



# Artículos

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# Analysis of Modular and Rhythmic Members in Design Masterpieces

Análisis de composición de miembros modulares y rítmicos en las obras maestras de diseño

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### RESUMEN

El artículo está dedicado a la descripción del desarrollo práctico y teórico de la esfera formal y será útil para profesionales, teóricos del arte del diseño, estudiantes, futuros diseñadores. Pero esto es imposible sin un conocimiento extenso y sólido del desarrollo objetivo y evolutivo de la forma en las artes visuales. Vemos una de las soluciones a este problema desarrollada por los autores de las tareas analíticas esquemáticas presentadas en este artículo. Por lo tanto, gracias al análisis de componentes formales en los productos creativos de personalidades conocidas, el estudiante estará más preparado para crear sus propios trabajos con derechos de autor.

Palabras clave: Análisis gráfico esquemático, análogos, composición, copia gratuita, modernización de la educación.

### **ABSTRACT**

The article is devoted to the description of the practical and theoretical development of the formal sphere and will be useful for practitioners, theorists of design art, students, future designers. But this is impossible without extensive and solid knowledge of the objective, evolutionary development of form in the visual arts. We see one of the solutions to this problem as developed by the authors of the analytical schematic tasks presented in this article. Thus, thanks to the analysis of formal components in the creative products of well-known personalities, the student will be more ready to create their own copyright works.

**Keywords:** Analogues, composition, free copy, modernization of education, schematic graphic analysis.

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#### INTRODUCTION

Schematic graphical analysis of "rhythmic roll calls", almost parallel to each other "power" lines, "modular articulations" in the creative products of world classics is, in our opinion, an interesting and important area for theoretical and practical research in educational and creative activities.

For practitioners, theorists of design art, students – future designers, it is of interest to identify the interaction of communication and the general interpretation of the terms "rhythm" and "module" in various types of classical fine art and design. The laws of composition are so universal that they "work", both in a painting that is flat in the graphic surface, and in the composition of architecture and design that is spatially spatial in nature.

One of the aspects of modernization of Russian education in the context of students studying subjects of the design cycle is the task of forming future professionals who own modern innovative technologies. However, this is impossible without extensive and solid knowledge of the objective, evolutionary development of form in the visual arts

# **METHODS**

Based on the foregoing, in practice and teaching design art, there is an important problem in the ability of students, future designers, to isolate the compositional union of rhythmic and modular organization from the newly created designer of artificial art form.

The relevance of the article is to describe the practical and theoretical development of the formal sphere based on the works of major masters of fine art and design.

Analytical compositional work on the works of the greatest classics of art contributes to a clear understanding of the continuity between the compositional process in modern design art and the great personalities of previous eras.

The problems of understanding the ways of creating modern fine art lie in the lack of understanding of the connection and the existing unity of the fine art of the old masters of painting and the modern art of painting and design in line with the formal sphere (De alfaro & Henzinger: 2001; Poizat & Royer: 2006; Wang et al.: 2012; Mirkhasanov: 2013).

The formal (compositional) field of fine art is a special, often hidden from the viewer's gaze, richest layer of compositional constructions and finds of masters of any kind of fine art and design. This is precisely the factor that affects the fundamental difference between professional work and the creative product of an amateur.

A scientific, analytical approach to composing work, along with temperament and individual and epochmaking preferences is the key to professionalism and leveling the manifestations of "kitsch" and amateurism in art. This will lead to the leveling of amateurish likes-dislikes ratings.

Based on the development of industrial design, which has become a "style icon", a model of reflection of the artistic and historical era, it is possible and necessary to conduct a compositional analysis with the aim of forming reliable quality criteria and evaluations of the design product.

One of the solutions to this problem we see is the analytical schematic exercises that we developed.

Task number 1. Perform a schematic representation of the Harley-Davidson V-Rod Muscule motorcycle with the division of the image into 3 light and color tones. Focus on the rhythm of color spots. Option Task number 1. Perform a schematic graphical analysis (SGA) – an image of a Harley-Davidson motorcycle with isolating the modular component of the composition of this creative product by classifying and reflecting in the figure various shapes that are close in geometric shape and in area.



Figure 1. Harley-Davidson motorcycle WLC



Figure 2. Motorcycle Harley-Davidson V-Rod



Figure 3. Motorcycle Harley-Davidson V-Rod Muscule

Perform a schematic graphical analysis (SGA) – image of the Harley-Davidson motorcycle with the principle of "roll calls" of numerous horizontal, vertical, diagonal linear rhythms.

Task number 2. Search for modular articulation in the interior composition of a Japanese medieval palace. Perform linear rhythmic analysis of the image of the interior of the medieval palace in Japan in the form of a schematic drawing of graphic material.

Task number 3. Perform a graphical, schematic depiction using modular dissection of a pictorial composition in the still life genre of a major still life master of Flemish art of the 17th – 18th centuries.

Task number 4. Perform a graphical, schematic depiction of a modular grid in the design development of a major master of design art. Perform a compositional analysis in the form of a diagram with graphic material (spot + line).

# **RESULTS**

For example, in the masterpieces of the pioneer of functionalism and organic architecture Wright, the ratios of vertical and horizontal rhythms are very strong: the famous house with a waterfall is built on a plastic line of beautiful rhythms of ramps and terraces, vertical walls and jets of the waterfall. Modular grid in environmental and subject design by architect Frank Lloyd Wright (Sloan: 2001; Pfeiffer: 2006).

For example, the interior of the Unity Church in Oak Park. A new church for the Unitarian community. Illinois. 1908. Analysis in the form of a schematic drawing made by graphic material (spot + line).



Figure 4. Frank Lloyd Wright. A new church for the Unitarian community, Illinois, 1908

# DISCUSSION

In the graphic task performed by the student on the A3, A2 format, an understanding of the construction of the artificial compositional form based on linear rhythmic and modular harmony should be presented.

In teaching composition, methodological systems are needed that facilitate the acquisition of practical and theoretical knowledge by university students through the study of the formal sphere of paintings and visual art products (Kovalev: 2006).

The formal (compositional) part of a new artificially created creative product, being in indivisible alliance with the content part, dominates the achievement of a bright modern image with a new language code.

We believe that it is important to note the important point that in the educational process of many modern universities, preparing designers, the practice of free copying of famous designers' works is necessary.

The practice of working with "samples" brought undeniable results in the Russian Imperial Academy of Arts and in higher art schools of the USSR Academy of Arts (Davydov: 1994; Rumyantseva et al.: 2018).

It is well known that a student of the imperial Russian educational institution began his studies by copying the so-called "samples", and after graduation, a graduate who was awarded a trip abroad could bring a copy of the famous foreign master made by him. That is, in fact, the artist began his work by copying the best creative products and ended his studies by copying the works of famous personalities. We believe that copying practice is as important for a designer as for an artist (Gazda: 2002; Chubakov: 2017; Zhdanova: 2019).

# CONCLUSION

The products of the creative activity of the designer-master meet the following rules:

- 1. Linearly-rhythmically organized;
- 2. Show a deep approach to the modular organization of composition;
- 3. Linear-rhythmic organization of a flat and three-dimensional spatial composition leads to modular articulations:
- 4. The competent organization of modular and metric divisions in a planar and three-dimensional spatial composition leads, among other things, to the rhythmic organization of this composition.

Thus, it is possible to introduce the concept of "formal method based on modular and rhythmic divisions in composition" into the practice of educational and creative, design and evaluation activities in design. In pedagogical practice, another indicator of the evaluation criterion appears, represented by the practical implementation of the formal method in educational works.

The consequence of insufficiently in-depth study of the laws of the formal sphere, which dominates the evolutionary development of fine art, is often the weakness of creative, term papers, expressed by amateurish visualization.

The existing problem arises, in our opinion, due to insufficiently deep development of methods, manuals, standards for the development and classification of formal (compositional) technologies. Knowledge of the laws and properties of a composition should not remain only a theory, but be fixed in various practical tasks, for example, on the basis of performing "free copying" and "compositional constructions" based on samples of well-known personalities in volume modeling, educational drawing, and painting. Drawing and painting in the training of the designer should be of an applied nature, and not be an object of easel in the spirit of "art for art's sake" (Loshakov: 2009; Mogilevtsev: 2013; Stepanskaya: 2016; Butt: 2017; Alekseeva: 2018; Białkiewicz: 2019).

A student of the design department, where creative and pedagogical training profiles interact, must organically perceive the interaction of education, culture, science in line with the emergence of the most important trends of past eras and the modern world, must be able to reasonably explain from the point of view of formal searches of famous personalities of fine art and design.

Thus, we can conclude that the master, student must consciously approach the choice of metric and rhythmic organization when creating a creative or educational product. As a result of one or another correlation in the balance "rhythm - module", professional creation of a new artificial art form takes place. In the end, there is a creation of a bright distinctive artistic image in the design product.

We are convinced that a student of an art university working on the creation of a rhythmic and modular organization of a planar and three-dimensional composition creates a professional product for solving design problems. Thanks to the readiness of the student to read the modular and rhythmic language codes of design masters, he will always be easy to navigate in various directions and trends of architecture and design.



Figure 5. The interiors of the villa Karma in Vivea. Adolph Loos

The interiors of the Villa Karma in Vivea are an interesting example of the interior, which is attributed to the conditional visual language of art deco, but built back in the era of the ubiquity of modernity, in 1906 (Loos: 1983; Loos & Opel: 1997).

In conclusion, we emphasize the need for an integrative teaching methodology, thesis dominant of which is formulated as "new bright and modern imaginative solutions based on classical analogies". The methodology for studying the formal component in classical art and modern design patterns is based on free copying and a schematic analysis of compositional constructions.

An independent search for students in the field of author-based shaping based on knowledge obtained by free copying of paintings, drawings; design works by great masters will become the norm for training following the results of analytical tasks. Thus, thanks to the decoding of the formal components in the creative products of famous personalities, the student will be more ready to create their own copyright works.

The student will be able to analyze compositional constructions based on a constant – the postulates of the formal sphere. This gives the university student an understanding of the analogues, origins, personalities of the masters who influenced the birth of this compositional structure.

A student working on additional tasks according to our methodology, which includes copying practice, is freer in the approaches of compositional solutions of natural objects according to drawing and painting or a sketch of the object that underlies the design project.

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