

POSTER AS A MEANS OF COMMUNICATION IN EDUCATION: METHODOLOGICAL AND APPLIED ASPECTS OF DESIGN

Irina Hristoforova^{1*}, Alexandra Demenkova², Tatiana N. Arkhipova³, Tamara I. Krasikova⁴
Valentina V. Krishtopaytis⁵

^{1*} State Educational Institution of Higher Education Moscow Region «University of Technology», Korolev,
Russia
Editor14@academicpapers.org
141070 Korolev, Moscow Region, Korolev, st. Gagarin, 42

² State Educational Institution of Higher Education Moscow Region «University of Technology», Korolev,
Russia
Higher.education2017@yandex.ru
141070 Korolev, Moscow Region, Korolev, st. Gagarin, 42

³ State Educational Institution of Higher Education Moscow Region «University of Technology», Korolev,
Russia
University.science@yandex.ru
141070 Korolev, Moscow Region, Korolev, st. Gagarin, 42

⁴ State Educational Institution of Higher Education Moscow Region «University of Technology», Korolev,
Russia
University.russia@yandex.ru
141070 Korolev, Moscow Region, Korolev, st. Gagarin, 42

⁵ Kharkiv State Academy of Design and Arts, Kharkov, Ukraine
Russ.science@yandex.ru
8, Chervonopraporna st., Kharkiv, 61002, Ukraine.

ABSTRACT

The relevance of the research is due to the existence of the poster design features as a means of communication in education.

Objective. To identify the methodological, pedagogical, marketing, art graphic design features incorporated in the design of contemporary posters in education.

Research methods. Such scientific methods as logical and content analysis, comparison of analogues and groups are used as research tools. These methods have allowed systematizing the methodological aspects of graphic design and applying them at the implementation of specific project.

Results of the research. The article presents the results of theoretical generalizations of the history of the emergence and development of the poster as a means of communication and artistic work. It shows systematized elements, rules, principles and techniques of graphic design used in posters creation, identifies techniques of graphic design used in poster production, justifies the specific character of posters used in education in sphere of service provision.

Practical significance. Article submissions are of practical value, since they have formed the basis for poster designing for the University Open Day and can be used in the educational process in future.

Keywords: graphic design, poster design education, research methodology, teaching methodology.

1. INTRODUCTION

Human environment is filled with vast amount of communications media, each of which performs a specific task: to interest or to motivate to action or deed. A poster is one of such communications media. This instrument of visual communication with potential consumers of particular goods or services has been used in trade, social and political advertising for a long time. Nowadays in time of new communications media, Internet advertisement, social networks, sms-marketing and other innovations this communications media is still relevant.

Under condition of strong competition between different firms, poster as a means of communication and an element of human environment takes major place. It is aimed to solve tasks set to communication policy: to attract customers', investors' and partners' attention. To achieve this aim art rendering of a poster should ensure the efficiency of communication. Its content and visual elements should comply with certain rules, take into account the psychology of the perception of colors and shapes, used texts being convincing and filled with information.

The problem of graphic design technology development is the subject of numerous works of foreign authors (Cutler, Javalgi, 1993; Gomez-Palacio, 2009).

It is obvious that with the purpose of professional graphic designing studying the problems of origin and evolution of the poster as a communication tool is necessary (Beauvais, Arens, 2012).

Problems identifying the role and place of the poster in the visual communication system have been studied to a great extent (Shevchenko, 2004).

Poster design, and consumer perception research require studying the psychology of perception and the art of poster creation (Kudin, Lomov, Mitkin 1987).

The art of photography and poster became the basis for the emergence and development of poster graphics and anticipated graphic design development (Voronov, 2003).

Meanwhile, the principles and techniques are used in poster design in specific industries particularly in advertise services, including education remain not fully studied.

As research shows, posters are created with different rules due to the usage of different approaches. As to social and commercial posters they differ according to the tasks. Besides, the sphere of application influences the poster creation. Different methods and means can be used for different industries. There are noticeable differences in the use of expressive means of communication in the promotion of goods and services.

It goes without saying that the specific features of the promoted product should be taken into consideration when creating the posters used in education. For the promotion of educational services professionals have developed specific preferences, traditions, special techniques, which are necessary to be investigated and applied. These characteristics have become the subject of the study conducted by the authors, and the results have formed the basis for the development of a poster for the Open Day of the University of Technology.

2. METHODOLOGY OF RESEARCH

The methodology of the research has identified the methods used- the logical and content analysis, the analogues and groups comparison.

2.1. Research objectives

Research objectives involve the following:

- * to explore the specific features of the poster as a means of visual communication;
- * to explore the main artistic techniques used in the art of the poster;
- * to assess the significance of the social poster;
- * to examine the role of social poster in educational activities in Russia;
- *to analyze the social poster counterparts in educational activities;
- * to describe the characteristics of the main expressive and formal means used to study the posters;
- * to formulate a poster concept for the Open doors Day of the University of Technology (Korolev);
- * to develop a poster design sketches and subsequent registration in the program Adobe Photoshop and CorelDraw.

The study includes the following:

- analyzing the analogues;
- considering the features of the advertised product - in this case educational services;
- collecting textual information, which should be present in the text of the poster as a filling;
- showing peculiarities of the institution style, or if it is formulated presenting some familiar visual characteristics of the university;
- studying the conditions for placing a poster and evaluating them in terms of the visual characteristics of the poster;
- taking into account the steady characteristics of the institution, in this case the logo.

The selection of analyzed analogs includes 57 posters used in the educational environment.

2.2 Connection of the work with scientific research and realized practical tasks

The article is based on the use of the results of research carried out by specialists of the Design Department of Technological University in Moscow region, Moscow State University of Design and Technology, Kharkov State Academy of Design and Arts in 2015-2016.

3. RESULTS

The results of the logic and content analysis were used to organize the elements, rules, principles and techniques of graphic design used in posters creation, graphic design, to reveal the means of graphic design used in the production of posters, to justify the presence of peculiarities of the posters used in education as the sphere of service provision.

3.1. Elements of Graphic Design

The initial phase of the work of a designer is preparing a poster concept. First of all, it is necessary to collect information on the subject and the simultaneous study of the strengths and weaknesses of the analogues. In addition to the aesthetic and artistic qualities of similar works, their advertising efficiency is analyzed. A careful interpretation of the material collected during the preparatory stage inspires the author of the poster for the first ideas of the future work. So there appears idea of the poster. In an advertising poster it is the *advertising* idea which is aimed at creating the image of an individual, company, product, organization, etc. In an art poster, it is the *conceptual art idea* that models the personal attitude of the creator to the particular issue, expressed with special artistic images (Shevchenko, 2004).

Modern poster uses a wide range of visual tools and techniques. The mixed technique possibilities and computer graphics make a poster indispensable communication media.

The design as a professional activity for the materialization of the idea requiring critical thinking, elements, rules, principles, techniques used in the creation of posters should be definitely summarized and systematized.

First of all it is the basic *advertising elements* of a poster that should be selected.

A poster advertising elements include *title, text, artistic elements, borders and signature*.

Title is usually printed in large type. Then it may be followed by a subtitle, which is longer than the title and is printed in a smaller type. The title may be the most important advertising element, as it contains the theme.

Rhythm in the advertisement title is more important than *size*. If there is more than one line in the title, it is divided natural pauses being used.

Text is printed in a smaller type. It develops the theme of the title and convinces the reader, prompting to action. The text should be short and very clear. If this is difficult to achieve, the long text should be split into parts, using white space or subtitles to give the reader "breathing space". An indispensable condition for the advertising text is expressiveness.

Boundaries also apply to the elements of an advertising poster design. The advertiser wants to allocate his advertisement, to separate it from the mass of similar posts on the same page. The larger size of advertising messages is and the lower page we have, the less it needs boundaries. Sometimes the designer uses a boundary as a decorative component to give the poster a certain mood. The boundaries are chosen or created by designers in the same way as the types.

Signature. The advertiser is certain to want to declare the name of his company brand or the product. Sometimes this information is on the last line of text, sometimes it is indicated with large capital letters outside the text or at the bottom of advertisement next to the emblem or logo.

Artistic element. This term has a very broad meaning. For this purpose, photography, drawing, painting, pattern, types, and layout, etc. are used. Besides, the artistic elements are *line, shape, size, direction, colour, tone*, combination of colors, tones and white seats, and even *texture*.

The point, line and spot are the basis for expressing the graphic language of the poster. By these means the artist constructs visual image. E. Ruder a well-known design theorist said: "Everything is in motion: the point moves, forming a line, the line shift creates a flatness, flatness combination creates volume" [Shevchenko, 2004, p. 75].

Lines. They can be straight and curved, thick or thin, smooth and rough, continuous and broken, visible and imaginary.

Form. It is formed with volume and using combined, broken or curved lines.

Size. Posters and some of their elements may be of different sizes, but large objects produce a greater impact.

Direction. Lines and shapes formed by them have their focus, they even create the illusion of movement.

Colour: It determines the mood of the poster more than other elements. Art tonal monochrome solutions can sometimes be met.

Tone: solid black or gray tones often fill the major surface of graphic design.

Texture: It is determined by the material, which a poster is printed on. It can be rough and smooth, rough and uneven, soft and smooth, soft and rough.

3.2 Design rules.

A number of *design rules* simplify the above-mentioned task. Applying them the designer spends less time on the development of the sketch and the poster project.

The following rules are the most *versatile*:

1. The poster design should be balanced.
2. The space inside the poster should be divided *proportionally*.
3. The *direction* of the elements should be *expressed clearly*.
4. The unity of the elements should be strictly *observed*.
5. A *part* or *one element* of the poster should *dominate* in the poster composition (asymmetry).

3.2. Design principles. *Design principles* define the use of certain design elements. These principles are the basis of all types of art: painting, drawing, sculpture, architecture and design of various types: graphic, industrial, environmental, communication and others.

3.3 Design principles

The list of design principles includes balance, proportionality, consistency, unity, focus.

Balance. When the poster composition is "balanced", it is in a state of rest, although some of its elements (image, picture, title and text) can be quite dynamic.

The designer deals with two types of balance: formal (symmetrical) and informal. In the formal balance each element on the one side the composition corresponds to the shape and size of the elements on the other. Items outside imaginative vertical line are placed symmetrically with respect to this axis. At an informal one optical balance is maintained too, but it is achieved by more complex methods.

The top and the bottom of the poster composition should be interconnected. All the elements should form a balanced composition, and the optical center - a point just above and to the left of the geometric center - should be the center of the composition. Big and black elements have more "weight" than the small and gray ones. Unusual shapes also attract more attention in comparison with the usual configuration of elements. The same is with color elements compared with black and white elements. Sometimes the designer intentionally disturbs the balance, to make the ads visible.

Proportionality. For the designer, who is developing a poster, proportions are ratio aspects i.e. width to depth, the width of the element to the depth of the element, the size of the space of one element to the size of the space of the other one, the space between two elements to the space of one of them and the third element.

To achieve adequate proportions advertising designer disposes intervals so that the eye could catch standard mathematical solutions. The designer usually avoids the division of the advertisement into two, three or four equal parts.

There are examples of proportional division of space. The ratio of width to depth approximately is 3: 2, or better 5: 3. Square with similar sides is not the best design element compared with a rectangle with two different dimensions. If the square is used, the designer can "stretch" it horizontally or vertically, putting horizontal or vertical stripes or lines in it. If the designer uses a vertical rectangle, it is divided with horizontal lines into several bands. One line located closer to the top and not coinciding with the mathematical center may be taken as the optical center line. Elements will then be placed on the bands. Some designers like to place the most important elements in such a way that they touch the optical center line or cross it.

The tone of advertisement also affects its proportion. The ideal proportion of light and dark tones is the following: 1/2 of medium gray, 1/4 of light gray and 1/4 of black tone. One tone should prevail in any combination.

Sequence. Advertising poster can fulfill its function even if the reader's eye wanders on it stopping on one, then another element. However, designers prefer to establish a specific order of the elements perception of the composition. For this purpose a number of techniques exists.

Designer can arrange elements on the path of natural eye movements. The eyes move from left to right and top to bottom. Knowing it, the designer can place elements from left to right on the top line, and then again from left to right on the lower line, etc. Other techniques are used as well. It is quite natural for the eye to move from larger to smaller items, from black to a lighter color, from a colorful element to a colorless one, from an unusual form to usual ones. The designer can guide the reader's eye movement to almost any point of advertisement.

Sometimes the designer directs the reader's eye with the help of solid and dotted lines to make way for the eyes. Sometimes the designer can find a more subtle way to control the reader's eye, and he achieves greater efficiency. He can repeat the shapes and sizes. This creates an imaginary way for the eye movement. The designer can create a path through elements in size graduation. In this case the eyes will move from one series to another. The sequence is an optical rhythm, it can develop in other ways including pulses and pauses.

Unity. It is the most important design principle. Unity states that the elements of advertising should be coordinated and complete each other. A designer creates harmony when he picks up the elements and on their compatibility features so that they fit together. Items will better meet unity principle if they are related by shape, size, texture, color and direction.

A designer strengthens unity, if it applies the three point method. This three-element composition is more proportion than two-and four-element.

Contrast. By creating a poster, the designer should decide exactly on what element he is making the focus, emphasis: in the picture whether it is the title or the text. After taking the decision, he looks for ways to focus on. He can highlight the drawing protecting it from the influence of the other elements. He can increase its size, make it prominent and colorful. The emphasis is achieved by the contrast between the primary and secondary things. The emphasis may be achieved by a sharp change in direction, size, shape, texture, color, tone and lines.

3.4 The metaphor and symbol in the poster

Learning the graphic means and methods of object forms processing is a very important key to the development of mastery of the artist or graphic designer. But that is not always enough for creating a vivid poster image. In art, there exists not only object *realistic representation principle*, where the shape of the whole corresponds to the content of the image itself and is characterized by reliability and documentaries. Of no less importance for the poster composition is the *associative principle*. In this case, actual or contingent forms have no literal relationship to the content. This type of allegorical representation of reality, or visual image is called the *metaphor*. The artist depicts a story or an image in a figurative sense. Metaphor **allows the designer** to find a solution by transforming the characteristic features needed to create an effective image on the object, whose image has these very characteristics. Sometimes it is possible to use methods of *allusion*, *irony* and method of *different contexts* to create unique, vivid pictures.

The signs- symbols are widely used as metaphorical representations. They are associatively and conceptually linked to the object. It often happens so that as a metaphorical image of the sign stands a generalized image of the entire system of concepts (heraldic symbols, specialties, philatelic, publishing symbols, etc.)

The designer uses three or four elements, based on the knowledge of these principles. He shapes form elements and brings them into compliance with well- known principles. He uses various options for element placement.

3.5 Design Techniques used in the poster production

3.5.1 Reception “Linear-spot composition”

When creating a poster the designer uses lines and spots with the advertisement text.



Fig. 1 Advertisements of Absolut Bank.



Fig. 2 Student work (author Katya Frolova)

3.5.2 “Innuendo Type” method

Type takes the commanding position, but has some limitations, innuendo (Fig. 3).

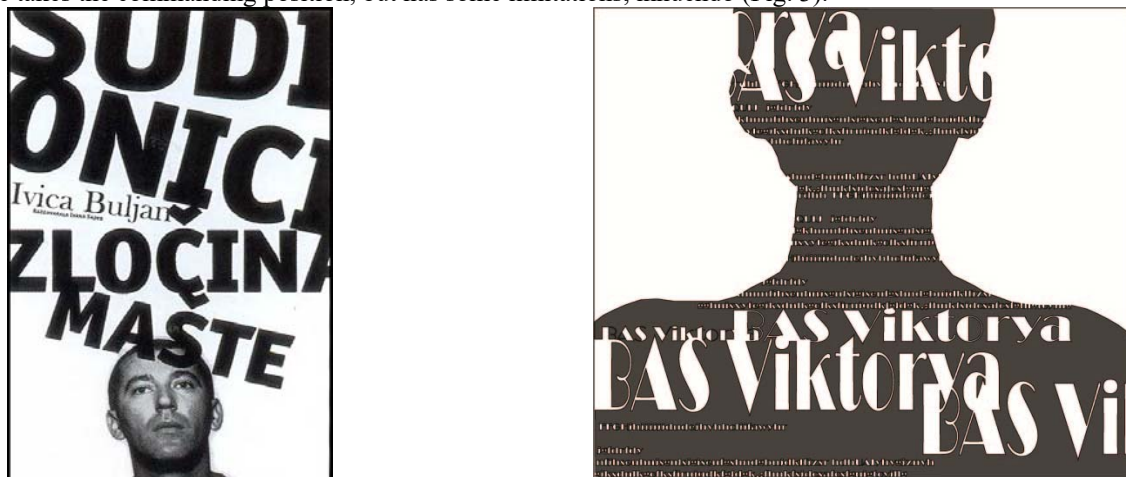


Fig. 3 Student work (author Victoria Bass)

3.5.3 “Letters Confluence” method

In the poster composition types merge, forming an original image (Fig. 4).



Fig. 4 Advertising Arts Festival.

3.5.4 Method of using photos, textures and types

In the composition of the poster a photo is placed on one layer, different filters being applied to it. On the top layer there is the inserted text part (Fig. 5).



Fig. 5 The theater advertising

3.5.5 “Type diversity” method

Words and numbers overlap each other (Fig. 6).

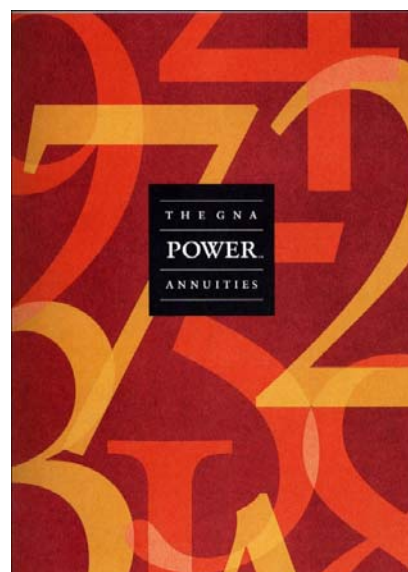
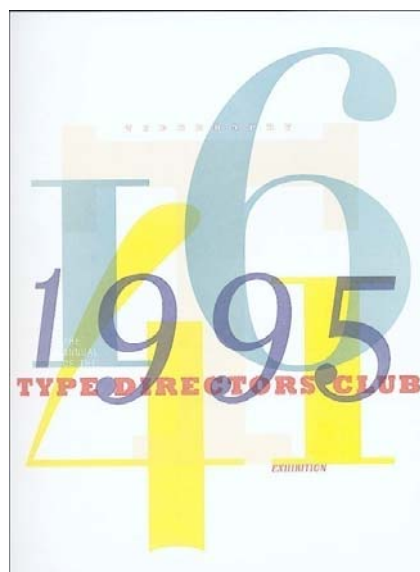


Fig. 6 Advertisements clubs

3.5.6 “Different type sizes” method
Different type sizes are used (Fig. 7).



Fig. 7 Military-insurance company advertisement

3.5.7 “The text wraps around the photo or illustration” method
Location of the text flows around the photo or illustration (Fig. 8).

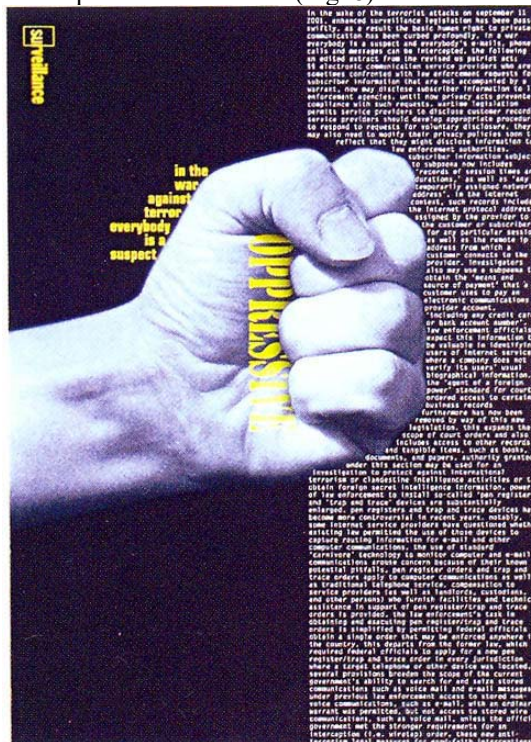


Fig. 8 A social advertisements

3.5.8 “Using object of animate or inanimate nature” method

The objects of animate or inanimate nature are used form the shape (Fig. 9) or the type (Fig. 10) of their silhouettes.



Fig. 9 Coffee advertisement



Fig. 10 A student work (author Lyudmila Mashkina)

3.5.9 “The effect of hand-made type effect” method

Types look as if they have been written out by hand (Fig. 11).



Fig. 11 A student work (author Lyudmila Mashkina)

Creativeness of artists and poster is not limited to the above mentioned methods. There are a lot of methods and advertising ideas. The above graphic means, the laws of composition and composition forms are just the bricks with which a poster is created.

3.6 Psychological and marketing aspects

Besides art and advertising techniques, there are also psychological and marketing aspects. Their application increases the effectiveness of an advertising poster. They include the peculiarities of communication means depending on the industry or field of activity. A significant number of research works and publications disclose the particular communication complex in education (Khristoforov, Khristoforova, 2011; Khristoforov, Khristoforova, Suglobov, Semenov, Bank, Orlova, Podrezov, Muslaev, Makeeva, Bank, 2017; Khristoforova, 2012). The study took into account the parameters of branded and stable characteristics of the university, for which the poster was designed, in particular, the existing logo (Figure 12).



Fig. 12 University of Technology's logo

As noted in the description of the methodology of the study, the analyzed selection includes 57 posters used in the educational environment, divided into two main groups: the socialist period of development and modern posters.

Posters in the formation of the socialist period of development of our country are characterized by ideological and educational orientation.

The first ideological group includes posters comparing the education system under socialism and capitalism (Figure 13) Educational tasks are presented on the posters focusing popularization of knowledge in general and internationalism (equality of opportunity for the representatives of different nationalities and races), promotion of various sports and the arts. Examples of patriotic posters focused on training young people, fostering respect for the work of various professions, such as teachers' work are shown in Figure 14.

Subject analysis in the direction of posters in the formation of modern Russia **allowed researches to identify** the following classification groups:

1. Information on the procedures of the Unified State Exam (Fig. 15).
2. Educational and methodical nature, which can be related to visual aids for some courses.
3. Popularizing education in specific areas, such as scientific and technical creativity.
4. Commercial posters that attract attention of entrants and their parents in the activities of the university, such as posters of holding Open Days, calling for the admission to a certain university or informing about it (Fig. 16).
5. Various activities organized at the university (Open Days, conferences, contests and competitions).
6. Social nature aimed at promoting specific ideas, such as healthy lifestyles, the dangers of bad habits, on accessibility and inclusive education, revealing the importance of modern computer education, etc.



Fig. 13 A comparison of education systems in the USA and the USSR



Fig. 14 Mentoring youth



Fig. 15 Information on the procedures of the Unified State Exam

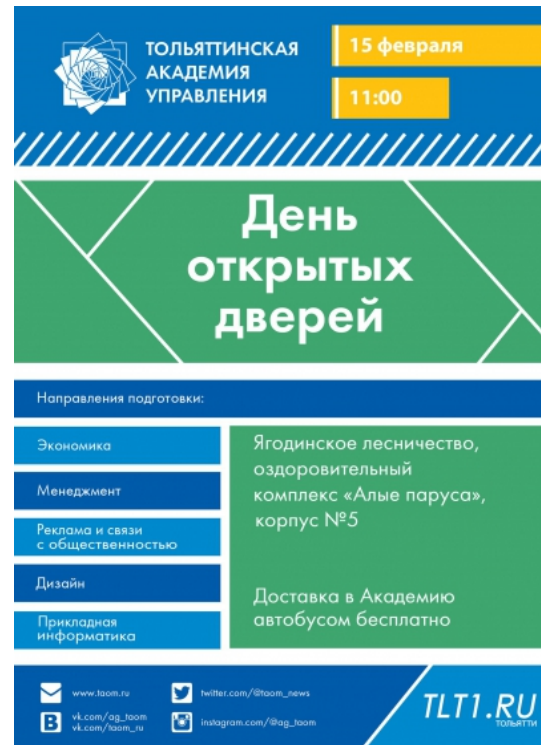


Fig.16 Informing about holding an Open Day

Universities posters analysis made for Open Days, **allows the scientists to identify** the main elements of the composition and the frequency of their use:

- the logo and the name of the university (100%)
- the availability of information about the event, date and time of the meeting - Open Day (100%)
- contact details: phone number, website (90%)
- e-mail (95%)
- some posters also place contacts in social networks, directions, areas of training and education programs at the university, the program of the Open Day, etc.

Analysis of the design techniques used in the creation of posters in education revealed the ones using the following methods: "The text wraps around the image" (Fig. 17), "the use of animate and inanimate nature objects" (Fig. 18), "innuendo type" (Fig. 19).



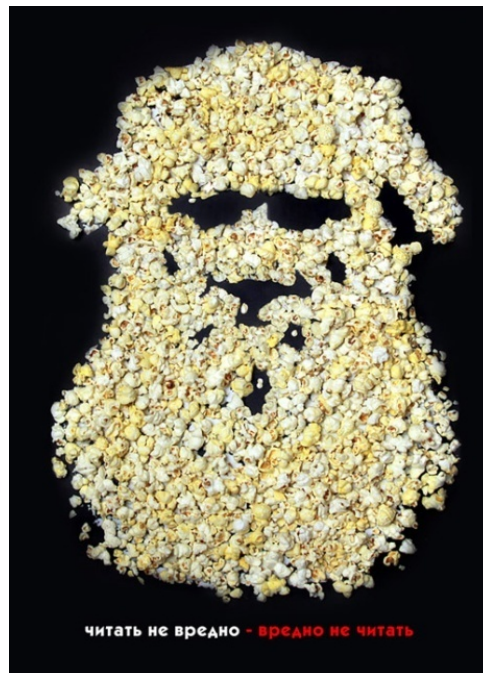
Fig. 17 Advertisement of the design faculty

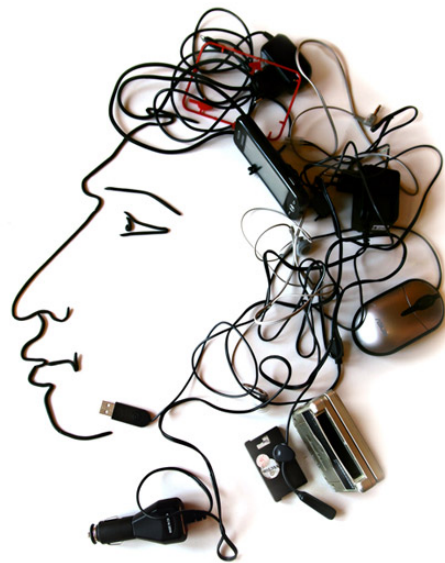


Fig. 18 Open Day poster

Research in the field of marketing tools designed for a specific target audience which takes into account the characteristics of the advertised product, in this case, the services, **allowed the researches to formulate** the following conclusions.

Specific features in the consumption of goods and services directly influence the strategic directions in the field of quality and marketing communications. In addition, we can distinguish the types of communication that are more effective when implementing the promotion of goods or services.





ЧИТАТЬ НЕ ВРЕДНО - ВРЕДНО НЕ ЧИТАТЬ

Fig. 19 A series of M. Knyazev's posters, the winner of the social poster competition promoting reading in the category of "the best photo"

K. Lawley says that the development of communication strategies with consumers in the sale of services is very different from the promotion of material goods (Lovelock and Wirtz, 2011). He identifies various aspects to prove that.

1. *Intangible nature of the service process* requires a search for ways to more specific and clearer visual representation of service possibilities. Many service companies use various animals as visual symbols of the services: Qantas - kangaroos, US Postal service - eagle, Lloyd's Bank - the horse. It is important that the idea the company or the organization wants to convey to the client, were displayed as clearly as possible in the visual image presented in the logo and various promotional materials. The use of *the symbols of material nature* **allows the specialist to make** promises of intangible benefits more specific. The logos of universities often use material symbols such as academic buildings (Moscow State University, University of Technology in Moscow region), the Earth (Korolev Institute of management and sociology), wood (Russian State Humanitarian University), a wreath and a column (Russian Economy University), an open book and the planet (Russian State University of Tourism and Service) (Fig. 20).

2. *The participation of consumers in providing services* makes it necessary to depict consumers themselves in communication elements: travel agencies advertisements - tourists, retail - customers, universities - students (Fig. 21).

3. In the service sector it is of great importance for staff to be in direct contact with consumers. The presence of the staff makes services more tangible, personalized.

4. Advertisement which shows the company employees at work, helps potential clients understand the service process nature. It involves a promise of special attention to each of them. Of this kind is the advertisement showing a uniformed employee of the hotel in the TV commercial accompanying the client at all stages of registration, or a teacher with students (Fig. 22).

Foreign experts say that in marketing communications used in the service sector, especially in ads letters, contains more emotional appeals than in advertising products. For example, studies Cutler Javalgi Andes (1993) demonstrate that the formation of strategies for the promotion and positioning in the services sector requires a large share of advertising using emotions to increase tangibility services (Cutler, B.D., Javalgy, 1993).



Fig. 20 The materialization of services in the design of Russian State University of Tourism and Service's poster



Figure 21 Students as a composition element in the design of the poster of the Russian Academy of National Economy and Public Administration



Fig. 22 Students with a teacher as a composition element in the design of a high school poster

Characteristics of the target audience

The target audiences of the poster are the entrants and their parents. The former relate to one age group (pupils of 9 classes are potential entrants of the College of Technology and Design and Space Engineering College, pupils of 11 classes are potential entrants of Baccalaureate). The latter differ in status, level of education, social status, place of residence, etc.

The wide coverage of the target audience by their characteristics is a feature of the development of the poster project design. It must be equally well accepted by different layers and groups, united by one desire to find a high level education university that trains needed in the labor market specialties.

3.8. Poster's concept

Poster for the Open Day at the University of Technology as a communication tool that implements the advertising function should fulfil a number of tasks:

- to create a vivid and distinctive image of the educational institution;
- to inform of the date of the Open Day;
- to inform the viewer of a number of other important characteristics of the University (directions of training, transport, telephones, etc.);

- to create emotional;
- to show competitive advantages of the University.

To solve these problems, it is necessary to formulate the main idea of the poster design, in which all the above mentioned tasks could be fulfilled. This idea should be the main competitive advantages, expressed in a vivid visual form. The formulation of the basic visualization parameters of the main idea of the poster that best meets the requirements is the very concept of the poster.

To address the objectives it is necessary to show strong measures and soundness of preparation at higher school, combined with interest and emotionally positive attitude that distinguishes the learning process there.

This combination of as if opposite parameters should be the basis for the design, being a fusion of unique and trivial things, freedom of communication and observation of rules, i.e. representing all the variety of vital activity united by one aim – effective comprehension of knowledge.

3.9. Development of poster's design in sketches and its realization in Adobe Photoshop and CorelDraw

In developing the design of the poster has been using the following artistic techniques (Fig. 23).



Fig. 23 Poster for the Open Day at the University of Technology

Asymmetry. Composition's asymmetry is a substantial violation of the proportions of the left and right sides. The left side is composed of type and the right one holds the iconic part of the poster. Such deliberate violation of symmetry is caused by the necessity of dividing the entire field into different functional areas.

The left side is "loaded" with verbal information reporting on the training directions, name of the event, the University name and the address.

The right part draws the viewer's attention to the date, and, which is the most important, affects his subconscious with striking visual image of the rainbow associating intuitively with positive experience of everything which is new, unusual, fresh and is combined with the silhouette of the open door. Due to this reconciliation, the poster creates a metaphorical image of the university- open doors in the new world filled with colors and sunlight.

Composition. In the center of the composition there a bright spot of color doorway with the date of the Open Day that immediately attracts the viewer's attention organizing the picture and movement of the eyes in it.

Simple, clear compositional scheme, compiled of the combination of the field lines - horizontal, along which type material is placed and vertical doorway. The Center of the composition, organizing the viewer's perception and directing the movements of his eyes is the bright spot of light and a large figure "7" that indicates the date of the event.

Another supporting point, subordinate to main center of the composition is the big text "Open Day". The combination of these two major leitmotifs "holds" all the elements of composition.

The contrast of colors and shapes.

The contrast of colors is provided by discreet pearl background and a bright saturated color of the door opening, as well as the color squares next to the training directions. The contrast is achieved by horizontal lines, along which the type material is placed and the vertical doorway.

The rhythm and meter. The type group is rhythmically organized along the repeated horizontal lines. This metric organization of the text preserves its readability and ease of acceptance. Large text blocks (left and right) in the same repeated image of a simple rhythm.

Larger blocks of text (left and right) are also repeated, forming a simple rhythm.

Poster Graphics (man-made illustrations, lettering, collage) is processed in modern **graphic editors** or completely created on the computer using the appropriate Adobe programs.

4. DISCUSSIONS

Solving the problem required a multi-disciplinary research related to the study of literature on art, design, advertising, marketing, pedagogy. As is well-known the poster is the most important area of artistic creation, specific form of printed products and, at the same time, represents the oldest form of advertising. The poster can be attributed to graphic design in relation to the process of creation, to the media in connection with the design feature of the impact on the consumer and to the element of environmental design in relation to the role in shaping the design of the space surrounding the person.

Works of numerous authors (A.V. Demenkova, 2014; N.B. Egorov, A.B. Demenkova 2011; V. Kovalev, 2010; V.V. Krishtopaytis, 2008; V.V. Krishtopaytis, 2012; V.V. Krishtopaytis, 2014; V.A. Pobedin, 2001; S. Serov, 2014) are devoted to the problems of development of graphic design technology.

The works of specialists in different fields(poster artists, educators, marketers, advertisers, psychologists and sociologists) deal with the history of art of poster creation, peculiarities of creative execution, consumer perception and effective promotion of goods and services.

Revealing the history of the art of poster creation K. Beauvais and H. Ahrens point out that the first poster was created by Batdolde, a bookseller in 1482, when the advertisement for Euclid's Geometry was needed. The founder of poster's production is considered to be Jules Cheret, the lithography creator. In 1866 in Paris he printed more than 1000 different posters for advertising some enterprises and events (Beauvais and Arens, 1995).

Problems of the perception psychology and art of poster creation are raised in the of works P.A. Kudin, B.F. Lomov, A.A. Mitkin, (1987).

Describing the features of the poster as a means of communication, A.N. Lavrentiev notes that it differs in large format being accompanied by an illustration or photograph a brief text or motto. It is used in advertising, promoting, informing and training (Lavrentiev, 2008).

S.I. Serov emphasizes that the poster is «the most widespread form of visual art, performing a certain utilitarian function, aimed at solving specific social problems», provided by features of the execution of this kind of visual communication as «clearly and lucidly presented idea disclosed by using a limited amount of express information » (Serov, 2014). The author claims that the poster is designed in most cases for a limited period of performance and the impact on viewer. It is this efficiency that creates special demands for the graphic structure of the poster and the whole style of his creations.

V.V. Voronov notes that it is the art of photography and poster - poster graphics, that laid the foundations of the domestic graphic design (Voronov, 2003).

A valuable source in the context of the theme of the poster is a monograph by a graphic artist V.J. Shevchenko (Shevchenko, 2004), in which the researcher presented his vision of poster art, revealing the following issues: the role of the poster and place in the system of visual communication; Graphic Arts poster composition; method of preparation of experts-poster artists.

However, in all the above mentioned works poster has not been considered as a means of communication in the field of education.

Thus the research has made it possible to solve the methodological problems - to systematize the elements, rules, principles and techniques of graphic design used in the creation of posters in education and to solve a number of applications - to develop a poster project for the Open Day and lay the foundations of teaching methodology based on a perception peculiarities of posters in education.

In addition, the results of the study have **allowing the researchers to consider** the technological and pedagogical aspects, identifying features, which need to be addressed in the training of design students. In particular, the practical implementation of the project has shown the importance of the use of specialized computer programs (A.B. Demenkova, 2014; N.B. Egorov, A.B. Demenkova 2011; A.P. Panfilova, 2009). The Adobe Photoshop is a popular professional editor pixel graphics, which offers virtually all the features of the processing of the scanned graphics and the creation of complex visual montages. Adobe Illustrator is a vector graphics editor for creating images that are used in the printing industry, electronic presentations and web-design. Adobe InDesign is a modern professional layout program with diverse characteristics of typography and advanced prepress system.

One of the ways to learn the computer programs by students- designers is to get the knowledge of theory and consolidate it in practice in the course of carrying out specific projects.

5. CONCLUSION

The application of described results of the research and poster creation techniques is expedient for the activation of professional skills of students of creative specialties (artists, designers, advertisers, marketers). Students practice using the results of research and consolidate the theoretical material in carrying out practical work on the course.

6. RECOMMENDATIONS

The results of the study by the authors identified the basis for the development of the poster Open doors Day. It is planned to continue research and use its results and methodological aspects at developing educational courses for students of "design" training.

Information about authors

Irina V. Hristoforova - Doctor of Economics, Professor, Head of the Department of Design, University of Technology, the Moscow region, Korolev, Russia

Alexander B. Demenkova - Ph.D., Associate Professor, Department of Design, University of Technology, the Moscow region, Korolev, Russia

Tatyana N. Arkhipova - Candidate of Technical Sciences, Associate Professor, Department of Design, University of Technology, the Moscow region, Korolev, Russia

Tamara I. Krasikov - Candidate of Philology, Professor, Head of Department of Foreign Languages, University of Technology, the Moscow region, Korolev, Russia

Valentina V. Krishtopaytis - Ph.D., Associate Professor, Department of graphics, Kharkiv State Academy of Design and Arts, Kharkov, Ukraine

Conflict of Interests Statement

The authors confirm that they have no Conflict of Interest.

Ethics statement

Not applicable

Data availability

The data of the research will be available right after its publication.

REFERENCES

- Beauvais, K., Arens, W. (1995) *Contemporary advertising*. Moscow: Dougan, 704 p.
- Voronov, N. V. (2003) *Design: Russian version*. Tyumen: 224 p.
- Demenkova, A. B. (2014) Methods of graphical presentation of advertisement poster. *Proceedings of the VIII International scientific-practical conference 'The Role of art and design in culture, science and education of XXI century'*. Moscow: NOU VPO MGTA, 11, 1-6.
- Demenkova, A. B. (2014) Application of graphic design for the specialty Design. *The second international scientific-practical Internet-conference 'Innovative technologies in modern education'* (pp. 1-6). Korolyov: FTA.
- Egorov, N. B., A. B. Demenkova (2011) *Branding and advertising Design Graphic: a Course of lectures on the subject of Project Graphic*. Moscow: MSUDT, 12 p.
- Kovalev, V. (2010) Social advertising potential of civil initiatives. Actual problems of social advertising and design. *The Metropolitan collection of scientific articles* (pp. 37-43). Moscow: RSSU: APK&PPRO.
- Krishtopaytis, V. V. (2014) Visual communication design and typography in the magazines of the early twenty-first century. *The collection of materials of all-Ukrainian scientific-practical conference 'Advertising as artistic and communicative practices'* (pp. 48-53). Kharkiv: Kharkiv State Academy of Design and Arts.
- Krishtopaytis, V. V. (2010) Post-modernistic aesthetics influence on the typography of printed matter at the turn of the 20th–21st centuries. *Materials of International scientific-theoretical conference 'Social, political and cultural problems of modernity'* (pp. 382-385). Simferopol: DIP.
- Krishtopaytis, V. V. (2008) Typography print editions the beginning of the XXI century: tendencies of development. *Materials of V International scientific-practical conference 'Science and social problems of society: education, culture, spirituality'* (pp. 62-65). Kharkiv: Kharkiv National Pedagogical University after G. S. Skovoroda.
- Kudin, P. A., Lomov, B. F., Mitkin, A.A. (1987) *The Psychology of perception and the art of the poster*. Moscow: Plakat, 208 p.
- Lavrentiev, A. N. (2008) *History of design: proc. manual*. Moscow: Gardariki, 303 p.
- Lovelock, Christopher, Wirtz, Jochen (2011) *Services Marketing: People, Technology, Strategy Journal of Services Marketing* (7th ed.). Boston: Prentice Hall, No 18(5), 616 p.
- Moscow international graphic design Biennale 'Golden bee'* (2016) In S. I. Serov (Ed.). – Moscow: Alma Mater, 338 p.
- Panfilova, A. P. (2009) *Innovative pedagogical technologies: Active training: study guide*. Moscow: Academy, 192 p.
- Pobedin, V. A. (2001) *Signs in graphic design*. Kharkiv: Ranok, 95 p.
- Serov, S. (2014) *Moscow Conceptual Poster 1990-ies*. Moscow: Index Market, 304 p.
- Heller, S., Ilic, M. (2009) *The Anatomy of Design: Uncovering the Influences and Inspiration in Modern Graphic Design*. Hove: Rotovision, 201 p.
- Khristoforov, A. V., Khristoforova, I. V. (2011) Developing complex of marketing communications in service companies: scientific approach. *Marketing and marketing research*, No 1, 50-66.
- Khristoforov, A. V., Khristoforova, I. V., Suglobov, A. E., Semenov, E. I., Bank S. V., Orlova, E. A., Podrezov, A. A., Muslaev, S. V., Makeeva, D. R., Bank, V. J. (2017) *Marketing communications in the services sector: specific applications and innovative approaches*. In A. E. Suglobova (Ed.). Moscow: RIOR: Infra-M, 159 p.
- Khristoforova, I. V. (2012) Innovative forms of marketing communication in the service sector: methodological and applied aspects. *Marketing and modernity: Current marketing technologies in the development of the Russian economy*. In S. V. Karpova (Ed.). Moscow: Paleotype, 271-275.
- Shevchenko, V. (2004) *The Composition of the Poster: study guide*. Kharkiv: Colorit, 124 p.
- Cutler, B. D., Javalgi, R. G. (1993) 'Analysis of print ad features: services versus products'. *Journal of Advertising Research*, Vol. 33. No. 2, pp. 62-9.
- Friedl, F. Ott, N., Stein, B. (1998) *Typography. When Who How*. Köln: Könemann Verlagseseellschaft mbH, 302 p.
- Gomez-Palacio, B. Vit, A. (2009) *Graphic design, referenced: a visual guide to the language, applications, and history of graphic design*. Beverly Massachusetts: Rockport Publishers, 400 p.
- Müller-Brockmann, J. (2001) *Grid Systems in Graphic Design: Raster Systeme Fur Die Visuele Gestaltung*. Niggli, 176 p.
- Polski plakat filmowi: Wybral i opracowal Tadeusz Kowalski* (1957). Warszawa: Filmowa Agencja Widawnicza, 143 s.
- Ryan, W. E., Conover, T. E. (2004) *Graphic communications today*. Thomson: Delmar Learning, 690 p.
- Yong Graphic: Designers Americas* (2008). London /New York: DAAB, 384 p.