest themselves in narrative mode, mentative mode and fragmented mode [3].

Let us focus on the analysis of the inflective (from the verb to inflict that means "to cause to suffer") narrative. The inflective narrative is created by the communicative personality of the prosecutor. The tasks of the inflicting personality are exposing and accusing through the strategy of verdict making in the process of argumentation, as well as convincing the judge and the jury of the guilt of the defendant using persuasive tactics. The representative of the prosecution, as a person in a position of power, dem-

onstrates an appropriate speech behaviour (powerful speech) in the courtroom and is implemented in the mode of an inflective narrative (term proposed by us). In identifying this form of narrative, we relied in particular on the research by D. Polkinghorne [4]. He argues that the narrative acts as a fundamental scheme linking certain events into a whole, and that these events can take on different meanings and lead to different forms of narrative, which happens in judicial discourse, when the same events are interpreted differently by discursive personalities. Different interpretations are based on different ideas, and only "A plot is able to weave together a complex of events to make a single story" [4, 9]. A story presented in an inflective narrative fulfils a number of tasks, chief among which are proving the guilt of the defendant and persuading the court.

If analyzing it from the organizational point of view, first, we should stop at the definition of a key sign (V. Lukin's term) [5]. The term key sign is synonymous to the terms "fundamental pillar" (V. Odintsov), "key elements" (O. Puzyrev), "semantic milestones" (O. Sokolov), and "key elements" (O. Sokolov), to name but a few [5, 83]. Key signs are the main elements of discursive space organisation, because any discursive space is organised. R. G. Mshvidobadze pointed out this peculiarity, pointing out that even at the invisible level everything is arranged so to influence the addressee's mind [6]. We will illustrate this hypothesis on the example of the opening statements on the part of the accuser. In the first part of his speech, the accuser creates a semantic layer with the meaning "an ordinary person who does not pose a threat to society": "***not an imposing man, simple life, worked 10 to 12-hour days, sold videotapes and things like that, spoke with his roommate about their utility bill, unarmed, minding his own business and doing nothing wrong***" [7]. Then there is a sudden change in the accuser's speech behaviour, expressed by the words *dead and die*. A police officer killed an ordinary young man of 22 years old. In the opinion of the prosecutor, they

deliberately did it. The prosecutor does not speak about it indirectly. For example, instead of saying that they had the intention to kill him, he says that they had no such intention: “*had no intent to kill him*”. Then the author clarifies that we do not believe in this intention: “*we do not believe that these four defendants woke up that morning or came on duty that night with the intent to kill Amadou Diallo or anybody else. We do not say it. We do not believe it*” [7]. By moving the negative particle to the main part of the sentence, the idea of the impossibility of the police officers’ actions is emphasized.

Culmination in the sentence takes place when the accuser explicitly states that the police officers made a conscious decision to shoot a person: “*But when they got out of the car, we will prove when they got out of the car in front of Amadou Diallo’s home in the early morning of February 4 they made the conscious decision to shoot him. They made the conscious decision to shoot a man standing in a confined space of a vestibule that was not much bigger than an elevator. They made the conscious decision to shoot into the vestibule of an occupied apartment building where people lived in the early morning hours, when most of them would be home*” [7]. Repetition, firstly, enhances the impact on the recipient, and secondly, it lingers in his memory (anchor principle). All this occurs against the background of everyday speech: “*vestibule of an occupied apartment building where people lived, in the early morning hours, most of them, be home*” [7].

The third block of the discursive space is organised through the use of language tools that share the theme evidence: “*Richard Murphy pulled the trigger of his nine millimeter pistol four times. Kenneth Boss pulled the trigger of his nine millimeter pistol five times. Sean Carroll and Edward McMellon pulled the triggers of their nine millimeter pistols 16 times each. The shots were fired at very close range from in front of the vestibule. And let us be absolutely clear. Each shot required a separate pull of the trigger*” [7]. Further in the text are the results of such a conscious decision, which resulted in forty-four bullets that put holes in

him. Moreover, many of the shots were fired while he was lying on the ground: “*Forty-one bullets were fired by these four defendants. Nineteen bullets struck Amadou Diallo. A number struck him while he was falling down or actually on the ground*” [7].

The prosecutor is already absolutely clear about his position by saying: “*And let us be absolutely clear*” [7]. He qualifies their conduct as intentional, reckless, and unreasonable based on the evidences that have the great impact on the recipients, thus making an acquittal impossible: “*We ask you to find these defendants guilty of their intentional, depraved, reckless, unreasonable and unnecessary conduct that jeopardized the lives of Amadou Diallo’s neighbors and destroyed Amadou Diallo’s life*” [7].

We will present this in the form of a scheme in which the first block is organised to present the victim as an ordinary person; the second block contains a statement that the officers are aware of their actions; the third block contains evidence that would prevent the imposition of a verdict.

The opening statement of the prosecution in the Dan White Trial (1979) follows the same pattern of three blocks. First, the prosecutor describes the antecedent events, united by the “ordinary affairs” theme and the “lawfulness” theme, as each person applied for employment and dismissal, which is a commonplace matter and the decision to do so, was made voluntarily by the defendant based on personal motives: “*The defendant in this case, Mr. Daniel James White, had been the duly-elected Supervisor of District 8 of San Francisco, until for personal reasons of his own, he tendered his resignation in writing to the Mayor on or about November the 10<sup>th</sup>, 1978, which was approximately 17 days before this tragedy occurred*” [8].

As in the first case, the subsequent statement contrasts with the information provided: “*Mr. White called his legislative assistant, Miss Apcar, asked her if she would pick him up, which she did. Mr. White, before leaving his home, armed himself with a .38 Smith and Wesson revolver, which is commonly called a Chiefs Special. It’s a five-shot revolver with a two-inch*

barrel. *The gun was loaded when he took it, put it in a holster, strapped it in his belt*" [8]. In essence, this statement could be called a trigger statement, a shock statement. In the first case, the trigger statement was a claim of deliberate police action, in this case the claim that a perfectly law-abiding citizen, the emphasis was on that earlier, goes to an official meeting but takes a loaded revolver with him, which also becomes evidence of the defendant's deliberate action, although no argument has yet been made.

The third block already contains further evidence of the intentionality of D. White's actions, although the word "intention" itself is not explicitly mentioned: *"Instead of going around to the front door on Polk Street, or another main door on Van Ness Avenue, Mr. White remained outside the door at the basement level on the McAllister Street side for a few minutes, and then he entered the building through the window of an engineer's office. Now, this is not a regular way to enter the building"* [8]. Firstly, the defendant enters the building through a window, which, as the prosecutor rightly observes, is not the usual way of entering the premises. Obviously, the question of intent would be proved at the hearing of the case. However, the defendant's actions were not in dispute because he had been seen by the staff and when he entered the measure's office gunshots could be heard and no other visitors or staff were in the office at the time: *"Mr. White drew out his .38 special revolver and he fired two shots into the Mayor's body. After the Mayor fell to the floor, disabled, then he discharged two more. 38 special rounds into the Mayor's head, on the right side, about the area of the right ear, at very close range, which were not unlike coup de grace shots"*. [8]. Draw your attention to the last words of the prosecution about the control shot, which again shows the criminal intent of the defendant and not the spontaneity of his actions. In the same way, the defendant committed the second murder: "The two of them went into the office. The door was shut and Harvey Milk was heard to cry out or exclaim, "Oh, no," or words similar to that, which then was followed by a series

of shots. *Harvey Milk was shot three times in the body with that same .38 Smith and Wesson Chief Special revolver, five shot. He took three shots to the body and when he fell to the floor, he was shot twice in the back of the head"* [8]. In this block, the linguistic means are represented by two thematic groups – "hypocrisy" and "cold-bloodedness": *"The Mayor had some other appointments at 11:00 o'clock, which were otherwise scheduled. The mayor, close to 11:00 o'clock, notified Cyr Copertini that he would now see Mr. White"* (the mayor received the defendant at his request at an unscheduled time); *"Mr. Harvey Milk, and the defendant, were acquainted with each other; both had been on the Board of Supervisors. The defendant put his head into Harvey Milk's office, where Mr. Milk was at that time sitting with his volunteer legislative aide, and he inquired of Harvey Milk, "Say, Harvey, can I see you a moment: and the reply from Harvey Milk was, "Well, sure.""* [8] (the defendant and the second victim knew each other well, as they worked together and held the same positions, so the murdered person readily responded to his colleague's request). It is worth noting that in cases such as these, when serious charges are made, each statement takes on a certain pragmatic meaning: to emphasise the defendant's intentional actions and his reprehensible behaviour, which also serves as an aggravating circumstance. Let us present this in the form of a scheme: normal things, legality – loaded revolver – evidence.

### Conclusions

Each participant in court realises a particular style of speech behaviour, prescribed by the ritual of court proceedings. These styles of speech behaviour manifest themselves in narrative mode, mentative mode and fragmented mode.

The narrative mode, created by the communicative personality of the prosecutor, is called inflective in our terminology. The inflective narrative is usually organised with the help of blocks. The first block represents the background to this case; the second one is culmination of the speech; the third one represents case evidence.

### References:

1. Busygina N. P. “Diskursivnyj povorot” v psihologicheskikh issledovaniyah soznaniya. [The “discursive turn” in psychological research on consciousness]. In *Konsul'tativnaya psihologiya i psihoterapiya*. [Counselling psychology and psychotherapy]. – Vol. 18(1). 2010. – P. 55–82.
2. Alexandrov A. S. *Yazyk ugovnogo sudoproizvodstva*. [The language of criminal proceedings]. 2003. – 60 p.
3. O'Barr W. *Linguistic Evidence. Language, Power and Strategy in the Courtroom*. New York, London, Paris, San Diego, San Francisco, Sao Paulo, Sydney, Tokyo, Toronto: Academic Press, 1982. – 192 p.
4. Polkinghorne D. *Narrative Knowing and the Human Sciences* / D. Polkinghorne.– New York: State University New York Press, 1988. – 232 p.
5. Lukin V. A. *Lingvo-semioticheskie svojstva hudozhestvennogo teksta, ego komponenty i parametry tipologicheskogo opredeleniya*. [Linguistic and semiotic properties of a fiction text, its components and typological definition parameters]. 2003. – 413 p.
6. Mshvidobadze R. G. *Raspoznavanie social'nyh ustanovok cherez grammaticheskie parametry rechi*. [Recognition of social attitudes through grammatical parameters of speech]. 1984. – 167 p.
7. Amadou Diallo Trial. [Internet]. Available from: URL: <https://www.nytimes.com/2000/02/26/nyregion/diallo-verdict-overview-4-officers-diallo-shooting-are-acquitted-all-charges.html>
8. Dan White Trial. [Internet] Available from: URL: <https://www.famous-trials.com/danwhite>



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## UKRAINIAN-GERMAN LANGUAGE CONTACTS IN GALICIA (UKRAINE): THE INFLUENCE ON LINGUISTIC WORLD- IMAGE (LATE 19<sup>TH</sup> – EARLY 20<sup>TH</sup> CENTURIES)

**Abstract.** The article deals with the problem of cross-cultural communication and its influence on the language contacts within historical period of late 19<sup>th</sup> – early 20<sup>th</sup> centuries and took place in Galicia (the western part of Ukraine). It is known that German Colonies on the territory of Ukraine had been settled since 1778 and up to 1940. German neighborhood left its signs in different fields of human's life but specially impacted Ukrainian language.

**Keywords:** language contacts, Galicia, Austro-Hungarian Empire, germanisms, loan words.

**Introduction:** After the first partition of the Polish-Lithuanian Commonwealth in 1772, the lands of Galicia became part of the Austro-Hungarian Empire and were in a state of decline. The imperial government took measures to raise the economic and social level in the region of Galicia, namely: colonists from different parts of the empire were sent to Galicia. Part of German-speaking colonists was engaged in agriculture, and some worked at schools and government offices. The contact of immigrants with the local population led to language contacts and interference, which promoted the loaning of words.

**Analysis:** It is well known that lexical borrowings cannot be a foreign body in the recipient language for a long time. Since borrowed words are the names of a certain phenomenon or fragment of the linguistic of world-image, they find their place in the language system [6, 11].

There was always scientific interest to German loan words in Ukrainian language among linguists. Ukrainian and foreign scientists researched this topic: V. Akulenko, O. Havryliv, J. Besters-Dilger, M. Hofinghof, V. Lopushanskyi, M. Kocherhan, T. Pyts, I. Sharovolskyi, D. Sheludko and others.

In the middle of 20<sup>th</sup> century took place many changes in scientific and technical sphere of life. Such changes in linguistics were marked by another change in fashion from the perspective of linguistic phenomena, the emergence, and implementation in linguistic research of another “style of thinking.” Linguistic phenomena are considered from an anthropocentric point of view, which means that the new scientific approach is formed based on studying the language in inseparable connection with thinking, consciousness, cognition, culture, the worldview of both the individual and the language group to which he belongs [2, 34].

The linguists explored the relationship between language and consciousness, reflected in the linguistic world-image, which is a complex system of knowledge and ideas about the surrounding reality. The founder of the concept of “the linguistic world-image” is considered to be the German philosopher Wilhelm von Humboldt. The scientist believed that language is a certain intermediate world between the external and internal world of an individual, and language itself is the self-expression of each individual nation.

Leo Weisgerber, a follower of the great scientist, developed the doctrine of the relationship between

language and nation. Language is the image of the world and at the same time the worldview of the people, and since each language is associated with a particular ethnic group, the difference of languages is the difference of views on the world. Representatives of different ethnic groups see the world differently [3, 112]. L. Weisgerber studied the world of language using the method of Trier's theory of semantic fields, and proved that the semantic fields of two different languages are never the same. The world-image of different languages has both common, invariant features, and essential national features connected with mentality of the people, history, culture, natural conditions. The language reflects the character of the people [1, 481].

Returning to the question of German colonists in Galicia, it should be noted that they brought their language, culture and religion, which affected various spheres of life and reflected in the language, and through the language impacted the worldview of the Galicians. As F. de Saussure noted, "Colonization as one of the forms of conquest transfers language to another environment, and this causes changes in the language itself" [9, 34].

The loan words in Ukrainian language have become clear evidence of the impact on language contact and language interference. Thus, thanks to loan words (not only lexical) the vocabulary has expanded, the recipient language has received tokens to denote new realities and thus changed the world-image. According to V. Manakin, "in the case of knowledge of two or more languages (bilingualism and polylingualism) distinguish between primary and secondary (secondary) linguistic world-images. For example, in the process of learning a foreign language, the secondary linguistic world-image is layered on the primary one" [7, 66]. The stratification occurs when languages come into contact. Through the lexical elements of the German language, the linguistic world-image of German language was layered on the linguistic world-image of the Ukrainian-Galicians. Accordingly to this feature of language development

in Galicia has enabled Ukrainian speakers with foreign language to perceive the world somewhat differently. It is also necessary to mention that Germanisms for our research are the loan words of the German language origin.

The loan words before being mastered in the language, faces the stages of formation in the recipient language. G. Paul classification of changing in lexical meaning is widely used in linguistics, in particular in lexicology, [8, 47], namely: 1) widening of word meaning, 2) narrowing of word meaning, 3) improvement of word meaning, 4) deterioration of word meaning, 5) metaphorization of word meaning based on similarity of things.

It should also be noted that a large number of Germanisms were borrowed without changing the meaning as their semantics were preserved. For example (loan words are given here in Ukrainian language with their pronunciation in square bracket, with German word of origin and meaning which is translated): ukr. апель [apel] – ger. Apfel – apple; ukr. вексель [veksel] – ger. Wechsel – a written commitment on the prescribed form to pay a certain amount of money; ukr. зацалювати [zatsaluvaty] – ger. bezahlen – to pay a bill; ukr. зупа [zupa] – ger. Suppe – soup; ukr. штрека [shtreka] – ger. Strecke – railway lines; ukr. цимра [tsymra] – ger. Zimmer – a room; ukr. фіранка [firanka] – ger. Vorhang – curtain; ukr. регал [regal] – ger. Regal – bookshelf; ukr. коц [kots] – ger. Kotze – wool blanket.

The next group of vocabulary is represented by the examples with the narrowed meaning – change from superordinate level to subordinate level [5, 120]. Here are some examples: ukr. гальс [gals] – ger. Hals – in German language has meaning neck, throat but in Ukrainian neckline, гошстаплер [hochstapler] is origins from German word Hochstapler which means swindler in German but in Ukrainian has different meaning – a vain man who is constantly trying to attract attention, ukr. грейфнути [graifnuty] – ger. greifen in German means to grab and in Ukrainian – to steal, another example ukr. бакфінш

[bakfish] – in German Backfisch – fried fish but in Ukrainian a teenager.

The next type of meaning change is metaphORIZATION. Such a linguistic phenomenon is based on some common feature of objects that are revealed as a result of comparison. When the external and internal features of the two denotations are similar, the transfer of the name occurs in the form of metaphor. For example: ukr. відпущуватися [vid-putsuvatysya] origins from Ger. abputzen which means to clean up and has totally different meaning in Ukrainian – to deny the guilt in a crime during interrogations. In this example we see that the basic meaning is preserved, but the main feature gained a new meaning by losing the previous ones, thus narrowing its scope. The following Germanisms also belong to this group: ukr. шнабель / шнобель [schnabel / schnobel] – ger. Schnobel – nose (mostly large and ugly); ukr. крис [krys] – ger. Kreis – hat; ukr. бруст [brust] – ger. Brust – breast pocket; ukr. брит [brit] – ger. Breit – the width of the fabric for the skirt; ukr. гурель [gugel] – ger. Gugelhupf – 1. oven-baked grated potatoes with fat; 2. soft sweet bread;

3. well-dressed man. The main feature of this word group is that the lexes lose their essential meaning by loaning into another language and receive partly new one. The metaphORIZATION here is based on comparison and out of compared features are separated parts of the meaning which is transferred into recipient language.

The presented examples of the vocabulary show the influence on the Ukrainian language was comprehensive and touch difference spheres of life.

### Conclusion:

Summarizing written above material, we may come to the conclusion that many Germanisms were borrowed into the Ukrainian language and after the process of the assimilation rooted in the language. German language was actively used in Galicia at late 19 – early 20 centuries and such linguistic interaction influenced the language, and the language influenced the linguistic world-image of the Ukrainians at that time, as it is evidenced by Germanisms and their widespread use in artistic and poetic works, newspaper articles and letters of researched period which needs further analysis.

### References:

1. Bulyhyna T. V., Shmelev A. D. Yazykovaia kontseptualyzatsiia myra: na materyale russkoi hramatyky [Linguistic conceptualization of the world]. – Moscow: Shkola, 1997.
2. Holubovska I. O. Antropolohizm u movoznavstvi ta vykladanni inozemnykh mov [Anthropologism in linguistics and foreign language teaching]. – Kyiv: Lohos. 2006.
3. Kocherhan M. P. Zahalne movoznavstvo [General linguistics]. – Kyiv: Akademiia. 2006.
4. Krysin L. P. Ynoiazychnye slova v sovremennom russkom yazyke. [The foreign words in modern Russian language]. – Moscow: Nauka.
5. Levytskyi V. V. Leksykologhiia nimetskoi movy [Lexicology of the German language]. – Vinnytsia: Nova knyha. 2014.
6. Simoniuk V. P. Linhvopravova kartyna svitu: suchasni problemy linhvistyky ta inshomovnoi dydaktyky: monohrafiia. [Linguistic picture of the world: modern problems of linguistics and foreign language didactics: monograph]. – Kharkiv: NTMT.
7. Manakin V. M. Mova i mizhkulturna komunikatsiia [The Language and intercultural communication]. Kyiv: Akademiia. 2012
8. Paul H. Pryntsypy istorii yazyka [Principles of the language history] – Moscow: Ynostrannaia lyteratura 1960.
9. Sosiur F. de. (1998) Kurs zahalnoi lingvistyky [The course of general linguistics]. – Kyiv: Osnoviy.

## Section 8. Economics and management

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### MODERN MARKETING CONCEPTS

**Abstract.** The article examines traditional approaches and modern marketing concepts. Special attention is paid to the concept of holistic marketing, which recognizes that everything is important in marketing and that an extended, integrated approach is often needed. At the same time, such types of marketing as guerrilla, viral, entertainment marketing, and permission marketing are considered.

The main directions of improving marketing activities are considered at the end of the article.

**Keywords:** traditional marketing concepts, holistic marketing, vertical marketing, modulation, business concept.

### **Modern Marketing Concept: A Holistic Approach**

**The company's goal** is to create a consumer who is the only profit center. Marketing is aimed at solving consumer problems. Modern trends in the development of the surrounding world, the image and lifestyle of people lead to the fact that the consumer becomes different. In this regard, we can talk about the following:

Lack of time leads to an increase in the need for convenient and simple things which do not require a lot of time for their purchase (for example, complex delivery of food products to home, system purchases in the "business-to-business" market).

A decrease in the perceived difference between consumer properties of products leads to a decrease in loyalty to individual brands. Due to the large selection of products and the increased "market literacy" of consumers, there is a more conscious attitude towards price and value.

The modern marketing concept assumes a holistic, integrated approach to all marketing issues of the enterprise. That is why, according to a number of domestic foreign experts, modern marketing concept is the quintessence of socio-ethical marketing, relationship marketing and some other approaches.

**The concept of holistic (holistic) marketing** is based on the planning, development and implementation of marketing programs, processes and activities, taking into account their breadth and interdependence. [1].

**Holistic marketing** recognizes that everything is important in the marketing business and that, often, an extended, integrated approach is needed.

The concept of holistic marketing is gaining more and more popularity now; proposed by F. Kotler and including planning, design and implementation of marketing programs, processes and activities, taking into account their breadth and interdependence.

**Holistic marketing** – first of all, a special, holistic way of thinking, and not a set of certain recipes and technologies. Its powerful and so far little

explored potential can be used by any business, but for this you need to learn to act, not trying to understand and control everything around. It's not easy, but don't be intimidated. Even the transition from classic 4P marketing to branding requires a serious rethinking: you cannot understand branding without shifting the focus of attention from your office to the head of the consumer [2].

Holistic marketing just goes one step further, suggesting to take both into account. Holistic marketing is hard to understand, but that doesn't stop you from using it successfully. In addition to advertising and sales promotion.

Companies operating effectively in the market by increasingly using other communication factors: such as the product itself, its packaging and labels, the efficiency of personnel (sales agents, sellers), public relations, etc. [3].

Thus, there is clearly an increase in the role of complex, integrated use of marketing communications, their great adaptation to the type of product and market, consumer needs and their level of awareness of the product, the stage of its life cycle.

### **Development of new types of marketing as a response to changing business conditions**

Recently, terms such as vertical and secondary, or lateral, marketing have been used. These types of marketing are not given a specific definition rather their features and methods are described often with examples.

**Vertical marketing** is based on choosing new directions for using old ideas. The methods used in this type of marketing include:

**Modulation.** A juice manufacturer can offer juice with different content of sugar, fruit concentrate, vitamins.

**Variation in size.** Packets of chips of different sizes.

**Variation in packaging.** A variety of candy packaging – from inexpensive paper packaging for regular stores to metal holiday boxes for expensive stores.

**Change of design.** Construction of cars of different designs.

**Insertion of additives.** Baking with sugar, cinnamon, chocolate and etc. The same can be said about cereal producers.

**Simplification of purchases ‘ forms of payment.** Different payment channels for purchases: shops, by phone, via the Internet, etc.

It is noted that you cannot make a lot of money in these ways, as these improved products are tried and bought by the same consumers. Apparently, one can only partially agree with such an assessment, for example, a new car design may attract new buyers. In addition, in many cases, similar methods are used, if they do not increase the number of consumers in general, then they can divert existing consumers to buy a product of this particular brand.

Secondary marketing, as opposed to vertical marketing, is based on the use of new ideas. Secondary marketing is usually a combination of two ideas for creating a new one. Example, Petrol station = petrol station + the possibility of purchasing food; Internet cafes = cafes + Internet; “Kinder surprise” = sweets + toy; Barbie doll = doll + teen (a doll that looks like a teenager).

Obviously, both of the described types of marketing are needed. Secondary marketing now requires more attention, because vertical leads to hyper fragmentation of the markets. Each new concept discovered through secondary marketing will eventually be developed by vertical marketing. Often the search for novelty in marketing is carried out at the level of terminology, there is an unjustified desire to use new, unusual names. Many “new” types of marketing are essentially “old” types of marketing in which clarifying emphasis are made on the use of its individual tools and methods. Moreover, the principles of marketing, its tools in general, the content of marketing management (marketing research, individual stages of segmentation, positioning, the structure of the marketing plan and the sequence of its development, etc.) do not undergo any changes. In some cases, these types of marketing can be called pseudo-new types. In our opinion, the considerations presented here are relevant to the material below.

**Guerrilla marketing.** Its novelty lies only in the use of new methods of product promotion. For example, representatives of the company “Nokia” hire people who on the streets of Rome ask passers-by to take a picture of them with a mobile phone (it has a built-in camera), causing them surprise. In this way, new possible contacts with consumers are created without the cost of advertising (although instead there is a payment for hired people).

**Viral marketing.** In this case, consumers share information about the product with each other in person or via the Internet. (But this is a well-known method “word-of-mouth” promotion.)

**Entertainment marketing.** It consists in inviting key customers to restaurants, sports events and etc. in order to provide them with emotional impressions, create a sense of belonging to the lifestyle of rich (great) people. This also includes the provision of unusual services to passengers on the plane: massage, manicure, casino, giving new impressions.

**Permissions Marketing.** Its essence is to reduce consumers’ feelings of anxiety, to prevent them from having a negative attitude towards the company which focusing primarily on CRM technologies, creates and actively uses the customer base. The client is concerned about the possibility of using information about him in an unacceptable direction. Due to the fact that marketing is increasingly invading people’s privacy, marketers are increasingly faced with the task of conducting marketing activities within certain ethnic norms. This does not mean the abuse of advertising, telemarketing, especially carried out by poorly trained personnel, or using computerized calls. The consumer sometimes begins to experience discomfort from intrusion into his/her privacy, because, having complete personal information, some companies are too intrusive to remind of themselves [4].

As part of this type of marketing, they try to dispel this sense of concern. The consumer is asked for permission to receive and use information related to him. (But this is simply the compliance with certain

norms of ethics in marketing, which is what ethical marketing is based on).

### **Directions for improving marketing activities**

The level of effectiveness of marketing activities is not necessarily determined only by the results of current activities. High efficiency is primarily determined by the fact that the company is competently pursuing a marketing policy on a strategic scale.

Hence the need to pay more attention to the problems of business growth. There is no such conception as a “mature business”. We must strive to find all the new directions of application of some product – nylon, for example, it was used to make parachutes, then stockings, clothing, tires, canvas. In addition, it is necessary to search for new users, for example, in China. Growth is possible due to a reduction in the number of brands. The money saved can be used for business development.

Not every growth is justified. It is necessary that it brings good results to be balanced. The balance should be in the growth of the company’s market value, the availability of free money and the acceptable risk of doing this business. Balanced growth is the key to prosperity in the XXI century. Growth is a corporate mentality created by the company’s management. In today’s market conditions, growing is less risky than not growing. The following specific business growth strategies can be distinguished: capture a larger share of the existing market; transition to new regions; transition to new consumer segments- for example, creating computer games (golf, cards) for pensioners; the creation of new markets; development of new products and services (for example, milk trade at gas stations); creation or use of new sales channels.

The following tasks can be identified to strengthen the role of consumer relation marketing (CRM technologies): [6].

**The first task** is to create, maintain and use a rich customer database based on information gathered from all channels and points of contact with customers. Information technologies are those that allow

analyzing the movement of the product from the company to the end user in real time, as well as quickly responding to any consumer requests make modern marketing flexible and ready for rapid changes.

**Second task-use of functional cost analysis** (Activity based Costing – ABC) and analysis of Consumers’ Lifetime Values (Customer Lifetime Value – CLV-Analysis), in order to find out who is a profitable consumer.

**Third task** – formulate a consumer-oriented offer which are transmitted in a personalized manner.

**The fourth task** – activate the interaction between consumers and the company by creating a contact center and a website in the company, wider use of telemarketing. The contact center should become the “nerve center” of the company for sales and customer service. Its activities should be aimed at analyzing all customer orders in the interconnection at promptly responding to complaints and at quickly eliminating their causes.

It is necessary to prove to the potential consumer the benefits of purchasing the product in numbers.

In modern conditions, the focus in the activities of companies is shifting from the production and sale of products to the choice of values, their creation and transfer to consumers and as a result, a shift to consumer-driven marketing.

In product-driven marketing, a product is usually created for a large group of consumers, and mass marketing is often practiced. The types of manufactured products are considered as the principle of building the organizational structure of the company. The “profile” department is engaged in marketing. There is a focus of marketing activities on the acquisition of new customers rather than retaining existing ones.

In consumer-driven marketing, the importance of analyzing the customer value of the products sold is increasing. Consumer value is understood as the consumer’s benefit minus the cost of purchasing and using a specific product. The additional value must exceed the additional costs. These purposes are served by cost-value analysis (CVA), aimed at correlating value

and all costs. For example, you can buy a more expensive truck that breaks down less often [5].

Consumers expect a manufacturer to continuously improve product quality, increase productivity, innovate continuously, and reduce prices over time. This gives them the opportunity to lower their prices.

It is necessary to strive to create additional value for the consumer, to aim to improve his business. From this point of view, manufacturers (sellers) are consultants for their consumers. It is necessary to share with the consumer not only the profit, but also the risks.

**The development of holistic marketing is fundamentally changing the role of the marketing department.** Marketing is too important to be handled by this department alone. The task of the marketing department is to coordinate marketing activities. The company itself is a large marketing department. Mar-

keting should be holistic, and not confined within one (specialized) department. Marketers must achieve greater influence in the company if they want to be the main architects of the business strategy. In fact, we are talking about raising marketing to the corporate level.

#### **Conclusion**

**Modernmarketing** – it is a new entrepreneurial philosophy based on socio-ethical and moral norms of business communication, international codes and rules of fair commercial activity, the interests of consumers and society as a whole.

This new approach collided with the old traditional business concept, namely, the desire to maximize profits through mass production and the intensification of efforts to market the products produced. In the new concept, the object of the enterprise's efforts are target market segments, that is, groups of consumers with their needs, interests and preferences.

#### **References:**

1. Demchenko A., Sezonova O. Features of the concept of “holistic marketing”. *Marketing*. 2012. – No. 1(122). – P. 84–90.
2. Gadzhieva N.A. *Marketing*. LAP. BEAU.– Bassin: 2018.– 678 p.
3. Vasiliev G. A. *Advertising marketing*. – M.: 2008,– 276 p.
4. Gadzhieva N.A. *Marketing*. – B.: 2014,– 676 p.
5. Gadzhieva N.A., Urkaev M. G. *Practical policy in marketing*. – G: 2017.
6. Kotler F., Triaz de Bez F. *new marketing technologies. Techniques for creating brilliant ideas*. – St. Petersburg: Publishing House. “Neva”. 2004,– 190 p.



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## INTERNATIONAL ASPECTS OF CURRENCY FINANCIAL AND CREDIT RELATIONS OF GEORGIA

**Abstract.** Amidst globalization of international financial-creditor relations, active and equal involvement in the World Community represents the key priority of state policy for Georgia. Currently, Georgia is a member country of several international financial-creditor organizations. As a result of multi-year collaboration with these organizations and their support, Georgia reached the stabilization of its financial-economic system and harmonized it with its internationally recognized standards.

**Keywords:** Banking relations, financial relations, international ranking, international financial legislation, EU legislation, international financial-creditor organizations.

Georgia's release from the post-socialist area and the recognition of its independence put the following issue on the agenda – regarding the role of financial-creditor relations in its economy and substantial change of its place, while, on the other hand, the issue applied to the inevitable integration in international financial-creditor relations.

The introduction of an independence financial-creditor system raised an issue of setting the national currency (notably, Georgia and other post-socialist countries used general currency – Russian Rouble earlier). Georgia's national currency Lari (GEL) has been used since 1995.

The inter-bank currency market of Georgia represents an integral part of its monetary market organized in international electronic commercial system of Bloomberg. The auction of the National Bank of Georgia represents a tool of the monetary policy. "The objective of the monetary auction is to fill international currency reserves, elimination of an impact on the exchange rate of temporary surplus inflow of capital and others" [1, 438]. Georgia-licensed commercial banks and branches of foreign banks awarded a participant bank's status by the National Bank un-

der their request, are allowed to engage in the market. Against other countries' currencies, the GEL official exchange rate is defined by cross-exchange calculation of exchange rates observed on international markets or internal monetary market of an issuer country. The information source for exchange rates required for re-calculation includes the information systems of Reuters, Bloomberg and central banks of respective countries. Information is received, processed and disseminated in an automatic mode [2].

The National Bank of Georgia officially recognizes the principles of the monetary market global code used in international practice and works under the principles. The global code of monetary market (FX Global Code) was developed by Bank for International Settlements (BIS). The world's leading central banks and commercial players of monetary market spent several years on its creation. Trade with the state securities is carried out in an electronic mode in the Bloomberg system. It means that any investor enjoys full information and access to the Georgian market. Besides, in 2018, an updated Georgian Securities Settlement System – CSSS started functioning in Georgia. This system is available for all market

players – local and international ones. All kinds of securities can be sold and purchased.

**Taking the repo transactions in international practice, an inter-bank repo market was established by joint efforts of Georgia’s National Bank and commercial banks.** Repo transactions are carried out by means of GSSS – Georgian Securities Settlement System and Bloomberg system. “Via the systems, 113 repo transactions were carried out between commercial banks with securities of 1.25 billion GEL nominal value” [3, 61]. Short-term liquid tools are used at Georgia’s monetary market for conducting trade.

**For the harmonization with international financial, namely, tax legislation, Georgia signed deals with 55 countries to avoid double taxation.** On June 7, 2017, as part of the OECD week, Georgia signed Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI). Thus, the norms defined by the multilateral tax convention applied mainly to 34 deals out of 56 ones signed and enforced by Georgia.

It is important to note that the first stage of development of Georgia’s tax system is September 2001. For this period, with support of the International Monetary Fund and USAID the first real-time payment system – RTGS- Real-Time Gross Settlement was established. From 2003, information among the RTGS participants (National Bank and commercial banks) was exchanged only in an electronic mode. “In December 2010, a new RTGS system activated, which replaced the system introduced years ago. The new system introduction process was supported by the World Bank and USAID [4].”

As for Georgia’s bank and credit system, it’s important to emphasize that “an improved evaluation of Georgia’s credit rating by international ranking companies” [5, 366]. In particular, international company “Standart&Poor” (S&P) improved Georgia’s sovereign rating to the BB level with a stable perspective. Besides, another large rating company “Fitch Ratings” increased Georgia’s sovereign credit

rating from BB- to BB. The rise of the international credit rating positively influences the rating of Georgia’s bank sector and its reliability that promotes the trust of the local and foreign investors and international institutions in Georgia’s banking system.

One of the leading banks of Georgia – Bank of Georgia – has been on London Stock Exchange since 2006. Earlier, the bank assets were presented as global depository acquittance on the stock exchange. The recent corporate culture and the availability of the highest management standards led Bank of Georgia to comparatively simply transit to the premium-listing of the London Stock Exchange. Another commercial bank operating in Georgia which placed its shares on London’s leading stock exchange is TBC Bank. On may 11, 2014, TBC Bank implemented an initial public offer (IPO) to the stock exchange of London and increased the bank’s capitalization level to 640 million USD by placing more than 18 million shares on the stock exchange. Two years later, TBC Bank was put on the premium listing of the same stock exchange.

The transfer of Georgia’s commercial banks in the premium listing of the London Stock Exchange led to increasing the awareness of Georgia’s banking system at an international level, while its shares became more attractive for the most influential and larger investors of the world. It’s clear that the trade with Georgia’s commercial banks (Bank of Georgia and TBC Bank) on the stock exchange of London is an important achievement of Georgia’s banking system and, simultaneously, it represents a successful stage of integration in this system.

The National Bank of Georgia follows the recommendations issued by the International Monetary Fund and Basel Committee on Banking Supervision. The banking supervision framework was updated gradually. Earlier, in 2014, when Georgia and EU signed the Association Agreement, Georgia engaged in the financial sector evaluation program conducted as part of the joint mission by IMF and National Bank of Georgia. In the end of 2017, the

Pillar-3 program was established, focused on the development of risk-management of any bank.

Taking the international banking practice experience into account, the Bank of Georgia has strictly defined and elaborated a regulation on the commercial bank administrators' compatibility criteria (the decree by the National Bank President of Georgia № 50/04, dated June 17, 2014). This regulation envisages the necessity of high social level towards the bank administrators as well as a required qualification for conducting bank activity and honest attitude to the job. Across the EU, this issue is regulated by relevant directive (2013/36/ EU) and joint manuals of ESMA- European Securities and Markets Authority and EBA – European Banking Authority.

Together with the state service of insurance supervision, under the Georgia-EU Association Agreement, the National Bank of Georgia continues working on a bill regarding financial conglomerates to make it compatible with respective international legal acts. Internationally, the operation of financial conglomerates is regulated by the 2002/87/EC directive of the European Parliament and Council, which defines the norms of efficient supervision of commercial banks and insurance companies incorporated in the financial conglomerate, promotion of their financial stability and protection of consumers' rights.

Based on the experience in international banking area, the National Bank of Georgia supports the development of new, innovative technologies and approaches in the banking-financial sector. Thus, for supporting innovative models in the financial sector, the National Bank of Georgia has already activated the financial innovations office and regulation lab. The National Bank has already defined the digital bank licensing issue.

Due to the 2018 pension reform in Georgia, the pension payments mobilization and administration has been carried out since January 2019. For sharing international experience in this field, the National Bank of Georgia became a governing member of the International Organization of Pension Supervisors,

IOPS in December 2019. The membership of this organization represents a significant supporting factor for sharing enriched experience of regulation of other countries' pension activity.

**Importantly, the Georgian government intensively collaborates with international financial-creditor organizations.** After Georgia's integration in the World Bank, the bank financed many projects in various fields. In mid 90ies the bank supported the First Generation Government reforms, i.e., the implementation of the reforms of transitional period from centralized-planned economy to market economy. Besides, it supported the achievement of macro-economic stability, stimulation of macro-economic growth and improvement of financial discipline in private and public sector. "Since 1992, the World Bank allocated more than 2,7 billion USD cheap credits and loans for funding 69 projects in different economic sectors of Georgia. The current portfolio includes 12 active investment projects and development policy measures, equaling 789 million USD in total" [6].

Since the foundation to June 30, 2011, the total amount of the loans allocated by IMF for Georgia equals 974,350,000 SDR, and its current balance totals 672,950,000 SDR. SDR represents an international reserve asset created by IMF. It is used as a calculating unit. The SDR value is defined under the world's leading currency basket.

It's important to note that the executive board of IMF approved the allocation of 113,9 million USD sum in December 2020. It helped Georgia to meet its tax balance, caused by the COVID-19 shocks. After the discussion, 79 million SDR (about 113,9 million USD) was allocated. It will promote Georgia's tax balance requirements and needs for the COVID-19 shock.

Georgia joined the European Bank for Reconstruction and Development, EBRD in September 1992. This bank is one of the largest investors not for only Eastern European and Central Asian countries, but post-socialist states, including Georgia. During the EBRD-Georgia collaboration, 275 projects were conducted. By means of investments, EBRD

supports strong financial institutions, structural and sector-based reforms, implementation of infrastructural reforms, establishment and development of judiciary systems and others.

The bank portfolio for Georgia equals 1,382 billion EUR. “The portfolio includes: financial institutions – 20%, industry, commerce and agricultural business – 13%, sustainable infrastructure – 59%” [7]. Based on this information posted on the official website of EBRD, the bank carries out intense cooperation in Georgia’s financial sector, but the highest volume of the portfolio is shared by infrastructural reforms.

It’s important to emphasize that the National Bank of Georgia manages liquidity via swap operations in parallel to standard refinancing loans for commercial banks and micro-financial organizations. In April 2019, “the National Bank signed a swap-agreement with a limit of 200 million USD with European Bank for Reconstruction and Development (EBRD). As part of the agreement, it undertakes to provide the relevant GEL liquidity. As far as it is known, EBRD funds many significant projects in Georgia. The funding is carried out by foreign and national currencies, as well, in some cases” [3,75].

As it happens at international level, in Georgia it has become relevant to introduce financial technologies and develop innovative systems in recent period. The banking sector of Georgia permanently introduces financial innovations in the banking-financing area. For this purpose, the National Bank of Georgia established the office for financial innovations and regulation. The office represents a collaboration platform of NBG and those having financial innovations, and it supports integration of Georgia’s banking system

worldwide. The National Bank of Georgia engaged in the global financial innovations (GFIN) network and starting 2019, it is its member country. This platform is leading in terms of collaboration in novator supervision. Georgia’s involvement in the global financial innovations center can increase the awareness of Georgia’s banking system and support the increase of international rating.

Georgia became a shareholder and member of International Finance Corporation in 1995. Since the integration, IFC has invested in different projects in financial, power-related, oil and gas, real estate and manufacturing sectors. The World Bank member IFC supported Georgia’s National Bank in issuing Euro bonds by means of national currency that is practically the first precedent in terms of placement of securities in Georgia’s financial-banking system by international scale. “IFC, as a large investor, declared its obligations – on advance purchase of 30% of the bank-planned issue (emission), for supporting the Road-Show offer for investors and improving the trust in upcoming transactions. The issuance of the NBG bonds attracted 500 million GEL (approximately 207 million USD/184 million EUR) from about 20 international investors” [8].

**Conclusion:** Thus, based on international aspects of monetary-financial and credit relations of independent Georgia, the country gradually occupies its modest place in international financial-creditor relations system. With the help of international financial-creditor organizations and with their great efforts, important reforms were conducted. It ensured Georgia’s macroeconomic stability, increased the quality of trust and its awareness and international credit rating.

### References:

1. Kovzanadze I., Kontridze G., Banking: Theory and Practice, Sezani Publishing, – Tbilisi, 2014.
2. Monetary Police and Management of Reserves. URL: <https://www.nbg.gov.ge/index.php?m=521>.
3. National Bank of Georgia. Yearly report 2019. URL: [https://www.nbg.gov.ge/uploads/publications/annualreport/2020/erovnuli\\_banki\\_211020.pdf](https://www.nbg.gov.ge/uploads/publications/annualreport/2020/erovnuli_banki_211020.pdf).
4. Overview of the development of tax systems. URL: <https://www.nbg.gov.ge/index.php?m=202>.

5. Nozadze M. International Monetary, Financial and Credit Relations. Textbook. Dani Publishing, – Tbilisi, 2021.
6. World Bank in Georgia: 25 Years of Partnership. URL: <https://www.worldbank.org/en/news/feature/2017/08/24/world-bank-georgia-25-years-of-partnership>.
7. EBRD projects in Georgia. URL: <https://www.ebrd.com/georgia-data.html>.
8. International finance corporation invests in Bank of Georgia landmark eurobond. URL: <http://agenda.ge/en/news/2017/1099>

# Contents

<b>Section 1. Art history and cultural studies</b> .....	<b>3</b>
<i>Mirzamuhamedova M.</i> CINEMATOGRAPHY OF UZBEKISTAN IN THE YEARS OF INDEPENDENCE .....	3
<i>Ortikov A.</i> THE IMPORTANCE OF THE ARTIST'S WORK IN CINEMA ART .....	8
<i>Truong Dai Luong</i> CURRENT SITUATION OF READING CULTURE OF VIETNAMESE STUDENTS IN SOME UNIVERSITIES OF SOCIAL SCIENCES AND HUMANITIES .....	13
<i>Haydarova Nigora</i> SPECIAL EFFECTS IN MODERN UZBEK ANIMATED FILMS .....	20
<b>Section 2. Medical science</b> .....	<b>25</b>
<i>Kravchenko Lenara</i> RESULTS OF THE BURNOUT SYNDROME COMPARATIVE ANALYSIS AMONG DOCTORS AND NURSES .....	25
<b>Section 3. Pedagogy</b> .....	<b>30</b>
<i>Isroilova Baxtixon Baxromjon qizi</i> THE ROLE OF MOTIVATION IN LEARNING FOREIGN LANGUAGE .....	30
<i>Khakimova Barno Muradovna</i> MODERN REQUIREMENTS FOR THE PROFESSIONAL COMPETENCE OF TEACHERS OF FOREIGN LANGUAGES .....	34
<b>Section 4. Political science</b> .....	<b>38</b>
<i>Fatima Kh. Dalieva</i> GEOPOLITICAL AGENDA OF SILK ROAD TRANSPORT CORRIDORS: INTERESTS OF UZBEKISTAN AND DIVERSIFICATION OF TRANSPORT UNITS .....	38
<b>Section 5. Agricultural sciences</b> .....	<b>43</b>
<i>Khudaykulov Jonibek Bozarovich, Rasulov Ilkhom Makhmudovich, Aberkulov Mardan Nurbayevich, Jumashv Mamur Musakhanovich, Irnazarov Shuxrat Ismatullayevich</i> THE EFFECTIVENESS OF THE USE OF BIOSTIMULANTS IN THE CULTIVATION OF PEANUTS .....	43
<b>Section 6. Physics</b> .....	<b>48</b>
<i>Rasulov Voxob Rustamovich, Rasulov Rustam Yavkachovich, Kasimov Forrukh, Muminov Islombek Arabboyevich, Qo'chqorov Mavzurjon Xurshidboyevich</i> THEORETICAL ANALYSIS OF MULTIPHOTON INTERBAND ABSORPTION OF POLARIZED LIGHT IN CRYSTALS WITH A COMPLEX ZONE (Part 1) .....	48
<i>Rasulov Voxob Rustamovich, Rasulov Rustam Yavkachovich, Muminov Islombek Arabboyevich, Qo'chqorov Mavzurjon Xurshidboyevich, Kodirov Nurillo</i> THEORETICAL ANALYSIS OF MULTIPHOTON INTERBAND ABSORPTION OF POLARIZED LIGHT IN CRYSTALS WITH A COMPLEX ZONE (Part 2) .....	52

<b>Section 7. Philology and linguistics.....</b>	<b>57</b>
<i>Altaeva Gulnar, Ainakulova Janat, Omarkulova Lyazzat</i>	
FEATURES OF IMPORTANT THEMES IN LITERATURE .....	57
<i>Zaitseva Margarita</i>	
INFLECTIVE PERSONALITY AND INFLECTIVE NARRATIVE IN COURT DISCOURSE.....	60
<i>Huk Zareslava</i>	
UKRAINIAN-GERMAN LANGUAGE CONTACTS IN GALICIA (UKRAINE): THE INFLUENCE ON LINGUISTIC WORLD-IMAGE (LATE 19 <sup>TH</sup> – EARLY 20 <sup>TH</sup> CENTURIES) .....	65
<b>Section 8. Economics and management .....</b>	<b>68</b>
<i>Gadzhieva Nushaba Aslan, Ismailov Vugar Agamusa, Babakishieva Sevinc Firuddin</i>	
<i>Garayeva Shahla Nadir, Gojayeva Zeynab Bahram, Hasanzadeh Zeynab Fizuli</i>	
MODERN MARKETING CONCEPTS .....	68
<i>Nozadze Mzevinar Iliaevna</i>	
INTERNATIONAL ASPECTS OF CURRENCY FINANCIAL AND CREDIT RELATIONS OF GEORGIA.....	73

