

# Multidisciplinary approach to the training designers as a way of systematic thinking formation

## Enfoque multidisciplinario de los diseñadores de formación como una forma de formación de pensamiento sistemático.

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#### ABSTRACT:

The paper is devoted to one of the components of professional training of designers – the study and practical development of different genres and styles of fine arts based on the polyartistic approach in order to develop a wide range of skills necessary for the creative activity of a graduate. Design as a kind of creative activity is closely connected with the visual perception and transformation of the world and was originally supported by ideas and discoveries of architecture, sculpture, painting, graphics, hence the need for the development of extensive knowledge and a variety of designer skills in the field of visual art in general. The paper reveals the links between the innovations of avant-garde art and modern design, which actualizes the polyartistic approach to the professional training of a designer in order to develop systematic thinking.

**Keywords:** Designers, Professional Training, Polyartistic approach, systematic thinking, design

#### RESUMEN:

El documento está dedicado a uno de los componentes de la capacitación profesional de los diseñadores: el estudio y el desarrollo práctico de diferentes géneros y estilos de bellas artes, basado en el enfoque polartístico para desarrollar una amplia gama de habilidades necesarias para la actividad creativa de un graduado. . El diseño como un tipo de actividad creativa está estrechamente relacionado con la percepción visual y la transformación del mundo y originalmente fue apoyado por ideas y descubrimientos de arquitectura, escultura, pintura, gráficos, de ahí la necesidad de desarrollar un amplio conocimiento y una variedad de diseñadores. Competencias en el campo del arte visual en general. El artículo revela los vínculos entre las innovaciones del arte de vanguardia y el diseño moderno, que actualiza el enfoque polartístico de la formación profesional de un diseñador para desarrollar un pensamiento sistemático.

**Palabras clave:** Diseñadores, Formación profesional, Enfoque polartístico, pensamiento sistemático, diseño.

## 1. Introduction

A designer is a specialist in the field of design and creative activities carried out through a wide range of artistic means and methods. Requiring a wide range of intellectual and practical skills, designer activities cover a multi-stage process from idea formation and goal projection to real implementation in the form of a specific creative product (Tarasova and Haliullina, 2015). Since design is a "specific sphere of activity aimed at the development of the subject-spatial environment in order to give the design results high aesthetic qualities, optimization and harmonization of their interaction with a person and society, natural environment" (Kaukina, 2015, p. 102), it is closely related to the visual perception and transformation of the world and was originally fueled by ideas and discoveries of visual arts – architecture, sculpture, painting, graphics. Many innovations of these types of artistic creativity directly influenced the development of design as an art and enriched it with methods, technology, figurative and conceptual components, hence the need for the development of extensive knowledge of a designer and a variety of skills in the field of visual art in general. After all, "everything that is in a relationship, should be taught in the same connection", as Ya.A. Kamensky considered (Dontsov, 2013, p. 7).

The specificity of the polyartistic approach is the development of several types of art in order to understand the origins and principles of different forms of creative activity and the acquisition of skills from many areas of art. It allows a future designer to master the skills and techniques used in different types of art, serves as a condition for self-realization of a person and develops the ability to create in general. The polyartistic approach in the professional training of designers contributes to the development of such an important quality of personality for specialists in this field as systematic thinking, which allows one to perceive an object or process in its relationship with other objects or processes that develop convergently or divergently, as well as to know about an object or process in its entirety and the plurality of components that form a system of interdependent elements.

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## 2. Methods

Professional training of designers is a subject of many works covering the competence (Ermolenko, 2008; Kaukina, 2015), project (Tagiltseva and Ovsyannikova, 2017; Shimko, 2005), creative activity (Bondareva, 2000; Zaplatina, 2008; Myshinsky and Koukina, 2009) and polyartistic (Pismak and Kukhareenko, 2014; Tagiltseva, 2016) approaches to the educational process. Multidisciplinary technologies, cross-thematic training, methods of the complex development of arts and the tendency to integrate creative design and development of project culture have been described in detail. The issue of versatile artists capable of creating works in all types of art has been addressed. The professional training should follow the polyartistic, multi-disciplinary, integrated approach and "be based on the development of different types of art and artistic and creative activities of students (Tagiltseva, 2016, p. 295). However, only N.I. Bondareva explores the process of formation of system representations based on the polyartistic approach, and B.P. Yusov (2000) has devoted a number of works to the interaction of arts and integrated educational technologies.

Meanwhile, in other areas of art education, with the aim of developing aesthetic taste and the systematic knowledge about art, polyartistic and integrated approaches, technologies and techniques are widely used. Thus, "the integrated art lessons include a wide range of different arts. At these lessons, students acquire knowledge of the basic laws of artistic creative reflection of the phenomena of life in works of art, the uniform laws of creation, similar means of expression in different types of creative activity" (Tagiltseva, 2016, p. 290). In relation to designer training, the polyartistic and integrated approaches are also acceptable and effective in the perspective view of the future of professional training, so the main method of studying the problem of using the polyartistic approach in the training of designers is forecasting and modeling of the educational process. Integration is interpreted as a "unity of previously isolated parts, elements, components, accompanied by the complication and enlargement of ties and relations between them; the process of movement and development of a particular system in which the frequency and intensity of interactions of its elements grows, enhanced by their interaction" (Dontsov, 2013; Zaplatina, 2008).

### 3. Results

Modern trends in design are largely associated with the visual arts of the 20th century, from abstract expressionism and pop art to conceptualism, assemblages and installations. Most of the original ideas of avant-garde and postmodern, relevant in the modern world, the designers of the 21st century have picked up, rethought, reincarnated and given them a new life in a new socio-cultural situation. Thus, in the first decades of the 20th century, the "ready-made" compositions of industrial production facilities or their parts created by M. Duchamp had a special resonance among the Bohemians. They reflected the concept of "a thing" – the subject of everyday life, which in certain conditions becomes a work of art or one of its components. The creators of the "ready-made" sought to "open" something new in ordinary things, to see the true nature of what one faces every day. Such ideas are the basis of many modern design trends.

Abandoning the elitism and depth of abstractionism, pop art artists chose mass culture and the environment, as well as the principle of the aestheticization of everyday objects and perception of the world as it is, as their source of inspiration. Pop art, bordering on painting and design, demonstrates what drives social consciousness today and criticizes the morals of modern society, exposing "anti-values" to the public. This is a bold, immersed in the immediate reality style, which makes fun of the faults of mass culture in the form of "visual bombardment of everyday life" (Leslie, 1998, p. 12), soberly assessing the activities of modern humans. It doesn't speak about specific things but pieces of the continuous and infinite process of the coexistence of multiple phenomena in a new, pluralistic world, saturated with images, objects, events.

One of the directions of abstract art was "concrete art" that emerged in painting in conjunction with abstract paintings that contain a purely geometric, often mathematically precise shapes and images, "assembled" from the lines, shapes, planes or patches of color (Bychkova, 2000, p. 223). Another genre is environment. It is an art form, in which objects of the physical world (stones, trees, sand, grass, etc.) are used as artistic material (Kaprow, 1966). Basically, an environment is created in the open air, so the external environment, the landscape and nature itself (and sometimes the weather) are equal parts of the composition. These findings were also further developed in the contemporary art of design.

The original ideas came to design from architecture as well. As one researcher stated, "Le Corbusier boldly applied free forms in architecture. The characteristic features of his style among others were three-dimensional objects raised above the ground with columns located underneath, a flat roof-terrace, used as gardens, transparent facades, large internal space with the "free plan" (Pereverzeva, 2018, p. 73). Another architect, Antonio Gaudi-I-Cornet, completed the construction of the La Pedrera House in 1910, proposing a new solution for the time, later called the free plan. The building and apartments of this six-floor building feature a complex curved plan and sloping shape of the internal partitions, no internal load-bearing walls, intermediate floors supporting columns and outer walls, support the roof of the arcade and the location on the roof of a terrace of complex composition" (Pereverzeva, 2018, p. 73).

If the art of the 1940s-1950s did not go beyond the studio, gallery, concert hall, theater, then in the 1960s, the whole world became the area of artistic activity. The leading trend was happenings – "collages of unrelated scenes, celebrations of the moment" (Mankovskaya, 2000, p. 244), which were arranged on the streets, in parks, museums, outside the city (Kaprow, 1966). Under the influence of happening, the "environmental theater" appeared with its principle of the globalization of art and the practice of attracting actors-amateurs of all races and nationalities. All this was the result of the integration and interpenetration of the arts, which "means their unity, that is, the preservation of interacting systems and the establishment of mutual contacts between them. Integration implies the mutual penetration of different types of art activities in a single lesson" (Dontsov, 2013, p. 6). Thus, avant-garde painting, sculpture and architecture anticipated the modern innovative design paradigm, which "is formed on an interdisciplinary basis as a result of the transfer and recombination of non-stereotypical information and skills from one area of knowledge or

## 4. Discussion

Art developed on the way from collective creative activity to individual creative self-realization of an artist. The same trend is observed in education. The competence-based concept of training reinforces the trend of individual and activity-practical approaches in the training of specialists of the 21st century. The purpose of training is the formation of a versatile educated designer, capable and ready for productive creative activity, developed as a person and an artist with a systematic understanding of the future profession and a set of methods and means of its implementation. The basis of design activity is the design and creative transformation of the environment, that is, "a comprehensive method representing the integration of knowledge from different subject areas" (Dontsov, 2013, p. 6). Integration determines the process of the system integrity formation and, as a consequence, of systematic thinking since it contributes to the development of a holistic artistic and creative consciousness on the basis of mechanisms of mental synthesis and interaction of different senses. Systematic thinking is the basis of sustainable (ecological) design, a form of design activities aimed at "stabilizing the relationship between a person and the environment" (Arutyunyan, 2016, p. 155). In other words, it serves to the restoration of the interrelation system between humans and the environment.

In order to achieve the necessary quality of thinking for a designer by the method of pedagogical integration – the interaction of different sources of knowledge and learning technologies – a student studies and practically masters special disciplines based on the polyartistic approach and a variety of creative directions. As T.V. Khudyshkina notes, "pedagogical integration is the linking of various disciplines, individual sections of certain types aimed to provide access to students for studying various aesthetic developments" (Khudyshkina, 2014, p. 92). One of the technologies of pedagogical integration is the method of polyartistic projects. Based on the above-mentioned regarding the immanent connections of avant-garde styles of visual art of the 20th century and design, including modern, it is possible to put forward a hypothesis about the effectiveness of the method of polyartistic projects in the professional training of designers in order to form the culture of systematic thinking.

Design projects based on the integration of different types of art are of interest from the point of view of the application of the polyartistic approach in the training of specialists. In the educational process, pedagogical effectiveness has been demonstrated by such projects as the creation of three-dimensional objects symbolizing the styles and trends of the 20th-century visual art, including abstract expressionism, cubism, constructivism and pop art. The project was implemented by students of the Higher Music School named after A. Schnittke and Russian State Social University for the exhibition of avant-garde painting in the Museum of Modern Art in 2017. These objects were designed and implemented in the spirit of "ready-made", installations, assemblages and combined structures, which were situated in different halls of the Museum dedicated to different styles and directions of the fine art of the 20th century. Another project is the exhibition "Evolution of Sculpture: From Stability to Mobility", held at the Garage Museum in 2018, which included the work of students-designers of Russian State Social University, who presented models of sculptures of the future, which, in the opinion of the young artists, represented what they will be like in the future.

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## 5. Conclusions

The polyartistic approach, which emerged in the 1970s, has already brought positive results in the educational process in the subject areas of music, art, choreography. The integration of arts has long brought together painting and applied arts, which influenced the "development of the understanding of art, brought a new idea of the world, helped to perceive the surrounding reality in a new way" (Dontsov, 2013, p. 7). Synthesis of arts in the 21st century is considered by researchers in the context of modern trends in the development of culture and education (Kalinina, 2016). In the training of designers, the polyartistic approach should be introduced into the content of theoretical and practical

disciplines, teaching methods and creative practice of students, which will promote the use of innovative metasubject principles and ways of interrelation of arts by students in design and creative activity, which will ensure their systematic vision and reflection in a new artistic subject. "This training allows you to freely "come out" beyond art in the area of painting, which contributes to the formation of interest in different types of art activities" (Tagiltseva, 2016, p. 298).

Systematic thinking helps to discover the inner kinship of various phenomena of artistic creativity, the unity of creative thinking, and common mechanisms of creative activity. Due to the polyartistic approach, the formation of systematic thinking significantly expands not only the range of professional competencies of a designer, but also a set of skills, abilities, tools and methods of creative activity of the specialist, allowing him/her to freely create, using the opportunities of various genres and styles of visual arts, which will only be needed to implement original ideas and bold daring. "Polyart, as a multilevel phenomenon, is a polyphonic perception of artistic images, the principles of learning go beyond a single art, which leads to another vision and the transmission of artistic images by means of plastic, words, movement, rhythm, character, symbol, sound, color," (Dontsov, 2013, p. 8).

Interspecies connections of arts contribute to the emergence of systematic connections and the development of system-forming concepts, as well as the integrated application of skills and abilities from different areas in integrated creative activity. The integration of different artistic means develops "the ability to design own activities" in a future designer (Kaukina, 2015, p. 102). Systematicity is the basis of the main style of thinking of a designer – project, which "is a feature of modern thinking and involves the manifestation of creativity in the creative act" (Tagiltseva and Ovsyannikova, 2017, p. 231). Systematicity, along with conceptuality and innovation, is the main component of a project and largely determines the level of development of professional and personal qualities of a designer, in turn, depending on the interrelated and interdependent knowledge, skills.

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## References

- Arutyunyan, A.A. (2016). Art of design: ethical and environmental aspects. *Bulletin of the St. Petersburg State Institute of culture*, 3(28), pp. 155-158.
- Bondareva, N.I. (2000). *Development of students ' systematic ideas about the culture of behavior on the basis of polyartistic approach* (Ph.D. dissertation). Rostov-on-Don: Rostov State Pedagogical University, 2003.
- Bychkova, L. (2000). *The book of non-classical aesthetics*. Moscow: Russian Academy of Sciences, pp. 333.
- Dontsov, A.O. (2013). Features of realization of the polychrome approach in the process of art education in the domestic pedagogy. *Vestnik KSU named after N.A. Nekrasov*, 19, pp. 6-8.
- Ermolenko, G.Yu. (2008). Pedagogical conditions of formation of polyartistic competence of future teachers of art. *Proceedings of Volgograd State Pedagogical University*, 9, pp. 157-160.
- Kalinina, L.Yu. (2016). The concept of "synthesis of arts": current aspects. *The Baltic Journal of Humanities*, 5(4(17)), pp. 236-239.
- Kaprow, A. (1966). *Assemblages, Environments and Happenings*. New York: H.N. Abrams, pp. 341.
- Kaukina, O.V. (2015). Methodological aspect of the formation of the project culture of future designers in the process of professional training. *Bulletin of the Volga University V. N. Tatishcheva*, 4(19), pp. 102-109.
- Khudyshkina, T.V. (2014). Polyart education through the implementation of creative projects. *Scientific dialogue*, 11(35), pp. 89-101.
- Leslie, R. (1998). Pop art. *A new generation of style*. Minsk: Belfax, pp. 128.
- Mankovskaya, N. (2000). *The aesthetics of the postmodern*. SPb.: Aletheia, pp. 347.

- Myshinsky, M.S., O.V. Koukina. (2009). Individualization of creative development of students in the process of design education. *Siberian pedagogical journal*, 12, pp. 359-364.
- Pereverzeva, M.V. (2018). Choreographic aleatorics of M. Cunningham in the context of mobile works of art. *Bulletin of the Academy of Russian ballet A. Ya. Vaganova*, 4(57), pp. 71-90.
- Pismak, G.A., S.N. Kukharenko. (2014). Awakening and development of students' creative thinking on the basis of polyartistic approach to art education and aesthetic education. *Experiment and innovation in school*, 6, pp. 28-31.
- Shimko, V.T. (2005). *Design basics and environmental engineering: textbook*. Moscow: Architecture-C, pp. 160.
- Tagiltseva, N.G. (2016). Multi-art approach to the organization of the training of music teachers in a pedagogical University. *Pedagogical education in Russia*, 5, pp. 191-195.
- Tagiltseva, N.G., O.A. Ovsyannikova. (2017). Multi-art approach in the training of teachers in the subject area "art". *Language and culture*, 40, pp. 219-301.
- Tarasova, O.P., O.R. Haliullina. (2015). Essential characteristics of the structural components of the concepts of "project quality" and "creativity" in the context of the design activity. *Vestnik of the Orenburg State University*, 5(180), pp. 231-236.
- Yusov, B.P. (2000). *Set of integrated multi-art programs in fine arts*. Moscow: Master Press, pp. 148.
- Zaplalina, E.A. (2008). Introduction of the polyartistic approach in the educational process of the school with an in-depth study of subjects of the artistic and aesthetic cycle. *Proceedings of the Russian State Pedagogical University named after A.I. Gertsen*, 74(2), pp. 131-138.
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