DOI https://doi.org/10.30525/2592-8813-2026-spec-3

EDUCATIONAL POTENTIAL OF GRAPHIC DESIGN IN MODERN CONDITIONS AND SYSTEMATIC ANALYSIS/META-ANALYSIS OF DESIGN QUALITY

Innola Novykova,
Doctor of Science, Professor,
Kyiv National University of Construction and Architecture (Kyiv, Ukraine),
Professor Baltic International Academy (Riga, Latvia)
ORCID ID: 0000-0002-7322-6727
innolanovykova@gmail.com

Irina Kopeikina,
Mg. art, Mg. paed,
Associate Professor Baltic International Academy (Riga, Latvia)

Mihails Kopeikins,
Mg. art, Design School Director, Associate Professor, LDS Member,
Baltic International Academy (Riga, Latvia)

Abstract. This article examines the role of graphic design in contemporary post-industrial society, highlighting how it transcends purely applied art to function as an expert medium that shapes the social and cultural status of individuals. It demonstrates that graphic design, when integrated into broader social contexts and responding to challenges posed by socio-decorative phenomena such as fashion, plays a key role in cultivating cultural tastes. This reflects the multiplicity of complex and ambivalent cultural manifestations inherent in graphic design. The study approaches graphic design through the lens of philosophical communication, identifying it as one of the most effective methods of non-verbal communication and information visualization in a post-industrial society.

Special attention is given to the educational potential of graphic design, showing that both the creation of visual imagery and its interpretation by consumers depend significantly on the designer's aesthetic sensibility, ethical convictions, and humanistic orientation. This highlights the responsibility of the designer (visualizer) not only as a creator but also as an educator within the cultural and informational environment.

Key words*:* graphic design, culture of tastes, visual information, education, educational potential, post-industrial society, visualizer.

In the culture of post-industrial society, design plays a leading role, performing functions that extend beyond purely decorative purposes and actively shaping the social status, life priorities, and attitudes of individuals toward their environment and the people around them. In this context, analyzing design through the lens of a "culture of tastes" becomes particularly relevant. Narratives concerning cultural taste emerge at nearly every stage of European history, reflecting societal values and the evolving understanding of aesthetics. Design naturally intersects with socio-decorative phenomena such as fashion, offering expanded avenues for self-expression and human self-realization.

The relationship between fashion and the differentiation of cultural tastes has been acknowledged in philosophical traditions, from German idealism (Immanuel Kant) to the writings of Grigory Skovoroda, for whom fashion was a key term, and Pierre Bourdieu, who highlighted its role in codifying social hierarchies. However, in post-industrial society, the coding of tastes as social markers becomes increasingly complex. On one hand, traditional social education programs of the industrial era emphasized dress codes to reinforce social roles; on the other, contemporary society often challenges or ignores these rules, creating tension between the desire to defy conventions and the need for social recognition. Modern dress codes reflect these contradictions, while protest cultures, such

as hippies, emo, and graffiti subcultures, frequently assert their identity through distinctive design and attire.

Cultural predestination and social conditioning remain defining features of design across all forms–graphic, industrial, or landscape–demonstrating the ambivalence of design manifestations, from elite high-culture paradigms to the pluralization of tastes in mass culture. Focusing on graphic design, we observe that it functions both as a mirror of everyday life and as a tool for individuals to explore personal philosophies of self-realization. Harmonizing the inner and outer worlds requires attention to fashion, interior aesthetics, and social positioning, which together form a personalized sense of comfort. This "comfort" is mediated by each individual's aesthetic taste, education, knowledge, and awareness. A person with a developed culture of taste does not merely consume art aesthetically but interprets and evaluates it with discernment.

While material wealth may provide access to luxury products and high-end graphic design, it does not guarantee refined taste or a deep understanding of visual culture. Monetary resources can compensate externally for a lack of inner aesthetic development, projecting an "individual vector of glamour" (Krylova 2019: 211), but they are not a true indicator of cultural sophistication. Meanwhile, commercialization continues to shape contemporary artistic spaces, amplifying tensions between superficial appeal and authentic cultural value.

Graphic design, as an element of visual culture, intersects deeply with societal tastes, shaping collective trends and fostering social cohesion through non-verbal communication. From the 19th century onward, movements such as the Arts and Crafts Movement in the USA and England promoted socially useful, aesthetically simple design, aiming to create environments conducive to well-being and functional beauty (Smythe 2021: 96–97). This historical perspective underscores that taste is not merely personal preference but a socially and culturally mediated phenomenon, highlighting the educational potential inherent in design practice.

This correlation is often reflected in the taste preferences of individuals who actively engage with graphic manifestations of culture. Several key factors shape this correlation, with the culture of taste playing a central role. History demonstrates that design created solely for its own sake can become superficial and meaningless. As noted by Gavin Ambrose and Nigel Ono-Billson, whose work Graphic Design 01 serves as a propaedeutic of design education, technological progress can sometimes encourage frivolity among designers, leading them to pursue illusory or "empty" design. Designers must be aware that fashion fads, trends, and stylistic preferences are transient, influenced both by technological developments and the prevailing cultural spirit of the time (Ambrose & Ono-Billson 2019). A thoughtful approach to design, therefore, requires not only technical skill but also an understanding of the broader cultural and temporal context in which visual communication operates.

The emergence of graphic design, particularly in the form of infographics, can be superficially understood through Walter Benjamin's concept of the mechanical reproduction of art (Benjamin 2002). However, its significance extends beyond reproduction, marking a shift from a culture dominated by the written word to a culture increasingly centered on images–transitioning from the "Gutenberg galaxy" to the "McLuhan galaxy". Graphic culture is inherently adaptive, able to meet the diverse tastes of its audience, because it functions as a medium of communication between individual aesthetic preferences and the broader need for visual consumption. Graphic design translates ideas, concepts, and messages into visual forms, taking into account the target audience, communicative goals, and contextual circumstances to ensure clarity, comprehension, and engagement.

Designers actively monitor current trends in visual culture–fashion styles, color palettes, typographic conventions–and incorporate these elements into their work to produce contemporary, appealing designs that resonate with public tastes. In essence, graphic design provides visual solutions for the aestheticization of human living spaces, reflecting societal ideas of beauty, desirability, and social ideals. Unlike vernacular or purely artistic activities, graphic design is goal-oriented: whether creat-

ing a logo, packaging, advertisement, or website, it serves a communicative purpose. Yet, these goals are not always neutral or positive; they can include aggressive appeals or even hostile messages.

As a complex visual language, graphic design operates within a structured system of meanings that influence emotions, thought processes, actions, and personal environments. It plays a central role in the information landscape of post-industrial society, where image dominance is evident. Non-verbal communication and information visualization, supported by advanced technologies, demonstrate that written culture alone is no longer sufficient to convey meaning fully. Modern artistic and philosophical discourses increasingly emphasize the power of the image. Following Hryhoriy Skovoroda's terminology, one must consider the "invisible"–the hidden layers beneath what is seen. Non-verbal communication, in this sense, can convey meaning with exceptional clarity, as exemplified by early cave paintings. While such rock art primarily encoded information for insiders of a tribe, its visual power foreshadowed the communicative potential of modern graphic design.

Today, graphic design functions both to encode and decode information in contemporary society. Its omnipresence in daily life shapes preferences and influences decisions: logos, brands, and visual symbols evoke emotional responses and associations that guide consumer behavior. Graphic markers, whether on maps, social media, or advertising, streamline information processing, yet can also mislead, creating reliance on brand recognition rather than critical evaluation. Modern consumers often prioritize widely promoted brands over less visible but potentially higher-quality alternatives, highlighting both the power and ambivalence of graphic culture.

Graphic culture, encompassing all aspects of visual perception, occupies a central position in the modern information space, and its influence is both universal and global. Graphics, as a language of visual symbols, serve as a fundamental means of transmitting information–from diagrams and road signs to brand logos and social media icons. Concurrently, public perception of graphic design is shifting: its value is increasingly seen not as sacralized or elite, but as mass-oriented and popularized. The historical progression from narrative to visual culture reflects the broader civilizational development of humanity. The transmission of information has undergone a remarkable transformation–from oral traditions and storytelling to the culture of images, symbols, and eventually written text. Irene Vallejo's work, The Journey of the Book, compellingly illustrates this evolution, highlighting how the emergence of text enabled precise recording of knowledge, facilitating its accumulation and transmission across generations (Vallejo, 2023). The formation of book culture stands as one of humanity's greatest achievements, yet in contemporary society, there is an increasing preference for images as a primary means of obtaining and processing information. Tracing this trajectory is essential for understanding the nature of human information reality.

In the early stages of human existence, communication was primarily oral, relying on narratives as a means to transmit knowledge, wisdom, and cultural heritage. These narratives not only conveyed practical information about survival but also established a shared understanding of the world, developed through observation and experience. Visual symbols and images played a crucial role in codifying knowledge, preserving history, and shaping complex belief systems. This transition marked the emergence of a "universal language" in primitive societies, laying the foundation for visual culture. While visual culture significantly enhanced oral communication processes, the advent of written textual culture fundamentally transformed information transmission. The ascendancy of image culture over textual culture became pronounced during the great industrial transformations and was further solidified with the advent of photography in the early twentieth century, when experimentation with photographic techniques became widespread in both art and design movements (Smith, 2021).

Image and text have become central components of modern information exchange. The digital information visualization industry saturates everyday human environments, while text continues to underpin business communication, document management, knowledge culture, and academic discourse. The combination of image and text reduces asymmetry in information transmission, allowing

for more effective selection, interpretation, and understanding of meaning, as described by Niklas Luhmann. The key advantage of images lies in their independence from linguistic barriers: on one hand, visual language is accessible and widely comprehensible, yet on the other hand, it requires intercultural and interfaith interpretation. Images can act as bridges for cultural exchange, narrating history and national traditions, but they can also carry threatening or destructive meanings, humiliate non-believers, or create barriers to intercultural communication.

Graphic materials can serve as instruments of propaganda, reinforcing power, destabilizing societies, and generating conflict. Posters, banners, and advertisements sometimes replicate aggressive imagery, transmitting inhumane messages. Political campaigns often depict opponents with hostile gestures or images that negatively influence public perception. Similarly, graphic cartoons, comics, and memes may employ grotesque depictions or negative stereotypes to incite hatred toward specific social groups. In the media, glossy magazines and online platforms often highlight curated images of success and happiness, potentially promoting deviant consumer behavior.

Conversely, graphic culture holds significant potential for fostering dialogue and promoting peace. Using universally recognized symbols, illustrations, posters, and infographics, designers can draw attention to shared civilizational challenges. Visualization of global issues provides an effective mechanism for engaging the international community in dialogue. Design and graphics, empowered by the creativity and technical skill of their creators, employ cutting-edge technologies to render these messages visible in the human living space. Understanding the "invisible"–the layers of meaning beneath the visible image–relies on the guidance of the designer and the perceptive abilities of the observer. Without this guidance, only the surface of the image is perceived. Hence, the educational role of graphic design is crucial, serving as a bridge between visual communication and the development of critical perception.

Graphic designers receive specialized education and possess deep knowledge in design principles, composition, typography, color theory, and other aspects of visual communication. Their professional skills and mastery of tools enable them to create effective, comprehensible, and aesthetically appealing graphic solutions. The creative potential of the designer determines not only the aesthetic and functional quality of a work but also its communicative power. This communicative quality, consciously or intuitively embedded by the designer, ensures the long-term relevance and impact of any graphic project.

It is important to note, following Immanuel Kant, that since graphic design carries significant educational and formative potential, the designer responsible for translating these meanings must be well-educated and culturally literate. If design education is limited or insufficient, the educational potential of design may be compromised. Current trends, such as the reduction of humanities disciplines in art education, are often economically justified but risk dehumanizing design education. The development of future designers should occur throughout their education and adhere to clear humanistic principles. Richard Pring emphasizes a practical approach in education, bridging theoretical knowledge with the common-sense understanding of ordinary individuals. According to Pring, education should not only convey theoretical concepts but also cultivate the ability to interpret and apply knowledge in the context of everyday experience (Pring 2004: 145–162). This integration ensures that students can critically engage with the world and internalize ethical and aesthetic principles.

Applying these principles to domestic design curricula suggests the importance of emphasizing "communication design," which seeks to establish connections between theoretical knowledge, sociocultural needs, common-sense perspectives, and practical demands of consumer culture. Communication design relies on pedagogical, psychological, and philosophical foundations to teach visual communication and cultivate future visualizers (Jia 2018). It enables designers to translate ideas into visible forms, realizing their creative potential while adhering to humanistic values. Consequently, graphic works must be responsible, clear, and socially meaningful. Accuracy, relia-

bility of information sources, cultural sensitivity, and ethical conduct–including respect for human rights, confidentiality, and copyright–are essential components of professional graphic design.

In contemporary design education, digital design practices, particularly UX/UI design, play a significant role. Educational programs increasingly incorporate courses on user experience and interface design, enabling students not only to develop aesthetic sensibilities but also to acquire skills in creating usable, functional, and ethical digital products. Such training helps future designers understand the social and psychological aspects of user interaction with visual objects, fostering responsibility for how visual solutions influence people's behavior and perception.

UX/UI design also exemplifies the educational potential of graphic design, as it encourages students to think holistically, analyzing both aesthetic and functional aspects of a product. Studying digital interfaces develops critical thinking, the ability to anticipate user reactions, and the integration of ethical principles into visual solutions. Thus, learning digital design extends beyond technical proficiency, cultivating conscious and responsible designers capable of creating culturally sensitive and socially meaningful products.

The educational component of UX/UI design naturally aligns with the humanistic orientation of graphic design. Students learn to adapt visual messages for diverse cultural and social contexts, ensure product accessibility and inclusivity, and develop empathy for users. This experience strengthens the role of the designer not only as a technical expert but also as a cultural and educational mediator in the process of communication through contemporary digital media.

Graphic culture and graphic design face challenges in the modern era due to the rapid development of communication technologies. Emerging forms of information transmission are reshaping traditional notions of taste, aesthetics, and education. Conventional publications, such as books, magazines, and newspapers, are increasingly losing relevance as new digital tools and platforms provide faster, more interactive means of disseminating information. At the same time, prejudices and elitist attitudes within intellectual circles can hinder the full utilization of these technologies in educational contexts. This situation presents both opportunities and risks, including the potential misuse of graphic design as a tool for propaganda or the propagation of low-quality, superficial aesthetics.

Nevertheless, graphic design retains the capacity not only to create new meanings but also to cultivate communicative competencies. By leveraging its visual and symbolic power, graphic design can enhance humanistic orientations in contemporary Ukrainian design and art education. The process of creating visual images, as well as the subsequent interpretation of these images by audiences, depends critically on the designer's aesthetic sensibilities, ethical convictions, and humanistic values. Properly guided, graphic design can serve as a method of non-verbal communication that reinforces positive social messages, supports cultural diversity, and fosters ethical engagement in post-industrial societies.

Presenting graphic design as a communicative method allows educators and practitioners to harness its instrumental and functional potential. It strengthens humanistic values through non-verbal communication and information visualization, contributing to the development of informed, culturally sensitive, and socially responsible citizens. In this sense, graphic design is not merely a technical skill but a vital educational tool capable of shaping perception, understanding, and behavior in modern society.

The theoretical comprehension of the educational and communicative potential of graphic design is impossible without a clear methodological apparatus capable of objectively assessing the quality of the created visual products. Therefore, the next part of the article is devoted to the systematic analysis and meta-analysis of design quality.

Research in design includes the study of design processes in all possible areas. Therefore, research in design in the context of metamodernism is associated with a complex of design methodologies or its separate disciplines. In the primary interpretation, research in design focuses on the idea/vision/

concept within the design process. The goal of such research is to better understand, more widely apply, and productively develop the accuracy of the design process and the accuracy of the product predicted by the result.

Research relevance***: why changes are necessary for a specific object, subject or target audience (company, industry, etc.) as well as to what extent the changes affect all aspects of design quality.

Relevance of the research: why changes are necessary for a specific object, subject, or target audience (company, industry, etc.), as well as to what extent the changes affect all aspects of design quality.

Novelty of the research reflects what the author has discovered and proven as a result of meta-analysis and creative synthesis (for example, an impact on a component of the object has been identified and proven, qualitative changes in the structure of the object under study have been discovered and proposals have been made for their elimination or other use, opportunities for developing and modifying a process have been shown, a set of methods has been developed or supplemented, etc.). The novelty is reflected in the comparison: what will be done within the project and why / what has been done in other projects in this area so far (this is searched by comparing analogues or scientific/business information sources without using populist information sources).

1. Characteristics and justification of the target audience – users or customers, mostly non-statistical data: justification of popularity, aesthetic values and priorities;

2. Functional meta-analysis – description of functions, definition of problems, description of means of expression and justification – with what exactly it was planned to achieve the value effect, innovativeness, topicality, description and justification of means of expression used in analogues, aesthetic, psychological, utilitarian comfort/discomfort;

- functional meta-analysis – what functions should be provided in the ideal case, in the context of the topic, all possible functions should be analyzed, as well as what you plan to do so that the target audience has maximum comfort in the project when using style elements and advertising, interior or other spatial object, virtual interface. As a result of functional analysis, in the form of an assumption/hypothesis you can obtain the ideal model (vision, description, understanding) of a product or service, which would fully satisfy the user/target audience. Using this model, you can create a full-fledged concept in which to formulate an element of innovation that will provide a difference in comparison with analogues, will allow you to create a project without repeating the mistakes of competitors.
- meta-analysis of functions in the context of historical development;
- meta-analysis of functions from the point of view of form, structure and functional usability;
- listing and optimization of all possible functions of objects;
- summaries of results with directions for further creative solutions to problems (elements of innovation, determination of a free niche in the professional field);
- using the results of the analysis, tasks for developing a new project;
- evaluation of ideas: time factor, fashion trends, market niche;
- aesthetic priorities;
- proportions and ergonomic factors;
- constructive solutions, plans, schemes;
- flows, compliance with goals;
- manufacturing technologies, labor intensity;
- information capacity, compliance with raw materials;
- health factors, occupational safety;
- layout, problem-solving options;
- emotional perception solutions in form, color, stylistics;
- imagery in the environment, stylistic unity;
- rhythmicity, staticity, dynamics;

- arrangement of information provided in the project or analysis study.

3. Study of analogues (negative, correct, positive – critical analysis, table, appendices);

3.1. mutual correspondence of theme and content, constructivism of analysis and solution;

3.2. purity and professional competence in technical execution, description of means of expression;

3.3. visually justified compositional solution of the project;

3.4. visually justified coloristic and tonal solution of the project;

3.5. visually justified stylistic solution of the project.

Procedure for evaluating the results of methodological and artistic creative work, in which the existing research component is highlighted in particular:

The meta-analysis system is based on a critical analysis of design quality expertise, which is a research basic vision of the structure of a creative task, the sketch stage with the original author's decision on the element of novelty, the vision of the work concept, and the author's decisions in the project part with the corresponding argumentation and evidence of the authenticity of the decisions made and their compliance with the goal. This information, research and artistic creative work decision block and its visual concept are initially prepared as a scheme

Research on the novelty of the work content (research); sources:

1. Functional and aesthetic priorities of the target audience (apathy, questionnaires, identification of the segment or subculture model),

2. Functional meta-analysis and information sources (fashion trends, fundamental books, media, Internet resources, independent applied research) contain the structure of the research: In the context of the topic, all possible potential functions of the object should be analyzed and studied, as well as what you plan to do in order to ensure maximum objective comfort for the target audience in the new project using style elements and advertising, interior or other spatial object, UX/UI virtual interface. As a result of functional analysis and research, students obtain an ideal model of a product or service in the form of an assumption/hypothesis (vision, fantasy, concept, description, understanding), which could fully satisfy the user/target audience. Using this model/forecast, a full-fledged product concept can be created, in which, as a result of the research, it is possible to formulate an element of innovation that will provide a positive difference compared to analogues, which will allow creating a new research-based project more qualitatively and accurately than competitors and analogues.

When conducting analysis and research before designing an interior/product/advertisement or other form of communication, 5 questions should be answered based on research:

Study 1: What functional options could interest the target audience and include a potential element of innovation/novelty in the context of the project theme?

Study 2: What aesthetic qualities could interest and satisfy the target audience and include a potential element of innovation/novelty in the context of the project theme?

Study 3: What ergonomic qualities could interest and satisfy the target audience and include a potential element of innovation/novelty in the context of the project theme?

Study 4: What hierarchy of priorities and stylistic features could interest and satisfy the target audience and include a potential element of innovation/novelty in the context of the project theme?

Study 5: What technical and technological base could ensure maximum satisfaction of the target audience and include a potential element of innovation/novelty in the context of the project theme?

The element of novelty/innovation must be identified in at least one of the 5 studies.

The meta-analysis of these studies is provided by the developed methodology «Analysis and Objective Diagnostics of Typical Problems of Objects of Design» / Analysis of Typical Problems of Objects of Design (ANTIPOD).

The methodology has been tested since 2014 and yields positive and objective results both in practical use and is recommended for use as a basis for assessing the quality of design work in the process of preparing design educational programs (Arts direction).

Conclusions.

In conclusion, the educational potential of graphic design is vast and multifaceted. By integrating technical skill, aesthetic sensibility, and humanistic values, designers can create visual works that communicate effectively, inspire reflection, and foster cultural awareness. Graphic design serves as both a mirror and a tool of society: it reflects prevailing tastes, values, and social dynamics, while also shaping perceptions, guiding behavior, and transmitting knowledge across generations.

To fully realize this potential, design education must combine theoretical knowledge with practical experience, grounded in ethical principles and a deep understanding of cultural contexts. Designers must be equipped not only with technical competence but also with critical thinking, empathy, and an awareness of the social consequences of their work. This holistic approach ensures that graphic design contributes meaningfully to individual development and societal well-being, rather than merely serving commercial or superficial ends.

Ultimately, graphic design is a form of visual communication that transcends language barriers, bridges cultures, and encourages dialogue. By cultivating an ethical, humanistic, and educational approach to design, society can harness the power of images not only to inform and persuade but also to educate, inspire, and unite people in a post-industrial, globalized world.

References:

1. Benjamin, W. (2002). The Work of Art in the Age of Mechanical Reproduction. Selected Works. Trans. from German by Y. Rybachuk, & N. Lozynska. (Pp. 3–91). Lviv: Litopys.
2. Ambrose, G., & Ono-Billson, N. (2019). Graphic Design 01. Approach and anguage. Trans. from English by L. Baz, R. Dziuba, & T. Kryvovyaz, Kyiv: ArtHuss.
3. Grygorova, N., & Ivashchenko, O. (2023). «The Phenomenon of Image in the Philosophical Explorations of Hryhoriy Skovoroda and Johann Wolfgang von Goethe,» Interdisciplinary Studies of Complex Systems, No. 22, pp. 87–94.
4. Jia, Yaochen. (2018). Creative Potential of Graphic Design Professionals: Realities and Perspectives. Monograph. Kyiv: Center of Educational Literature.
5. Krylova, S. A. (2019). Human Beauty in the Life Practices of Culture. Experience of Social and Cultural Metaanthropology and Androgyn Analysis. Monograph. 2nd edition, revised and expanded, Kyiv: KNT.
6. Pring, R. (2004). Philosophy of Education: Aim, Theory, Common Sense and Research. London – New York: Continuum.
7. Smith, I. H. (2021). Short History of Photography: A Pocket Guide to Key Genres, Works, Themes & Techniques. Trans. from English by T. Savchynska. Lviv: Old Lion Publishing House.
8. Smythe, K. (2021), Whole Earth Living: Reconnecting Earth, History, Body, and Mind. Trans. from English by O. Samoylenko. Kyiv: Nika-Center.
9. Vallejo, I. (2023). Papyrus: The Million-copy Global Bestseller. Trans. From Spanish by A. Markhovska. Kyiv: Laboratory
10. Kopeikina, I., Kopeikins, M. (2024), Dizaina kvalitātes sistēmanalīze / metaanalīze «Tipisku dizaina problēmu analītiskā un objektīva diagnostika (ANTIPODD). Metodoloģijas struktūra, pētijumu paradigmas, mākslinieciskо pētijumu metodoloģijas, mākslinieciskо pētijumu modeli un stratēģijas». In *Materialy III Mizhnarodnoi naukovo-praktychnoi konferentsii «Aktualni problemy suchasnoho dyzainu»* [Proceedings of the III International Scientific and Practical Conference “Actual Problems of Modern Design”]. Kyiv National University of Technologies and Design.