

Applying the Organic Visual Design Theory to Enhance Design Practices (An Applied Study on the "Design Fundamentals" Course)

Dr. Samah Haroun Abd El Salam

Lecturer in advertising department Faculty of Applied Arts – 6 October University

samah.haroun.art@o6u.edu.eg

Abstract:

Amid the rapid developments in the field of design, research efforts are increasingly directed toward the creation of new concepts that enhance creative design practices and connect them with natural sources. From this perspective, the study explores the development of a new theory called "Organic Visual Design Theory," which seeks to merge visual thinking with the core principles of organic design. The theory draws inspiration from natural elements and the inherent laws that govern them, using these as a foundation for creating visual compositions. In this approach, nature is seen not just as a source of beauty, but as a guide for developing visual tools that enhance clarity, understanding, and communication. The research focuses on shaping and expressing this theory through hands-on application in the "Design Fundamentals" course, turning the classroom into a creative lab for exploring and refining its ideas and principles.

Keywords:

Organic Visual Design – Nature Inspired – Visual Thinking – Organic Compositions.

ملخص البحث :

في ظل التطورات السريعة التي يشهدها مجال التصميم، تتجه الجهود البحثية نحو استحداث مفاهيم جديدة تساهم في تعزيز الممارسات التصميمية الإبداعية وربطها بمصادر الطبيعة. ومن هذا المنطلق، يتناول البحث صياغة مبادئ لنظرية جديدة تُعرف بـ "نظرية التصميم العضوي البصري"، والتي تسعى إلى دمج التفكير البصري مع مبادئ التصميم العضوي. تستند هذه النظرية إلى استلهام عناصر الطبيعة وقوانينها في تصميم التكوينات البصرية، بحيث تصبح الطبيعة مصدرًا ليس فقط للجماليات، بل أيضًا للوظائف البصرية التي تعزز الفهم والتواصل. ويتركز البحث على بلورة وصياغة هذه النظرية من خلال تطبيق عملي ضمن سياق مقرر "أسس التصميم"، مما يجعل من هذا المقرر مساحة تجريبية لتطوير مفاهيم ومبادئ النظرية.

الكلمات المفتاحية:

التصميم العضوي البصري - استلهام الطبيعة - التفكير البصري - التكوينات العضوية .

Introduction

In recent years, the design world has seen significant progress, with attention expanding beyond just function and beauty to include the pursuit of fresh and sustainable sources of inspiration. Within this context, the study introduces the "Organic Visual Design Theory" as a new way of thinking that links visual thinking with ideas drawn from nature to create designs that carry both visual appeal and deeper meaning. This theory rests on the belief that nature isn't just a source of inspiration for visuals, but a complete system that showcases a distinctive harmony between shape and purpose. By exploring natural platforms like repetition, organic symmetry, and irregular forms—designers can reinterpret these elements into visual works that support clearer

communication and understanding. The theory aims to blend both aesthetic and philosophical layers, allowing design to move beyond surface appearance and become a means of connection and creativity. In doing so, it provides a practical and theoretical foundation for viewing design as a living, evolving process rooted in nature. Amid the fast-paced progress in the design world, research is increasingly turning toward the development of fresh ideas and theories that support and enrich creative design practices. From this perspective, the study lays out the core principles of the Organic Visual Design Theory, which seeks to bring together visual thinking and the foundations of organic design, using elements and patterns from nature to guide the creation of visual compositions.

Research Problem:

The issue lies in the lack of a clear theoretical and practical framework that emphasizes the value of drawing inspiration from organic forms and patterns to strengthen students' visual and creative thinking. Additionally, design education often falls short in providing tools that connect the beauty of nature with core design principles, which in turn limits students' ability to create original work that shows a deep understanding of the link between nature and design. The problem can be summed up in the following question: How can the concept of "Organic Visual Design" be used as both a theoretical and practical framework in teaching the "Design Fundamentals" course to enhance students' visual and creative thinking?

Research Questions:

1. How effective is drawing inspiration from natural elements in enhancing students' visual thinking skills?
2. How can a practical framework be built on the "Organic Visual Design Theory" and be created for teaching the "Design Fundamentals" course?
3. What does the impact of applying this theory have on the quality of students' design work?

Research Hypotheses:

1. Applying the Organic Visual Design Theory could help improve students' visual understanding in the Design Fundamentals course.
2. Integrating natural elements and their built-in visual principles into the design process can lead to communicative visual compositions.

Significance of the Research:

This research marks a step forward in developing and formalizing the Organic Visual Design Theory, helping to build an innovative educational framework that supports students' visual and creative understanding. It also paves the way for new teaching strategies in the "Design Fundamentals" course, aiming to improve students' design skills and critical thinking.

This research may contribute to the advancement of academic education in the field of design and promote the more effective integration of Organic Visual Design principles into teaching practices. Additionally, the study may contribute to the progress of academic design education and encourage a more effective integration of Organic Visual Design principles into classroom practices.

Research Objective:

The goal of this research is to apply a newly developed theory—Organic Visual Design—within the teaching of the "Design Fundamentals" course, as an applied study aimed at enhancing students' visual and creative thinking skills by drawing inspiration from natural elements. This theory aims to connect visual thinking—using images and forms as tools to support understanding and communication—with nature-inspired organic design to create innovative visual compositions. The research also explores how the theory's core principles—such as repetition, organic symmetry, and harmony between elements— can be applied in student projects to help them develop creative designs that carry both philosophical meaning and aesthetic depth.

Research-Methodology:

The study uses a descriptive approach to explore the concepts and principles of Organic Visual Design by reviewing existing research on nature-inspired design and identifying the key features of natural elements that can be applied in the "Design Fundamentals" course. These theoretical concepts are then applied to student projects within the "Design Fundamentals" course for first-year students (preparatory level, first semester) at the Faculty of Applied Arts, October 6 University.

Research Scope and Limitations:

1. **Spatial Scope:** Faculty of Applied Arts – October 6 University
2. **Temporal Scope:** Academic year Fall 2024–2025
3. **Subject Scope:** Application of the theory's principles to the "Design Fundamentals" course – first-year level.

Theoretical Framework of Research**1. The Concept of Organic Theory**

Organic theory in design is based on drawing inspiration from natural forms and patterns, resulting in designs that harmonize with the environment and reflect natural characteristics such as repetition, symmetry, flexibility, and adaptation to nature. One of the most influential approaches in shaping design—with a positive impact across many areas related to form and functionality—is Organic Design, which was formulated within the scope of organic theory during the 18th and 19th centuries.

Organic theory relies on utilizing nature-inspired shapes and patterns within visual compositions, creating designs that are in harmony with their surroundings and embody the principles of nature, such as biological symmetry and adaptive structures. What distinguishes organic design is its ability to produce complex configurations and structures that align with human visual culture. This allows for the creation of abstract or intellectually formulated compositions that incorporate innovative variations while maintaining proportion, balance, and symmetry. (Ibrahim & Ansi, 2019)

1.1 Organic Theory in Architecture

Organic architecture is a term coined by the American architect Frank Lloyd Wright (1867–1959) to express his approach to architectural design that blends harmoniously with the

environment. This philosophy was influenced by the ideas of his mentor, Louis Sullivan, who famously said that "form follows function." But Wright took it a step further, suggesting that form and function are essentially the same. Frank Lloyd Wright is considered the pioneer of this movement in architecture. According to his thinking, the functional performance discovered by the designer or artist in biological systems serves as the primary inspiration for optimal design. Therefore, nature is an inexhaustible reservoir of ideal solutions that can be emulated when creatively translated into design. (Jalilyand, 2023)

This represents a constant challenge to improve life through designs inspired by the surrounding natural environment. (Figure 1) (Figure 2) (Figure 3).

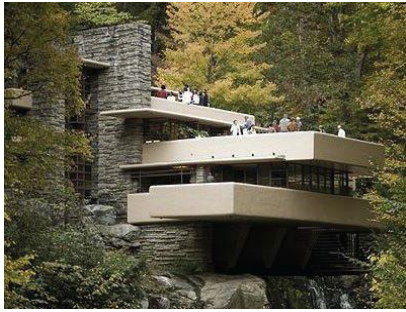


Figure 1

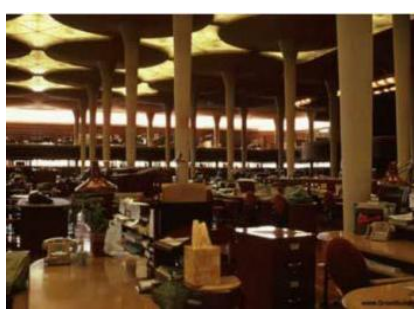


Figure 2



Figure 3

- (Figure1) Fallingwater House by Frank Lloyd Wright.

Frank Lloyd Wright used water as a natural element by showing falling, but he avoided making nature the main feature.

- (Figure 2) The Johnson Wax Building's administrative structure, designed by Frank Lloyd Wright, was inspired by mushrooms for its broad header column.
- (Figure 3) Frank Lloyd Wright's upward spiral ramp at the Guggenheim Museum
The upward spiral ramp design served as the inspiration for the shell's "Wright". (Nasir & Arif Kamal, 2022)

1.2 Principles of Organic Design in Architecture

1. Harmony with Nature:

- Environmental Integration: Designing buildings to appear as a natural part of the surrounding environment.
- Organic Imitation: Using curved and dynamic forms that mimic natural patterns (such as trees or oceans).

2. Use of Natural Materials:

- Local Materials: Relying on resources available in the surrounding environment (such as natural stone, wood, and clay) with minimal industrial processing.
- Eco-Friendliness: Choosing sustainable, recyclable materials.

3. Design from the Inside Out:

- Organic Growth: Beginning the design from the interior spaces to determine the outer form, as living organisms grow from the inside.

4. Functionality and Simplicity:

- Minimizing Complexity: Avoiding unnecessary ornamentation, focusing on clean lines and clear forms.

5. Sustainability and Efficiency:

- Renewable Energy: Utilizing natural ventilation, sunlight, and smart heating systems.
- Climate Adaptation: Designing buildings to provide thermal comfort without overreliance on mechanical devices.

6. Flexibility and Interaction:

- Adaptation to Terrain: Shaping the building to conform to the land (houses suspended above waterfalls).
- User Interaction: Designing spaces that can be adjusted according to residents' needs.

7. Aesthetic Unity:

- Visual Balance: Achieving harmony between architectural mass and landscape through lines and colors.
- Natural Rhythm: Repeating architectural elements in ways that mimic nature's rhythms (like the ripples of water). (Samra, 2022) (Bystrova, 2020)

2. Visual thinking

Visual thinking is the ability to process information and communicate visually through images, shapes, and symbols. It is one of the essential skills in art and design, relying on perception, analysis, and visual composition to understand the relationships between elements. It is a system of processes that translates an individual's ability to read visual forms and transform the visual language carried by these forms into verbal language, extracting meaning from them. Visual thinking involves skills such as analysis, classification, comparison, drawing conclusions, and expressing them.

2.1 Visual Thinking Strategy

It is a series of organizational procedures that enable the learner to use the sense of sight to perceive meanings, connotations, and extract information. This is done through reading visual forms and organizing the mental images they imagine, which include shapes, images, drawings, lines, symbols, and colors. Helping students discover their abilities and build their thinking processes is one of the most important goals of the educational process. Thinking is a cognitive and emotional mental process that affects perception, acquisition, memory, comparison, differentiation, and analysis. Correct scientific thinking has several components, one of the most important of which is visual thinking, which aids understanding and positive, effective learning by conveying ideas and information faster. The most important thinking processes come directly from our visual perception of the world around us, where vision is the first sensory device that provides the foundation for our cognitive processes. (Van de Kamp, Vernooij, & Warren, 2023) Visual thinking is the ability to visualize and communicate an idea or information through images and drawings rather than other communication methods. The visual thinking strategy consists of five skills:

1. Shape Recognition and Description: The ability to identify and describe shapes.
2. Shape Analysis: The ability to see relationships within a shape and identify and classify those relationships.
3. Relating Relationships in the Shape: The ability to connect elements of relationships within a shape and find correspondences between them.
4. Perception and Interpretation of Ambiguity: The ability to clarify gaps in relationships and bring them closer together. (Jaros, 2012)

5. Drawing Conclusions: The ability to deduce new meanings and derive scientific concepts from the shape. (Figure 4)

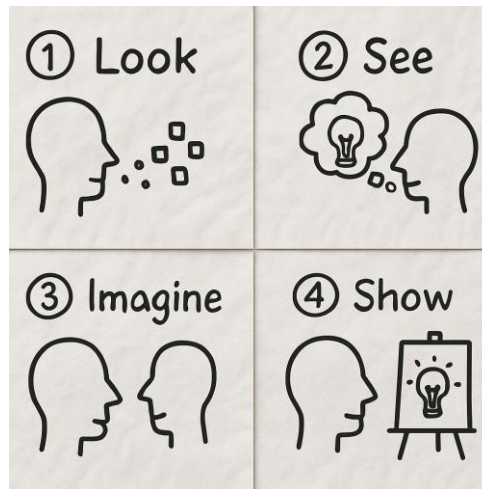


Figure 4 The steps of visual thinking strategies

The Relationship Between Organic Design and Visual Thinking:

The integration of organic design and visual thinking relies on merging the philosophical principles of organic theory with cognitive processes to achieve a cohesive design theory through:

First: Visual Thinking as a Tool to Achieve Organic Principles

- Using visual thinking tools (such as mind maps and diagrams) to transform organic design concepts, like biomimicry, into tangible representations.
- Analyzing relationships between elements helps in organizing organic elements such as curved shapes and asymmetrical balance through visual and structural relationship analysis.

Second: The Role of Organic Design in Enhancing Visual Thinking

- Providing a reference framework by shaping organic principles (harmony with nature, simplicity) into a structure that stimulates the creation of mental images that inspire visual creativity.
- Enhancing visual language by using organic elements (such as texture and organic symmetry) to enable the designer to build visual symbols with environmental connotations.

In Other Words:

- Visual thinking embodies the theoretical principles of organic design through visual tools.
- Organic design supports visual thinking with an aesthetic and functional framework derived from nature.

These two elements form a design theory based on cognitive sustainability, where environmental values are translated into compelling visual solutions.

The following diagram can explain the integration of organic design and visual thinking to achieve the theory of organic visual design according to the following steps:

1. Visual Perception of Natural Relationships: The organic theory relies on exploring patterns in nature, which helps the designer develop their visual analysis abilities.
2. Enhancing Creativity Through Analyzing Relationships Between Elements: By drawing inspiration from organic shapes, the designer learns how to analyze forms and translate them into creative design solutions.

3. Using Organic Structures in Visual Compositions: Visual thinking depends on understanding the relationship between mass and space, while organic design enhances this understanding by studying natural organic models.

4. Stimulating Creativity: Through the study of nature, the designer learns to think in unconventional ways, which enhances their visual abilities and provides innovative solutions to design problems. (Figure 5)

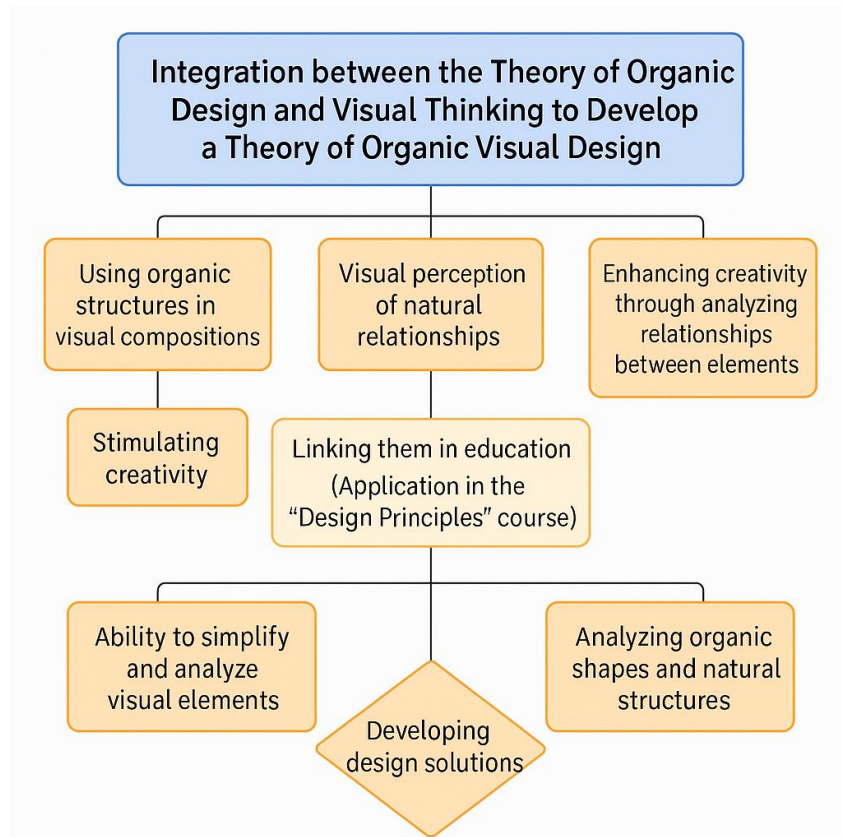


Figure 5 A diagram designed by the researcher illustrating the relationship between organic design and visual thinking.

3.The Theory of Organic Visual Design:

3.1Philosophical and Scientific Foundations:

- Philosophy: The theory's philosophical roots are derived from artistic and architectural movements like organic architecture, which emphasizes the integration of design with the environment.
- Sciences: Cognitive psychology, particularly through the application of Gestalt principles, is used to understand how organic forms are perceived.
- Mathematics: The application of the golden ratio and fractals to achieve visual harmony.

3.2 Definition of the Theory of Organic Visual Design:

The Theory of Organic Visual Design is both a philosophical and scientific framework that aims to integrate natural principles into the design process, promoting a balance between functional beauty and harmony with the environment. At its core, the theory is based on the idea that design should be inspired by the laws and patterns found in nature, not only as an aesthetic reference but as a foundation for creating a visual and functional experience that mimics harmony and adaptation to ecological systems.

3.3 Basic Principles of the Organic Visual Design Theory:

1. Organic Harmony: This refers to biomimetic visual imitation by transforming natural elements such as (fractals, ripples, branching in nature) into abstract design elements while preserving their natural essence.
2. Dynamic Balance: Achieving visual balance through asymmetrical methods that mimic nature.
3. Sustainable Perception: Designing in a way that reduces visual distraction by using natural shapes and balanced spaces.
4. Natural Rhythm: Using repetitive patterns inspired by natural phenomena (such as water ripples, tree branches).

Practical Framework of the Research:**First: Proposal for Applying the Theory to the "Principles of Design" Course****1. Preliminary Stage: Planning**

- Analysis of the current curriculum: Reviewing the content of the existing course to propose how to integrate organic visual principles.
- Setting educational objectives: For example, enhancing visual perception of natural patterns and connecting design with environmental sustainability.
- Preparation of teaching methods: Designing presentations that illustrate concepts like biomimetic visual imitation.

2. Research and Analysis Stage:

- Study of natural patterns and organic formations to identify elements that can be visually mimicked.
- Collect images and create an image library of natural shapes to serve as a design reference.

3. Initial Design Stage: Crafting Practical Activities

- Biomimetic activities (inspiration): Create analytical sketches inspired by nature with curved forms to enhance interaction with nature.
- Apply Gestalt principles to design elements that achieve visual unity.

4. Detailed Design Stage:

- Materials and textures: Integrate natural textures and finishes through textural patterns.
- Dynamic movement: Use light and shadow to achieve a dynamic balance.

5. Evaluation and Feedback Stage: (Evaluation Criteria)

- Organic unity: How well the visual elements harmonize with natural principles.

6. Modification and Improvement:

- Analyze project outcomes to modify and develop the proposed design.

Secondly: Practical Experiment Procedures

The procedures of the practical experiment were carried out based on the previous proposal:

- Selecting a set of natural images (such as natural patterns of plants or birds).
- Analyzing the images visually using visual thinking systems, including visual brainstorming (presenting natural images) and encouraging students to explore new design ideas inspired by them.
- Developing organic designs is inspired by visual analysis.

Third: Practical Experiment

Division of Projects into Phases:

1. Inspiration and Analysis Phase: Studying the natural element through inspiration.
2. Abstraction Phase: Transforming the natural element into abstract design elements.
3. Design Phase: Employing the forms in creative organic designs.

Criteria for Measuring Results:

The outcomes are evaluated based on the following assessment criteria:

- The extent to which the principles of the theory are applied (harmony and unity, organic dynamic symmetry, and others).
- The level of creativity and innovation in design projects.

First: Inspiration and Analysis Phase

Studying the natural element through the process of inspiration. (Figure 6)



Figure 6 Illustrates the Inspiration Phase

Second: The Abstraction Phase

Transforming the natural element into abstract design components. (Figure 7)



Figure 7 Illustrates the Inspiration Phase

Third: The Design Phase

Employing the abstracted forms in the creation of innovative organic designs and analyzing the resulting models.

The First Model (Figure 8)**Figure 8**

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The butterfly clearly appears as the central element in the design, serving as a natural symbol associated with balance and natural beauty. The curved lines surrounding the butterfly are inspired by the shapes of branches and organic patterns.
Organic Composition	The design shows integration between the butterfly and the surrounding elements, such as branches and spiral lines, reflecting the harmony found in nature. The shapes and lines interweave fluidly, creating a sense of visual unity.
Natural Rhythm	The patterns on the butterfly's wings, along with the surrounding circular motifs, generate a visual rhythm that resembles natural patterns found in nature.
Dynamic Balance	The spiral and curved lines add a sense of movement, making the design feel alive aligning with the philosophy of organic design. The scattered fine dots enhance the texture, reminiscent of the surface of leaves.
Sustainable Perception	The use of natural textures, organic lines, and neutral colors (black, red, and gray) enhances clarity, reduces visual fatigue, and encourages prolonged contemplation of the details without causing strain.
Symbolism	The butterfly symbolizes renewal, a common theme in nature, while the spiral elements suggest gradual growth, one of the key principles in organic design.

Overall Evaluation	This design clearly reflects the principles of organic design, through its imitation of nature, use of organic lines and textures, and the integration of elements into a harmonious composition.
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The Second Model (Figure 9)



Figure 9

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The work shows a clear inspiration from nature, as the parrot, its feather details, and the background are rendered using patterns derived from natural elements, while avoiding straight lines and sharp angles.
Organic Composition	The visual composition is well-integrated, with elements overlapping fluidly, reflecting an organic unity and smooth visual harmony across the artwork.
Natural Rhythm	Curved lines and patterns are repeated with varying gradations, creating a visual rhythm reminiscent of nature (such as water ripples, feather repetitions, or mountain contours), giving the piece a sense of vitality and dynamism.
Dynamic Balance	Despite the density of detail and variety in direction, the composition maintains dynamic balance, with asymmetrical yet well-distributed forms and spaces.
Sustainable Perception	Using natural textures, flowing organic lines, and muted colors like black, green, and gray helps improve visual clarity, reduce eye strain, and invite longer, more thoughtful engagement with the intricate details.
Symbolism	The parrot is employed as a symbol of freedom, while other elements—such as waves or leaves—reinforce the theme of harmony with nature.

Overall Evaluation	The design clearly fulfills the principles of organic visual design through its simulation of natural forms and use of organic lines and textures.
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The Third Model (Figure 10)



Figure 10

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The artwork presents a unique interpretation of organic elements through the use of curved lines, circular forms, and spirals that echo patterns found in nature. This interpretation ranges from floral shapes to wave-like forms and other organic motifs.
Organic Composition	The piece creates a sense of harmony by blending different shapes, where organic and geometric elements flow together seamlessly. The smooth transitions between forms reflect the idea of organic growth, as if each shape naturally evolves from the next, despite their differences.
Natural Rhythm	Rhythm is created through the varied repetition of patterns at different scales and their thoughtful placement throughout the design space. The flowing, wavy lines evoke a visual rhythm similar to natural patterns—like rippling water or the spiral growth seen in plants.
Dynamic Balance	While the design doesn't rely on strict symmetry, it achieves a dynamic balance through the thoughtful arrangement of sizes, shapes, and the use of black and red. This asymmetrical balance creates a sense of movement while still preserving overall visual harmony.
Sustainable Perception	The design offers sustainable visual experience by reducing eye strain, even with its detailed elements. The use of black, pink in varying shades, and white creates strong contrast that boosts visual clarity.

Symbolism	The piece includes multiple visual symbols that merge natural and abstract meanings. The curved and spiral forms reflect symbolism of growth and continuity.
Overall Evaluation	The work demonstrates notable success in applying the principles of organic visual design, skillfully blending organic and geometric forms into a cohesive composition. It showcases a strong visual rhythm and dynamic balance, effectively capturing and holding the viewer's attention through variety and seamless visual integration.

The Fourth Model (Figure 11)



Figure 11

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The design represents an organic simulation of peacocks through curved forms, with fine details that mimic feathers and vital patterns.
Organic Composition	There is a cohesive organic composition among the diverse shapes forming the peacock, with a balance between the various organic elements.
Natural Rhythm	Rhythm is evident in the repetition of feathers and curves that suggest the movement of the peacock.
Dynamic Balance	Balance appears in the distribution of the varied shapes around the center of the peacock, along with harmony in the color gradients.
Sustainable Perception	The use of black and light green creates a visually pleasant contrast, reducing visual fatigue.
Symbolism	The peacock symbolizes beauty and pride, with organic patterns that enhance natural symbolism.

Overall Evaluation	This work stands as a strong example of organic visual design, bringing together accurate organic representation, a cohesive layout, and a vibrant natural rhythm. Despite the complexity of its details, it maintains dynamic balance, offering a visually sustainable experience enriched with symbolic elements that elevate the artistic value of the work.
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The Fifth Model (Figure 12)



Figure 12

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The design prominently features a gazelle's head with large, branching antlers and nature-inspired shapes, showcasing a clear imitation of organic forms. The flowing curves and intricate details bring a sense of vitality and a strong connection to the natural world.
Organic Composition	The elements and lines intersect irregularly, giving the composition an organic character. There is an overlap and fluidity that reflects natural formations.
Natural Rhythm	The patterns and curved, undulating lines are repeated in different parts of the work, creating a harmonious visual rhythm that resembles the flow of elements in nature.
Dynamic Balance	Despite the abundance of details and diverse patterns, the work achieves visual balance through the distribution of elements and colors, with a clear dynamic movement in the composition.
Sustainable Perception	The piece is rich in details and organic patterns, drawing the viewer in for exploration and contemplation, yet it does not cause visual fatigue.
Symbolism	The deer's head serves as a symbol of wildlife, while the organic patterns and interwoven lines reflect the richness and interconnectedness of nature. The symbolism is clear and reinforces the core concept of organic design.

Overall Evaluation	The work strongly embodies the principles of organic visual design, showcasing natural elements, dynamic balance, and clear symbolism that together enhance both the visual impact and conceptual depth of the piece.
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The Sixth Model (Figure 13)

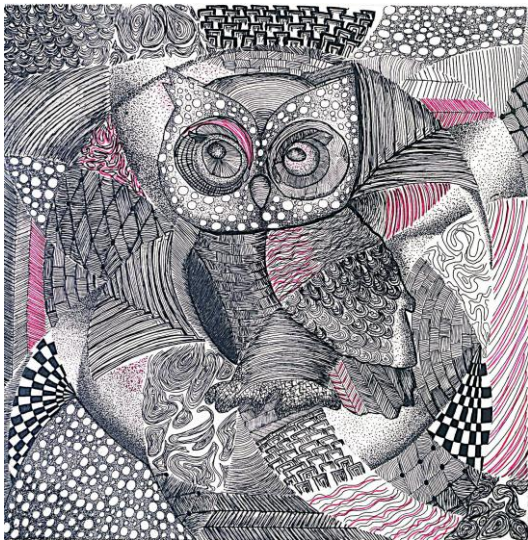


Figure 13

Evaluation Criteria (Principles of Organic Visual Design)	Analysis
Organic Mimicry	The owl appears centrally, with clear details of the eyes and beak. Organic simulation is evident despite the abstract style used.
Organic Composition	The owl appears centrally, with clear details of the eyes and beak. Organic simulation is evident despite the abstract style used.
Natural Rhythm	Circular and linear patterns are rhythmically repeated around the owl, creating a rotational movement that draws the eye toward the center of the work.
Dynamic Balance	A dynamic balance is achieved through the distribution of patterns and masses, with the use of red as a balancing color for black and gray.
Sustainable Perception	The variety of patterns and textures creates a visual depth that encourages exploration without causing visual distraction.
Symbolism	The owl symbolizes wisdom and keen vision, while the surrounding circular patterns may represent a spiritual aura and knowledge.
Overall Evaluation	The design is balanced and rich in symbolism, highlighting the power of organic patterns and visual integration between geometric lines and circles, with a strong symbolic clarity that clearly fulfills the principles of organic visual design.

Results:

1. Enhancement of Students' Visual Thinking: Applying the Organic Visual Design Theory helps develop students' skills in visual analysis and composition, therefore improving their ability to understand visual relationships between shapes and design elements.
2. Improvement in Creativity and Innovation in Design: Drawing inspiration from nature enhances students' ability to develop more creative design ideas, as they learn how to transform organic shapes and patterns into innovative visual solutions.
3. Better Integration of Theory and Practice: Using the organic visual model in teaching "Design Fundamentals" links theoretical concepts with practical applications, helping students gain a deeper understanding of theoretical principles.
4. Improved Quality of Design Output: Compared to students who did not use this model, the resulting designs are expected to show greater harmony, organic flow, and visual balance, along with a stronger ability to convey ideas visually.
5. Deeper Understanding of Nature-Based Aesthetic Principles: Through the analysis and application of natural elements, students develop the ability to grasp and apply concepts like repetition, dynamic balance, rhythm, and organic harmony within their designs.
6. Potential for Curriculum Development: The theory offers a foundation for integrating organic visual principles into broader design curricula, paving the way for updated teaching methods across academic institutions.

Conclusion

Embracing the Organic Visual Design Theory can greatly enrich design practices by strengthening visual communication and purposefully incorporating nature-inspired elements and principles. This approach enables designers to produce work that is not only visually engaging but also meaningful and relevant to both digital and physical contexts in today's world. This research also advocates for a stronger integration of scientific inquiry into design education, ensuring that future designers are well-equipped to address complex design challenges. It offers practical recommendations for enhancing design instruction through the application of this theory.

Recommendations

- 1- Bridging the gap between theory and practice by highlighting the importance of incorporating scientific methods into design education from the early stages. This approach helps students recognize the value of research-driven design.
- 2- Fostering a research-oriented culture by encouraging students to build critical and analytical thinking skills. This empowers them to engage with academic research, conduct systematic studies, and apply their findings meaningfully within the design process.
- 3- Developing hybrid educational models by proposing flexible, interdisciplinary learning environments where research is seamlessly integrated into design curricula, fostering a forward-thinking approach that reimagines the future of design education.

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