Experiment on Teaching Basic Graphic Formation with Graphic Images and Design Principles

Wang I- Hsuan

Department   of Visual Communication Design ,   Tainan Woman's University, Taiwan

Abstract

This research addressed the following concepts: reevaluating basic graphic design development in personal terms; creating conditions for the conceptual design to move from the known to the unknown; encouraging the use of concepts to dictate techniques instead of the other way around; discovering design principles rather than directly learning or memorizing them; and discovering personal conceptual methods of graphic design. The assignments were given to beginning students, not only to teach basic graphic design fundamentals but also to encourage personal creative processes. The wide variety of solutions shown to each problem reflect the diversity of options and potential approaches presented by each design principle.

Keyword   Graphic, Design Principle, Graphic Formation

1. Purpose of the research

The process of visual communication runs throughout our daily lives. Unfortunately, most graphic design teaching methods focus only on technical facility, ignoring the need for personal and innovative thought in visual communication. So I propose that the repertoire of principles and techniques needed for effective visual communication should not simply be taught; this repertoire must be developed. With its uniquely practical hands-on approach and wide variety of application, the concept above will be welcomed throughout the visual communication field, by professionals looking for new avenues of inspiration, students, and instructors.

For most people, learning the principles of effective visual communication is an intensely personal venture. Among the more curious and vexing predicaments is the fact that the necessary visual communication concepts cannot be taught directly. The

study of various media and techniques offers a certain tangibility for direct study, of course, but there is very little practical knowledge that can be imparted regarding an overall conceptual approach to visual communication. It is therefore necessary to create conditions conducive to students' personal exploration and discovery of this knowledge.

For educators in the ever-changing visual communication field, understanding how to create these conditions is a formidable challenge. It is essential that assignments be both educationally sound and personally meaningful to the students, so as to create sufficient interest to open up the students to previously unexplored avenues of visual communication.

Educators should never assume that student's mere enrollment in design school will inherently constitute a serious interest in solving visual communications problems -- this interest must be developed, through the employment of personal interest and thought-provoking problems. The concerns, then, for design educators are to demystify the visual communication process by presenting it in an exciting and challenging way. The assignments in this research project are structured to achieve just that, serving as original strategies to prompt original results. Each assignment is designed to lead students away from traditional thought processes, away from traditional avenues of visual research, and away from "right" and "wrong" answers. Many of them are presented in the context of seemingly narrow parameters; students are then forced to look inward for personal design solutions. In short, the necessary conditions for personal creative growth are established again and again.

The assignments were given to beginning students, not only to teach basic design fundamentals but also to encourage personal creative processes and self-reliance. The wide variety of solutions shown to each problem reflected the diversity of options and potential approaches presented in each problem. Because self-discovery was stressed as the primary goal, certain "deviant" but nonetheless worthwhile solutions were presented as well.

2. Scope of the research

The intention of this research is to develop a graphic idiom through the discovery of the various two-dimensional design principles needed to extend a limited number of graphic images. The primary intention here is to explore various aspects of the fundamental design principles. By experimenting with graphic image within the parameters of these design principles, designers can include basic skills into personal expressive repertories. Because design skills would become more comprehensive by creating several solutions to a single problem, using only 2 to 5 graphic images may seem to be a rather limited palette for expressing such diverse design principles. But consider how these graphic images can be expanded into a more comprehensive language by utilizing various design principles. So the project addressed by this research will include: creating conditions for self-questioning by moving from the known to the unknown; encouraging the use of concepts to dictate techniques, instead of the other way around; discovering design principles, rather than directly learning or memorizing them; and discovering personal conceptual method of problem - solving.

In this research, how the component can be assembled or composed is studied. There are three broad approaches to this research graphic design: one concerned with a visual image--an analytical approach, a conceptual approach and an expressive approach. The ideas and the concept highlight different facets of this subject:

a. The sculpting experience -- reflecting the notion that the form of the message influences the reader's interpretation of the content.

b. The management of graphic images -- stressing the organizational ability of the

graphic images layout, and alluding to the creation of structure.

c. The learning engine -- graphic design empowering the systematisation.

3. Analysis

Most people learned about graphics separately from content. You may ask, however, isn't design valid on its own formal terms, or for its own sake? Of course, there is a virtue in formalism, but graphic design is not an independent art form. It's about interdependence and interrelatedness. So in this research the assignments I gave to students have no right or wrong answers. Each requires the students to conjure multiple solutions to the test of the limits of perception and comprehension. These are the stepping stones to acute conceptual thinking. So indeed, the clever ways in which the problems have been designed invite questions and also include how to deal and play with those design principles, not answers. The graphic forms beckon the student to experiment; the principle limitations provide necessary, but not inviolable, parameters.

The new way of joining and interweaving in the development of design talents and arrangement and use of relevant scientific knowledge and working methods is the key to graphic design education suitable for modern times. The importance of sign and information theory, gestalt and perception psychology, semantics and structuralism for the theoretical and practical training of the graphic designer is generally uncontested. It should be quite obvious that we cannot make intuitive thinking into a leading principle in professional training. The progressive graphic designer also needs manual and technical knowledge and ability in the traditional sense. They must learn and master the various rules and laws which are indispensable for the creation of any visual communication.

4. Concept of this research

In grammar, syntax is the manner in which words are combined to form phrases or sentences. In this research, design principles will be defined as graphic syntax to process and arrange elements into cohesive whole. Design principles in this research guide designers to organize content and visual elements into purposeful, pleasing compositions (Fig.1).
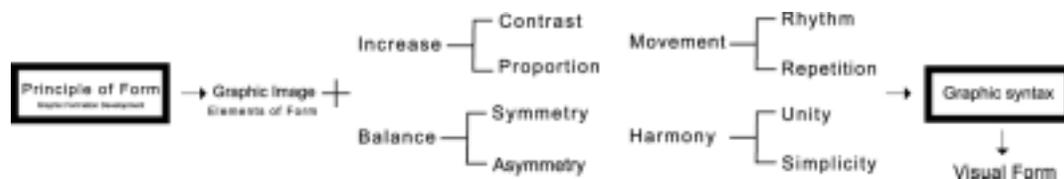

Fig 1. Concept Of This Research

5. Definition of the design principle

Design principles are the guidelines. Designers follow principles to create purposeful compositions. Like an architect's plans, design principles orchestrate the construction of a visual structure that is strong enough to support all the graphic elements placed on the blank page. Design principles also help visual communicators forge a link between information content and that structure, so that each reinforces the other, telegraphing a single message. Perhaps concepts like contrast, proportion, repetition, rhythm, symmetry, asymmetry, unity, simplicity are taught in other courses. That's likely because design principles are cross-disciplinary. These general concepts can be applied to any situation where a visual communicator wants to express a message. While technology and the ways people receive information may change, design principles will not. Design principles are not concepts foreign to you. Instead, it's likely that you've used them already; for

example when you dress yourself. Also, design principles reflect the laws of physics. People would fall, twist, and meet immovable objects because we possess bodies that inevitably act according to natural laws. Similarly, design principles can be felt subconsciously. So the design principle is a grid structure in this project. These design principles are divided into 4 parts:
a. Increase -- contrast, proportion.
b. Movement -- repetition, rhythm.
c. Balance -- symmetry, asymmetry.
d. Harmony -- unity, simplicity.

6. Graphic formation development exercise

The following assignments are used to address the complex issue of graphic design instruction. Each assignment is carefully structured to create conditions conducive to discovering the language of graphic design. These conditions encourage exploration of visual communication concepts and design principles and allow students to develop more personally expressive ways of solving communication problems. Under this instructive approach, personal, intuitive concepts are stressed over specific technical skills. These skills and techniques needed to execute the assignments are not taught; they must be developed through involvement with problems. This interactive approach is ideally suited to the world of graphic design – a world of dynamic concept and ever-changing idea.

These assignments are designed to give good practical advice to students in an open-mind, non-dogmatic manner. In this research, graphic formation is concerned with the structuring and arranging of visual language. By experimenting with graphic images within the parameters of these design principles, students and designers can develop basic skills into personal expressive repertories. Using 2 to 5 graphic images may seem to be a rather limited palette for expressing such diverse design principles, but consider how these graphic images can be expanded into a more comprehensive language by utilizing various design principles.

The following exercises were selected with emphasis upon building the perceptual and conceptual abilities to provide a foundation for effective and innovative graphic design practice.

A. Increase [contrast, proportion] (Fig.2-3) : The use of increase is to: a). attract attention, b). accent, c). define and clarify, d). increase visual activity and spontaneity, e). exaggerate f). emphasize and subordinate, g). determine, h). inject natural elements, I). infuse design with a visual intelligence.

B. Movement [repetition, rhythm] (Fig.4-5): The use of movement is to: a). direct the eye, b). streamline eye movement, c). highlight visual dynamics, d). invoke a kinesthetic response -- muscular movement , e). attract attention.

C. Balance [symmetry, asymmetry] (Fig.6-7): The use of balance is to: a). project a designed look, b). invoke formal or informal page architecture, c). solicit a kinesthetic response, d). minimize or maximize stress by using imbalance.

D. Harmony [unity, simplicity] (Fig.8-9): The use of harmony is to: a). control contrast, b). accent, c). define and clarify, d). increase visual activity and spontaneity, e). exaggerate, f). emphasize and subordinate.

The following goals are promoted and presented throughout these exercises:
1. Acquiring sensitivity which allows conscientious and creative design decisions in graphic images.
2. Developing creative skills through the process of visual experimentation with graphic images in relation to design principles.
3. Encouraging an understanding of the abstract properties inherent in existing graphic forms. An exploratory attitude towards space and visual organization is developed.

Following are examples of the four mentioned design principles:

Figure 2 represents examples of contrast graphic formation. Contrast means the same thing as sharpening. Applying contrast as a design principle means to increase tensions between visual elements. Contrast is a concept that may appear sharp and chaotic to our eyes. We better try to mitigate that stress by ordering experiences into categories that stress resolution and rationality

(Fig 2)

Figure 3 represents examples of proportion graphic formation. Proportion is a principle that always has an immediate context as in the sentence -- She has a sense of proportion --implying that a person sees meaning in one thing in relation to another. It's helpful to think of proportion as a ratio. Proportion is closely linked to contrast, too. While contrast forces emphasis and subordination, proportion means emphasizing and subordinating in intelligent, logical ways.

(Fig 3)

Figure 4 represents examples of rhythm graphic formation. Rhythm provides the illusion of motion in a composition. Graphic designers can emphasing rhythm by repeating any element. In turn, the eye is strongly attracted to rhythm. It also refers to the directions the eye might take as it moves through a design with sequential patterning of visual elements, or it may refer to the muscular tension a viewer feels upon looking at a composition.
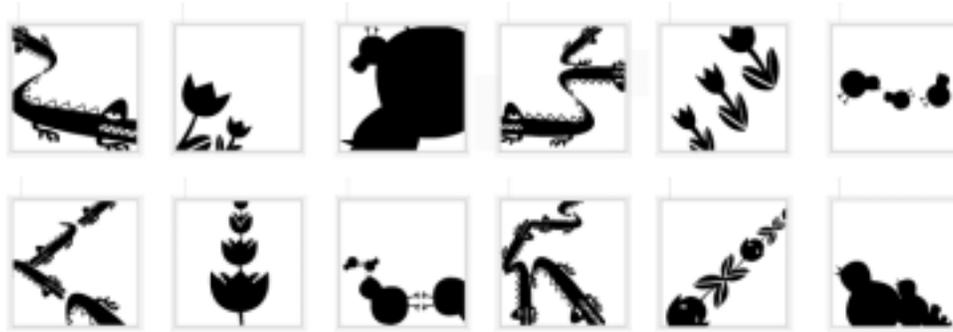
(Fig 4)

Figure 5 represents examples of repetition graphic formation. Repetition reaffirms the viewer's selection of visual information and provides him with additional reinforcement, hopefully for memory. With subtle variations,repetition can elicit a visual response by provocative ambiance.
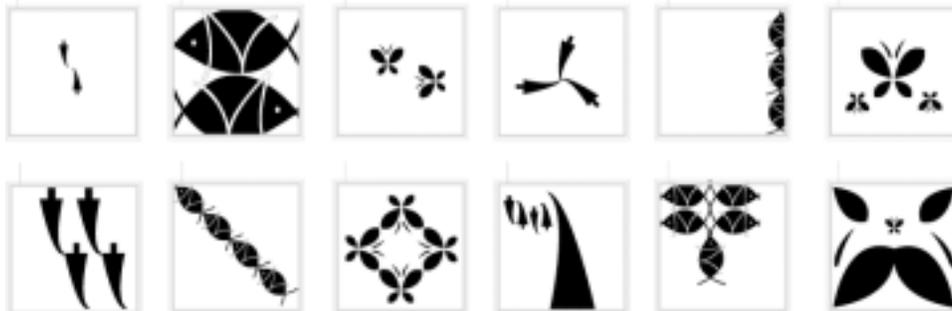
(Fig 5)

Figure 6 represents examples of symmetry graphic formation. Symmetry placement produces a quiet, balanced configuration. Symmetry best defines formal balance. Each is a mirror image of the other, with visual elements centred on top of the vertical axis that divides the space in two.
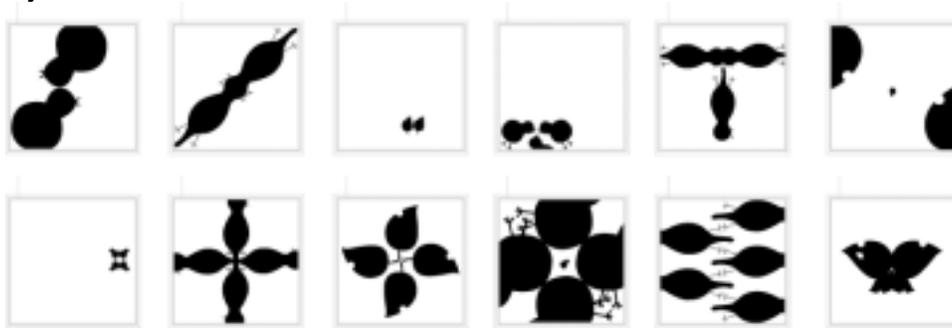
(Fig 6)

Figure 7 represents examples of asymmetry graphic formation. Asymmetrical placement is a dynamic division of space on the square. Disproportional balance relies upon asymmetry. Instead of mechanically centering visual elements on a vertical axis, a designer employing information balance juxtaposes the weight and mess visually. Designers use disproportional balance more often because it provides flexibility. There are more possible points of attraction, and they can achieve balance through an almost

infinite number of arrangements with visual   masses.

(Fig 7)

Figure 8 represents examples of unity graphic formation. Unity is what happens when all the design principles presented have been selected for a purpose, and they work together like a finely tuned machine.

In a successful composition, design principles coalesce into a single unified expression. Unity could then be said to be the theme or point of view of it.

(Fig 8)

Figure 9 represents examples of simplicity graphic formation. Simplicity means the same thing as "leveling" - the lessening of tensions through unification. Simplicity

demands a sensitive eye from the graphic designer -- attention to small details. For that reason, it is a more difficult principle to apply for a beginner.
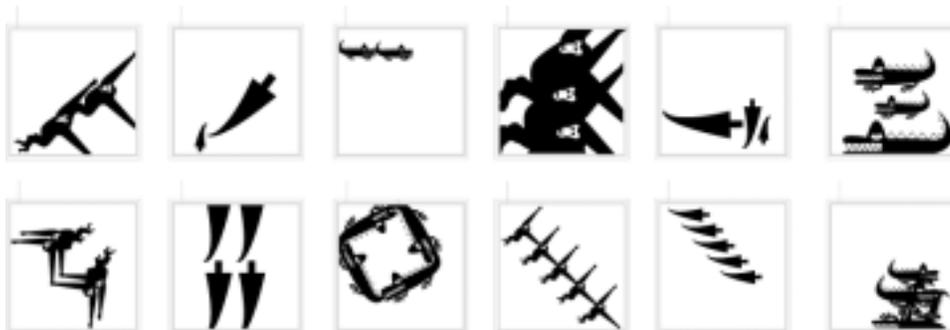
(Fig 9)

7. Conclusions

The discoveries are derived from experimentation with the interrelationship of graphic images, a vital experience for the growth of a designer to develop a personal, and formal style. Combining these principles can further expand a mere graphic formation into a comprehensive, abstract graphic language, maximizing the possibilities for graphic expression .

This conceptual approach to solve visual problems embodies the quest for basic graphic formation development. This research hopes students can come to realize that the potential number of successful solutions is infinite. The idea of unlearning comes into play here as well, prodding students to go beyond habitual,

learned responses and thought processes, into the realm of more instinctive, spontaneous approaches. These conditions encourage exploration of visual communication concepts and design principles, to allow students to develop more personal ways of expression by solving communication problems. This interactive approach is ideally suitable for the world of graphic design -- a world of dynamic concepts and ever-changing ideas.

References

1. Charles Wallschlaeger, Cynthia Busic-Snyder. Deign Basics, Taipei: Liu Ho, 1996

2. Nicholas Roukes. Design Synectics, Taipei; Liu Ho, 1995

3. Phil Baines & Andrew Haslam. Type & Typography, UK: Laurence King, 2002

4. Robin Landa. Graphic Design Solutions, Taipei: Liu Ho, 1985

5. Rob Carter, Ben Day, Philip Meggs. Typographic Design: Form and Communication, New Jersey: John Wily& Sons, 2002

6. Rick Poynor. Typographica, UK: Laurence King, 2001