Visual organizational systems for the graphic designer

Michael P. Agoston

Follow this and additional works at: http://scholarworks.rit.edu/theses

Recommended Citation
ROCHESTER INSTITUTE OF TECHNOLOGY

A Thesis Submitted to the Faculty of
The College of Fine and Applied Arts
in Candidacy for the Degree of

MASTER OF FINE ARTS

VISUAL ORGANIZATIONAL SYSTEMS FOR THE GRAPHIC DESIGNER
(A Video Tape)

By

MICHAEL P. AGOSTON

December 18, 1987
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approvals</td>
<td>ii</td>
</tr>
<tr>
<td>Thesis Committee</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgements (Dedication)</td>
<td>iv</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Project Definition</td>
<td>4</td>
</tr>
<tr>
<td>Project Implementation</td>
<td>12</td>
</tr>
<tr>
<td>Conclusion</td>
<td>17</td>
</tr>
<tr>
<td>Appendix A</td>
<td>19</td>
</tr>
<tr>
<td>Appendix B</td>
<td>24</td>
</tr>
<tr>
<td>Appendix C</td>
<td>27</td>
</tr>
<tr>
<td>Appendix D</td>
<td>37</td>
</tr>
<tr>
<td>Appendix E</td>
<td>59</td>
</tr>
<tr>
<td>Appendix F</td>
<td>86</td>
</tr>
<tr>
<td>Selected Bibliography</td>
<td>97</td>
</tr>
</tbody>
</table>
Thesis Committee

Committee Chairman: R. Roger Remington

Associate Adviser: Mary Ann Begland

Associate Adviser: Bernadette Merkel
I would like to thank R. Roger Remington for the contributions he has made during this thesis project and the lasting influence he has had on me as a graphic designer.

I would also like to sincerely thank Elizabeth Bauer Simon for her support during the completion of this paper, her dedicated friendship, and the encouragement she has given me as a student and as a professional.

Lastly, I would like to acknowledge Mary Lou Agoston for her support and love during this academic experience and throughout my life.
Introduction
Methods of organizing our visual world have been used and developed for centuries. These systematic approaches have been implemented in areas such as painting, drawing, architecture, type design, and the printed page.

As early as 1532, Albrecht Durer, the renowned printmaker/designer engineered a glass panel with a superimposed grid system to aid in the proportional drawing of the human figure. In 1695 the ultimate in systematic approaches to type design was commissioned by Louis XIV of France. The type face was designed on a matrix consisting of a square divided into sixty-four units; these were further divided into thirty-six small partitions. This created a matrix of two thousand three hundred and four squares. The type face was appropriately named the Romain du Roi. In the mid-nineteen forties a modular system of measurement was designed by the famed architect of Swiss origin, Le Corbusier. The system was based on three main points of the human anatomy: the solar plexus, the top of the head, and the tip of the finger on the extended hand. These three points yielded a mean (golden mean) and an extreme point, creating a proportional scale of measure. He patented his system under the name "Le Modulor".

These individuals and others like them influenced graphic design in the development and aesthetic use of systematic approaches to design. (See Appendix A).

The full extent of Visual Organizational Systems (VOS) was introduced to me through my studies at RIT, under the direction of R. Roger Remington. Initially, there was some difficulty in coordinating my design work with an appropriate organizational system. As a result of an intense effort to both utilize and understand this analytical
approach (VOS), I soon became aware that here was a potential tool by which one could more effectively present complex information. I subsequently became a strong proponent of the VOS and sought a medium by which I could share my knowledge with other members of the RIT community who found themselves in the same unenlightened and confused situation I had experienced.

This led me to my actual thesis project: to produce an instructional video tape on Visual Organizational Systems, the aim of this tape being the definition and application of VOS methodology.
Project Definition
The first task in this project was to define VOS in general terms in order to develop a clear understanding of the nomenclature and how each word related to the others semantically. Dictionary definitions were employed to help realize each component's full linguistic implication.

Organize

To form into a whole with mutually connected, and dependent parts; to co-ordinate parts or elements so as to form a systematic whole (with either the whole or the parts as object); to give a definite and orderly structure to; to systematize; to frame and put into working order (an institution, enterprise, etc.); to arrange or "get up" something involving united action.

System

A set or assemblage of things connected, associated or interdependent, so as to form a complex unity; a whole composed of parts in orderly arrangement according to some scheme, or plan; rarely applied to simple or small assemblage of things (nearly = "group" or "set")
Visual

Of power or faculty; pertaining or relating to, concerning or connected with, sight or vision.

After analyzing the description of each word it became apparent that the major focus should be with the definitions of "organize" and "system": as they related to a visual context. This led to the general definition of VOS as follows:

"A Visual Organizational System can be described as any interacting or interrelated group of compositional parts forming a unified whole, which is bound by visual formats and predetermined regulations. The purpose of this unified group is to facilitate information processing for a specific or general audience in a rational and precise manner."

Generalities such as "compositional parts" and "unified whole" were purposely implemented. This allowed for interpretations of actual components and results. For example, "compositional parts" could pertain to any combination of type, photography, and graphic elements. The phrase "unified whole" refers to the visual integration of these "compositional parts", the culmination of which could pertain to any number of graphic conclusions, i.e., poster, brochure, or advertisement.

The next logical step was to decide on which VOS would be investigated in this undertaking. At this point my Thesis Committee
Chairman R. Roger Remington graciously allowed me the use of his file on this subject matter. I discovered a list of systematic approaches that were currently integrated into the RIT curriculum. Five Visual Organizational Systems with various degrees of difficulty ranging from simplest to most complex were chosen. They follow with their definitions:

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Texture</td>
<td>A visually adequate number of similar repeated elements creating a cohesive whole.</td>
</tr>
<tr>
<td>Pattern</td>
<td>Equal legibility balance between the individual modules and an overriding theme.</td>
</tr>
<tr>
<td>Constructional Grid</td>
<td>The correlation of the inherent proportional relationships of each design element creating a visually interlocking organization.</td>
</tr>
<tr>
<td>Compositional Grid</td>
<td>The imposition of design elements into a predetermined structure of a specific organization.</td>
</tr>
</tbody>
</table>
Typographic Unit Grid

Based on a typographical measure that is multiplied and combined to form larger modules. These modules are then used to house visual information.

With the subject matter decided upon and definitions in order, it was time to begin some preliminary research. I dissected my work from the past eighteen months (as of February 1984) and searched for pertinent examples of each VOS in order to relate to their actual usage and application.

The topic of VOS was discussed with fellow students, both on a graduate and undergraduate level. This enabled me to build a broader perspective of the entire theme.

I studied the work of respected designers, such as Karl Gerstner, Allen Hurlburt, and Chermayeff and Geismar. These individuals applied visual organizational systems relating them to the results in a structural manner, as well as conceptually in some cases.

After discussions and investigations, an early conclusion was drawn: certain types of visual organizational systems lend themselves more readily to particular kinds and amounts of information. This later became a criterion for judging effective VOS usage for examples to be used in the thesis project.
Upon completion of this early searching process, a medium had to be found for presenting this information.

Several different forms of printed media were considered: a poster series, a booklet and a brochure series, none of which were very appealing, since it seemed inherent in the very concept of a "thesis" to explore unfamiliar areas. It was then suggested that the information be presented on video tape, a medium in which I had no prior experience.

I chose this vehicle for several reasons. Video tape was (and is) being widely used in the marketplace, and presented a perfect opportunity for me to acquire experience in a growing field. Once the project was completed it would serve to broaden my portfolio making it of greater competitive value in the job market. For some time I was aware of other video tapes which were on file in the Graphic Design Department. Some were instructional in nature, produced by past students, while others were taped lectures of guest speakers. I decided to produce an instructional video tape on VOS motivated by the thought that this would constitute a lasting contribution to the RIT Graphic Design Department. At the same time, it would help others through the original difficulties I encountered when first utilizing VOS.

After serious consideration, I decided to make the sophomore graphic design students my primary target audience. This was done for
several reasons, the first of which was that there was no visual aid on this subject matter which was readily accessible to this audience. It was hoped that an introduction to VOS at this early stage of the sophomores' education would assist in their understanding of VOS. There was also a precedent set by previous instructional tapes, some of which were also designed around this audience. Following this precedent would enlarge the current subject matter on file for the sophomore level student. Furthermore, it would give motivated students at the sophomore level an opportunity to either reinforce or go beyond their current classroom instruction.

It was also decided at this time that a review of some previously learned set of design principles from the freshman design curriculum be included with the new material on VOS. This was suggested for two reasons: the first would be to demonstrate that Visual Organizational Systems do not work as stand alone solutions to design problems, rather they interact with and organize many other design theories and principles; secondly, integrating previously learned knowledge would serve as a "building block" to learning the new information on VOS.

Five basic design principles were chosen for this purpose. They follow with their differences.

Symmetry

Symmetry occurs when all compositional parts can be divided by a central axis.
<table>
<thead>
<tr>
<th>Asymmetry</th>
<th>Asymmetry occurs when all or the majority of compositional parts cannot be divided by a central axis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symmetric/Asymmetric Combination</td>
<td>Symmetric/Asymmetric Combination occurs when the majority of compositional parts are symmetric but one or several parts are in an asymmetrical position.</td>
</tr>
<tr>
<td>Contrast</td>
<td>Contrast is a comparative appraisal in respect to differences.</td>
</tr>
<tr>
<td>Rhythm</td>
<td>Rhythm is the movement or fluctuation of related elements marked by a reoccurrence or natural flow.</td>
</tr>
</tbody>
</table>

Parameters now had to be set for what the video tape was to accomplish on an informational and educational level. After conferring with the members of my Thesis Committee it was decided that the tape should supply working definitions of each VOS to be explored, set rudimentary parameters for the use of each systematic approach and show actual applications of these systems.
Project Implementation
The thesis project started on February 1, 1984 with a reading list of books and articles dealing with various aspects of VOS. The list, which I initially developed, was in part suggested by the Thesis Committee.

Most of the books from the reading list addressed the development and use of Visual Organizational Systems. One book in particular was extremely informative, Karl Gerstner's "Designing Programs". Gerstner explored not only the pragmatics of designing a system, but also analytical thinking as it pertained to system development. This proved to be much more insightful than simply examining the step-by-step procedures outlined in other research material.

Another book from the reading list which proved to be quite helpful was Philip Meggs's "The History of Graphic Design". This book supplied a broad overview of the historic prevalence of VOS employed by designers and artists. The knowledge gained from this book became a unifying factor in the understanding of visual systems in their various forms and use.

At this time research was also begun to find ways to produce video tape. Tapes that had already been produced were viewed and studied to see what method would be most suitable for the type of information to be presented. Information was also obtained from R. Roger Remington and library resources on various techniques for video production. After the research process was completed, it was decided that a
slide/tape presentation converted to video would be produced. This method seemed to be most appropriate because photographing examples of VOS on 35mm slide would be more economical than shooting directly to video and would allow me to utilize my knowledge of 35mm cameras and film.

This method did not entail highly technical post-production work, such as video editing, chyron graphics, etc. It demanded "voice only" talent, as opposed to on-screen talent, the former being much more available and considerably less expensive. A video shoot would have entailed the hiring of lighting grips, cameramen, and the procurement of a set and on-screen talent, as opposed to no expense at all in the slide/tape method. Budget considerations forced this alternative, although by no means inferior, approach.

There were eight steps in the production of the video tape itself. Each of these steps had to be approved by my Thesis Committee in order to allow me to continue the next phase of the project. A time line, establishing a due date for each of these phases, was also developed at this time. This enabled me to achieve my final deadline of April 20, 1984. (See Appendix B.)

The first of these steps was the development of an outline. This was written from my definitions combined with the information obtained from my reading list. This was used in the next phase, script development. The script was the most time-consuming and most important
step in the production. The communicative value of the video itself was developed in this phase, i.e. the actual language to be used in explaining the subject matter, and the realization of visuals to reinforce and coordinate with the concepts and examples being explained. There were several revisions of the script before the final version was accepted. The next phase in the implementation process was to search out or develop visual examples which complimented the script. A visual reference sheet was created during the research phase of the project which proved to be of great organizational value. Further research was needed to find visuals which were absent at this time.

Upon completion of this phase a story board was created. This entailed the drawing of each visual in correlation with the script, enabling me to get a sense of timing between audio and visual. This was necessary in order to see if additional visuals were indicated. After all the visuals were found or created the actual photography of them onto 35mm slides took place. The recording of the script was then undertaken. This was achieved with the help of the audio engineer, David Stone, from Instructional Media Service at RIT. He supplied me with a demo reel of several different professional narrators, from which an appropriate female voice, possessing the desired modulation, was chosen. The script was recorded on April 9, 1984. The next phase was synchronization. This involved the placing of inaudible tones onto the audio tape which would then electronically communicate with the slide projectors, enabling them to advance the slides in conjunction with the audio. The equipment was loaned to me from Instructional Media Services, as was a demonstration of its use.
This phase took longer than anticipated due to the unfamiliar equipment and procedures. This, however, did not pose any undue difficulty. The final step of video conversion took place on April 20, 1984 at I.M.S. This was accomplished by projecting the programmed slide/tape onto a reflective screen and having it recorded onto tape via video camera. The final time of the tape is 24 min. 5 sec. (See Appendix C, D, and E.)
Conclusion
The ability to organize information is essential to a Graphic Designer. Visual Organizational Systems create a harmony between other visual languages such as perceptual principles, form, color, concept and basic design principles. These systems also organize the syntactic placement of elements, such as type and imagery, to create a cohesive and comprehensible design. In some instances VOS sets a visual hierarchy of components, in others it separates information into visually manageable modules, in still others it allows for the repetition of a particular unit, creating or emphasizing that unit's meaning.

Visual Organizational Systems have been used throughout history. Our society has become complex, and the strains on the designer greater. The continued use and development of Visual Organizational Systems is essential to maintaining a quality standard of design in the future. I hope I have impacted the future in a positive way through the production of this video tape.
Appendix A

Historic References
Durer's glass panel with superimposed grid system.

The Romain Du Roi (lower case) with matrix.

The Romain Du Roi (upper case) with matrix.

An illustration of Le Corbusier's "Le Modulor".

Appendix B

Time Line

Appraisal Flow Chart
### MARCH 1984

**NOTES FOR THIS MONTH**

- *Script development*
- *Imagery sketch*
- *Final draft of script*
- *Second draft (draft)*
- *First draft of script*

### APRIL 1984

**SUN.** | **MON.** | **TUES.** | **WED.** | **THURS.** | **FRI.** | **SAT.**
---|---|---|---|---|---|---
* | STORY | BOARD |  |  |  |  

- *Production*
- *Presentation for their show*
APPROVAL PROCESS

Yes

Thesis Committee

No

Outline

Script

Visual Development

Storyboard

35mm Slides

Voice Over Recording

Programming

Video Conversion

Video

Submitted for Approval
Appendix C

Outline
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>A) Historical preface</td>
<td>B) Why we need VOS in our modern society</td>
</tr>
<tr>
<td>II. Basic Design Principles</td>
<td>A) How basic design principles enhance the use of basic Visual Organizational Systems.</td>
<td>1) Design principles can be utilized when using visual systems to help ensure a more aesthetic result.</td>
</tr>
</tbody>
</table>
5) The use of design principles can enhance the organizational possibilities of VOS.

B) Some design principles are useful as support devices for VOS.

1) Symmetry
Symmetry occurs when all compositional parts can be divided equally by a central axis.

2) Asymmetry
Asymmetry occurs when all or the majority of compositional parts cannot be evenly divided by a central axis.

3) Symmetric/Asymmetric Combination
Symmetric/Asymmetric occurs when the majority of compositional parts are symmetric, but one or several parts are in an asymmetric location.
D) Contrast

Contrast is the comparative appraisal in respect to differences.

1) Some types of contract:
   a) scale
   b) shape
   c) volume
   d) direction
   e) planular position
   f) texture
   g) color

E) Rhythm

Rhythm is the movement or fluctuation of related elements marked by a recurrence or natural flow.

1) Some types of rhythm:
   a) regular
   b) irregular
   c) progressive
   d) regressive
   e) random
III. Some types of VOS

A) Visual Texture

1) A visually adequate number of similar repeated elements creating a cohesive whole.

   a) The number of repeated elements is important in determining the desired impact, communicative value, and cohesiveness of the texture.

   b) The type of repeated element is useful in determining the randomness or predictability of the final grouping.

B) Pattern

1) An organized pattern consists of an equal legibility balance between the individual modules and an overriding group concept (theme).
a) The modules of this systemized pattern are equal in size; it is the overriding concept that decides organization of the pattern.

b) Each module is interconnected by containing similar imagery. The organized pattern is determined by the change that occurs in each module.

C) Constructional Grid

1) The Constructional Grid correlates the inherent proportional relationships of each design element. It is the interwoven organization of these elements that creates a unified group.

a) Each design element is dissected, exposing its
inherent proportional similarities. These correlations become the modules of the grid, which are then aligned and adjusted to create an interlocking whole.

b) The single most important aspect of this system is the correlation of the inherent proportional relationships of design elements; these become the building blocks of the system.

D) Compositional Grid

1) The Compositional Grid is created by imposing elements onto a predetermined structure which has been rationally developed to suit the information.
a) The organizational qualities of this system are developed when the predetermined structure is created to serve the organizational needs of the information.

b) The kind, amount, and inter-relationship of the information as well as the type and size of format should be taken into consideration when creating the predetermined structure.

E) Typographic Unit Grid

1) The Typographic Unit Grid is based on a typographical unit which is multiplied to create modules in which the information is to be placed.
a) The size of the unit is determined by the point size of the body copy type. The point size is arrived at by evaluating the amount of copy, number of illustrations and the chosen or assigned format size.

b) Once the unit size has been determined, it is used to divide the page, and serves as a measure to create larger modules.

c) Larger modules can then be further combined to form columns, and even larger segments from this modular (or secondary) grid system.

d) Information can then be placed in the appropriately sized and located module, column or division, all of which were based on the original unit. This gives the final product an
inherent sense of interrelationship and proportion.

e) Spatial and proportional organization are easier to accomplish when the typographic unit grid is used.

V. Summary: Review

A) What is a VOS?

B) Why use VOS?

C) How design principles support VOS.

D) Several types of VOS.
Appendix D

Script
1. Historic References
i.e. Egyptian, Medieval, etc.

2. Cityscape

3. Various examples of VOS

4. TITLE SLIDE
"Visual Organizational Systems"

5. Various Grid Systems

Man has used and developed methods to organize his visual world for centuries. Painting, drawing, architecture, type design, and the printed page are just a few examples of how visual systems have been used in the past. Due to the complexity of our modern society and the involved information we must deal with as designers, visual systems are more important than ever. They will help to achieve our goal of communicating information.

A visual system can be defined as any interacting or interdependent group of compositional parts forming a unified whole. The purpose of this unified group is to distribute information or serve a common goal. Visual systems are tools which help a designer clearly convey a concept to an audience. Josef Muller
Brockmann says, "A system... fosters analytical thinking and gives the solution to the problem a logical and material basis."

6. Simple vs. Complex System

Systems can be simple or complex depending on the kind, amount, and intricacy of the information to be communicated.

7. Examples of Systems

It is important to understand why we use systematic approaches to design. Knowing why will help with the application of these organizing tools in problem solving. Visual systems can supply a point of departure when solving a design problem. They can also offer a way to develop an underlying structure for building efficiency, controlling clarity, and building continuity into a design. Allen Hurlburt wrote, "When...(the system) is applied to
Visual

Audio

multiple units, it can generate a sense of continuity and flow that has a distinctive unifying value."

9. Student working on design problem

Even though visual systems form a base structure to help solve design problems, they are not the total answer.

10. Examples of Perceptual Principles, Concept, Form, etc.

Visual systems are a strong link in a chain of design implements which are used by graphic designers. Some other links in the chain are perceptual principles, concept, form, and basic design principles.

11. TITLE SLIDE
   "Basic Design Principles"

Basic design principles are some of the most useful tools a designer can use in conjunction with a systematic approach to design. Knowing how these principles assist visual systems
will help insure an aesthetic result in their applications.

13. TITLE SLIDE

"Balance"

One such principle is balance. Balance is termed as being symmetrical, asymmetrical, or a combination of the two. Symmetry occurs when all the compositional parts can be evenly divided by a central axis. Asymmetry occurs when all or the majority of compositional parts cannot be divided by a central axis.

14. Example Symmetry

A combination takes place when the majority of compositional parts are symmetrical, but one or several parts are in an asymmetrical location.

15. Example Asymmetry

These types of balance should be

-40-
17. Mobil Grid

The grid is designed with flexibility of spatial organization in mind. Any type of balance can work in an organized manner when applied to this grid.

18. TITLE SLIDE

"Contrast"

Contrast is another useful principle. Contrast can be defined as a comparative appraisal in respect to differences. These differences may concern scale, shape, volume, direction, position, color, texture, or combinations of these variables. Creating a meaningful contrast between design elements allows an audience to readily understand divisions of information. This
21. Various "Spreads" from Container Corp. Brochure exemplifies how color was implemented to accent the separation of information. The use of contrast in a systemized composition makes a stronger, more comprehensive presentation of information.

22. TITLE SLIDE "Rhythm"

Applying the design principle of rhythm to information within the confines of a system can enhance its organizational possibilities. Rhythm is the movement or fluctuation of related elements marked by a recurrence of natural flow. This recurrence in elements can occur on a regular, irregular, progressive, regressive or alternating basis. This example illustrates a progressive rhythm from parts to whole, and light to
The system supplies the framework for the rhythm to progress. The rhythm lends additional information to the information.

25. Review

Mobile Grid
Container Corp.
Mask Sequence

These are just a few examples of how certain design principles support visual systems. Systems and design principles can accent information to avoid monotony in repetition, help a viewer scan information on a visual level, and enhance the organizational possibilities of the system.

26. Example of Systems

Systems supply the structure that enables design principles to function in a logical, controlled manner. There are several different multi-unit systems a designer can use to organize
Visual Texture

The first and simplest multi-unit system to be investigated is visual texture. An organized visual texture is any number of repeated similar elements creating a cohesive whole. The individual element becomes a building block of the texture. The single multiplied unit can help determine the impact, communicative value, and unity of the texture. The shape of the repeated component can also help one arrive at the final result. In this example, an Egyptian style letter "X" has been used as a base unit. Notice how the final result is block-like and heavy. In the next sample, a sans serif numeral four has been chosen as the repeated element. This

29. Egyptian "X"
Student Work

30. Sans Serif "4"
Student Work
There are many ways that a visual texture can assist in solving design problems. For example, a visual texture was implemented in the designing of this symbol for the Canadian Broadcasting Corporation. The symbol is composed of the letter "C" which stands for Canada. This base unit has been multiplied and overlapped to represent the satellite stations that make up the Canadian Broadcasting Corporation. It is obvious that the information was adapted to a system appropriate to its needs. The shape of the base unit is meaningful and repeating its form further communicates to the audience.
Visual texture can also be used in a decorative way. In this instance, a symbol for a leather multiplied form. The texture was then applied to a gift box and shopping bag. The result is decorative, but also reinforces the identity of the manufacturer. This example shows how a textural approach has been applied to a book jacket. In this case, a rectangle plus a sequential color change has been used to create a visual texture. The final result is a clean, concise layout.

Visual texture works best with information that requires a single multiplied unit.

The next method of organizing information is pattern. A systemized pattern consists of an equal balance of individual modules and a "group concept".
38. Example
Pattern Student Work

The concept is communicated by the shifting of design elements within each module. Every unit contains a stage in the development of the pattern. This example by Verra Spoerri is a photo essay of a car.

39. Example
Spoerri Outlined to Show Separate Modules

The modular units give structure to the composition. The shifting of photographic images from unit to unit develops the theme. Here Spoerri is conveying the theme of movement and a car.

40. Spoerri - NO Outline

In this sample the letter form "A" serves as a unit. The physical characteristics of this letterform changes from one unit to the next. The final result is a metamorphosis of the letter "A into a compass. The metamorphosis is the theme that runs through this systemized pattern. An organized
pattern is best adapted to information that demands a sequential theme.

The next system to be investigated is the Constructional grid which entails the study of the proportional relationships of design elements. The unifying factor of this grid is the interwoven correlation of these elements. Each element is dissected to discover its relational proportions. In this example, a photo of a dancer, the letter "M", and a compass have been chosen as compositional elements. Common attributes are found and aligned to create a consolidated entity. The final result exemplifies how this
47. Herbert Matter Poster
Dissected by lines
to see relationships

48. Herbert Matter Poster
NO Dissection

49. Henryk Berlwi Advertisement

50. Henryk Berlwi Advertisement
Dissected by lines to
to show relationships

51. Henryk Berlwi Advertisement
NO Dissection

52. TITLE SLIDE
"Compositional Grid"

47. Herbert Matter Poster
Dissected by lines
to see relationships

48. Herbert Matter Poster
NO Dissection

This is an advertisement for Pluto Chocolates by Henryk Berlwi. The components of this layout are interconnected by visual lines. The advertisement is a cohesive and visually stimulating design. This method is best adapted to information that needs a dynamic solution.

49. Henryk Berlwi Advertisement

50. Henryk Berlwi Advertisement
Dissected by lines to
to show relationships

51. Henryk Berlwi Advertisement
NO Dissection

52. TITLE SLIDE
"Compositional Grid"

Another way a designer can organize information is with the
53. Several Student Exercises

A compositional grid is created by imposing design elements onto a predetermined structure. This structure should be rationally developed to suit the information. These student exercises show how a compositional grid has been used. A puzzle is composed of nine units that are identical in size and imagery. The modules may be turned in various directions, the imagery and grid work together allowing for a continuous flow of the design. The final result is an interacting and structured scheme.

54. "Book Binding" Poster

This is an informational poster about the bookbinding process. It was designed using a compositional grid.
grid. The kind, amount, and interrelationship of the information was taken into consideration when the predetermined grid structure was designed. Each module of the grid holds an illustrated stage in the bookbinding process. When necessary, the modules are combined to house the typographic information.

55. "Aspen Design Conference"

The third example is a poster designed for the Aspen Design Conference, by Ivan Chermayeff. The poster deals with how the international tagging system for baggage and cargo relates to the global village. The modules of the grid were designed to accommodate the size and number of baggage tags. The copy was then placed in modules of the same size.
The final result is a direct and organized poster about a complex subject. This type of information lends itself to information that needs related multiple imagery in order to communicate an entire concept.

56. TITLE SLIDE
"Typographic Unit Grid"

The final system to be examined is the typographic unit grid. This grid is based on a unit that is multipled and combined to form larger modules. These modules are then used to house information.

57. Grid Superimposed over Body Copy

The size of the unit is determined by the point size of the body type plus the interline spacing or space between each line of type. For example, 10 point type with two points of interline spacing
58. Full Page Spread Consisting of Body Copy, Imagery & Format Size yields a 12-point unit. The correlation of body copy, image, and the size of format should be taken into consideration when the point size is decided upon.

59. Full Page Spread Left Side Body Copy with Imposed Grid Right Side Grid Once the unit size has been determined it serves as a measure to create horizontal and vertical divisions. These divisions segment the page into modules. The modules can then be further divided to accommodate information. They can also be consolidated to form larger segments. The size and shape of the information dictates the division or fusion of these modules. Allen Hurlburt wrote, "The creative key to the designer's grid is the carefully..."
<table>
<thead>
<tr>
<th>Visual</th>
<th>Audio</th>
</tr>
</thead>
<tbody>
<tr>
<td>planned relationship between then vertical and horizontal divisions</td>
<td>and how these relate to the overall design.</td>
</tr>
<tr>
<td>61. Container Corp. Brochure (2)</td>
<td>This is a brochure from Container Corporation of America. It is</td>
</tr>
<tr>
<td></td>
<td>describing the durability and versatility of composite cans.</td>
</tr>
<tr>
<td>62. Container Corp. Brochure (2) (Layout 1)</td>
<td>The grid has been used to divide information in a logical manner.</td>
</tr>
<tr>
<td></td>
<td>The photographic and typographic information was placed into</td>
</tr>
<tr>
<td></td>
<td>horizontal divisions.</td>
</tr>
<tr>
<td>63. Container Corp. Brochure (2) (Layout 2)</td>
<td>The length and width of these divisions were determined by the</td>
</tr>
<tr>
<td></td>
<td>unit grid. The vertical alignment of the elements, which has been</td>
</tr>
<tr>
<td></td>
<td>directed by the grid, further separates the information into related</td>
</tr>
<tr>
<td></td>
<td>columns. The final outcome is an organized layout</td>
</tr>
</tbody>
</table>
that allows easy access of information.

The typographic unit grid is the perfect tool for creating a unified appearance among multiple related layouts. This is a grid program designed for the National Park System by Massimo Vignelli.

The unit grid was applied to 500 pamphlets and brochures which were distributed to 350 parks. The grid helped determine standardized standardized column widths, headlines, and illustration sizes.

The underlying structure of the grid plus the standardized information create a visual unity among all the printed material. This unity portrays the park system as a national network of
68. Recap on Previous Visuals

The typographic unit grid adapts well to complex and varied information. It creates a visual scheme of information, and allows the viewer to easily locate desired knowledge.

69. EXAMPLES

All of these visual systems help a graphic designer to organize information. Each method has attributes that make it more adaptable to certain kinds of communication. Visual texture works well with imagery that requires a single multiplied unit. Pattern is used best with information that demands a sequential theme. The constructional grid yields a dynamic solution. The
compositional grid lends itself to a presentation that needs related multiple imagery in order to communicate an entire concept. A typographic unit grid adapts well to complex and varied information. A systematic approach to design combined with aesthetic considerations will make a stronger and more concise presentation of information.
Appendix E
Story Board
Man has used and developed methods to organize his visual world for centuries.

Painting, drawing, architecture, type design, and the printed page are just a few examples of how visual systems
Due to the complexity of our modern society and the involved information we must deal with as designers, visual systems are more important than ever. They will help to achieve our goal of communicating information.

A visual system can be defined as any interacting or interdependent group of compositional parts forming a unified whole. The purpose of this unified group is to distribute information or serve a common goal.
Visual systems are tools which help a designer clearly convey a concept to an audience. Josef Muller

Brachman says, "A system... fosters analytical thinking and"

gives the solution to the problem a logical and material basis."

Systems can be simple or complex depending on the kind, amount, and intricacy of the information to be communicated.
It is important to understand why we use systematic approaches to design. Knowing why will help with the application of these organizing tools in problem solving.

Visual systems can supply a point of departure when solving a design problem.

They can also offer a way to develop an underlying structure for building efficiency, controlling clarity.

And building continuity into a design. Allen Humburt wrote, "When...(the system) is applied to
multiple units, it can generate a sense of continuity and flow that

has a distinctive unifying value.

Even though visual systems form a base structure to help solve design problems, they are not the total answer.

Visual systems are a strong link in a chain of design implements which are used by graphic designers. Some other links in the chain are perceptual principles.
Basic design principles are some of the most useful tools a designer can use in conjunction with a systematic approach to design.

Knowing how these principles assist visual systems will help ensure an aesthetic result in their applications.

One such principle is balance. Balance is termed as being symmetrical, asymmetrical, or a combination of the two.
This is Karl Gerstner's "Mobil Grid". The grid is designed with flexibility of spatial organization in mind. Any type of balance can work in an organized manner when applied to this grid.

A combination takes place when the majority of compositional parts are symmetrical, but one or several parts are in an asymmetrical location. These types of balance should be taken into consideration when designing or using a visual system.

Symmetry occurs when all the compositional parts can be evenly divided by a central axis.

Asymmetry occurs when all or the majority of compositional parts cannot be divided by a central axis.
Contrast is another useful principle. Contrast can be defined as a comparative appraisal in respect to differences.

These differences may concern scale, shape, volume, direction, position, color, texture, or combinations of these variables. Creating a meaningful contrast between design elements allows an audience to readily understand divisions of information.
This brochure from Container Corporation exemplifies how color was implemented to accent the separation of information. The use of contrast in a systemized composition makes a stronger, more comprehensive presentation of information.

Applying the design principle of rhythm to information within the confines of a system can enhance its organizational possibilities. Rhythm is the movement or fluctuation of related elements marked by a recurrence of natural flow.
This recurrence in elements can occur on a regular, irregular, progressive, regressive or alternating basis.

This example illustrates a progressive rhythm from parts to whole, and light to dark. The system supplies the framework for the rhythm to progress.
The rhythm lends additional information to the information.

These are just a few examples of how certain design principles support visual systems. Systems and design principles can accent information to avoid monotony in repetition, help a viewer scan information on a visual level, and enhance the organizational possibilities of the system.
Systems supply the structure that enables design principles to function in a logical, controlled manner. There are several different multi-unit systems a designer can use to organize information in an aesthetic and meaningful way.

The first and simplest multi-unit system to be investigated is visual texture. An organized visual texture is any number of repeated similar elements creating a cohesive whole. The individual element becomes a building block of the texture.

The single multiplied unit can help determine the impact, communicative value, and unity of the texture.

The shape of the repeated component can also help one arrive at the final result.
In this example, an Egyptian style letter "X" has been used as a base unit. Notice how the final result is block-like and heavy.

In the next sample, a sans serif numeral four has been chosen as the repeated element. This composition is much lighter and more active. There are many ways that a visual texture can assist in solving design problems.

For example, a visual texture was implemented in the designing of this symbol for the Canadian Broadcasting Corporation.

The symbol is composed of the letter "C" which stands for Canada. This base unit has been multiplied and overlapped to represent the satellite stations that make up the Canadian Broadcasting Corporation.
It is obvious that the information was adapted to a system appropriate to its needs. The shape of the base unit is meaningful and repeating its form further communicates to the audience.

Visual texture can also be used in a decorative way. In this instance, a symbol for a leather multiplied form. The texture was then applied to a gift box and shopping bag. The result is decorative, but also reinforces the identity of the manufacturer.

Visual texture works best with information that requires a single multiplied unit.

approach has been applied to a book jacket. In this case, a rectangle plus a sequential color change has been used to create a visual texture. The final is a clean, concise layout.
The next method of organizing information is pattern. A systemized pattern consists of an equal balance of individual modules and a "group concept".

This example by Verra Spoerri is a photo essay of a car. The modular units give structure to the composition.

The concept is communicated by the shifting of design elements within each module. Every unit contains a stage in the development of the pattern.

The shifting of photographic images from unit to unit develops the theme. Here Spoerri is conveying the theme of movement and a car.
In this sample the letter form "A" serves as a unit. The physical characteristics of this letterform changes from one unit to the next. The final result is a metamorphosis of the letter "A" into a compass. The metamorphosis is the theme that runs through this systemized pattern.

An organized pattern is best adapted to information that demands a sequential theme.

**CONSTRUCTIONAL GRID**

The next system to be investigated is the Constructional grid which entails the study of the proportional relationships of design elements.

The unifying factor of this grid is the interwoven correlation of these elements.
Each element is dissected to discover its relational proportions.

In this example, a photo of a dancer, the letter "M", and a compass have been chosen as compositional elements.

Common attributes are found and aligned to create a consolidated entity.

The final result exemplifies how this procedure can create a dynamic visual statement.
This example is a Swiss travel poster by Herbert Matter. The majority of the typographic and photographic elements are visually aligned.

The final result shows how the constructional grid was used to create a vigorous statement about Swiss travel.

This is an advertisement for Pluto Chocolates by Henryk Berlwa. The components of this layout are interconnected by visual lines.

The advertisement is a cohesive and visually stimulating design.
This is best adapted to information that needs a dynamic solution.

Another way a designer can organize information is with the compositional grid. A compositional grid is created by imposing design elements onto a predetermined structure. This structure should be rationally developed to suit the information.

These student exercises show how a compositional grid has been turned in various directions, the imagery and grid work together allowing for a continuous flow of the design. A puzzle is composed of nine units that are identical in size and imagery. The modules may be
The final result is an interacting and structured scheme.

The final system to be examined is the Typographic unit grid. This grid is based on a unit that is multiplied and combined to form larger modules. These modules are then used to house information.

This is an informational poster about the bookbinding process. It was designed using a compositional grid. The kind, amount, and interrelationship of the information was taken into consideration when the predetermined grid structure was designed. Each module of the grid holds an illustrated stage in the
Once the unit size has been determined it serves as a measure to create horizontal and vertical divisions. These divisions segment the page into modules.

The size and shape of the information dictates the division or fusion of these modules. Allen Hurburt wrote, "The creative key to the designer's grid is the carefully..."
planned relationship between the vertical and horizontal divisions and how these relate to the overall design.

This is a brochure from Container Corporation of America. It is describing the durability and versatility of composite cans.

The grid has been used to divide information in a logical manner. The photographic and typographic information was placed into horizontal divisions. The length and width of these divisions were determined by the unit grid.
The vertical alignment of the elements, which has been directed by the grid, further separates the information into related columns. The final outcome is an organized layout that allows easy access of information.

The typographic unit grid is the perfect tool for creating a unified appearance among multiple related layouts.

This is a grid program designed for the National Park System by Massimo Vignelli.

The unit grid was applied to 500 pamphlets and brochures which were distributed to 350 parks.
The grid helped determine standardized column widths, headlines, and illustration sizes.

The underlying structure of the grid plus the standardized information created a visual unity among all the printed material. This unity portrays the park system as a national network of vacation and sightseeing spots.
The typographic unit grid adapts well to complex and varied information. It creates a visual scheme of information, and allows the viewer to easily locate desired knowledge.

All of these visual systems help a graphic designer to organize information.

Visual texture works well with imagery that requires a single multiplexed unit.

Pattern is used best with information that demands a sequential theme.
The constructional grid yields a dynamic solution.

The compositional grid lends itself to a presentation that needs related multiple imagery in order to communicate an entire concept.

A typographic unit grid adapts well to complex and varied information. A systematic approach to design combined with aesthetic considerations will make a stronger and more concise presentation of information.
Appendix F

Selected Visuals from the Video Tape
Selected Bibliography
SELECTED BIBLIOGRAPHY


