ROCHESTER INSTITUTE OF TECHNOLOGY

A Thesis Submitted to the Faculty of

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in Candidacy for the Degree of

MASTER OF FINE ARTS

VISUAL ORGANIZATIONAL SYSTEMS FOR THE GRAPHIC DESIGNER

(A Video Tape)

By

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Acknowledgements

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 institu-
                              tion, 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 composesd
                              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:

Visual Texture   A visually adequate number of

                                        similar repeated elements

                                        creating a cohesive whole.

Pattern   Equal legibility balance between

                                        the individual modules and an

                                        overriding theme.

Constructional Grid   The correlation of the inherent

                                        proportional relationships of

                                        each design element creating a

                                        visually interlocking

                                        organization.

Compositional Grid   The imposition of design

                                        elements into a predetermined

                                        structure of a specific

                                        organization.

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 struc-
tural 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.

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

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 accpeted. 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.

1 Meggs, Philip B., A History of Graphic Design, (New York: Von Norstrand Rienhold Company, 1983), p. 98.

Construction des Lettres
Courantes Droites.
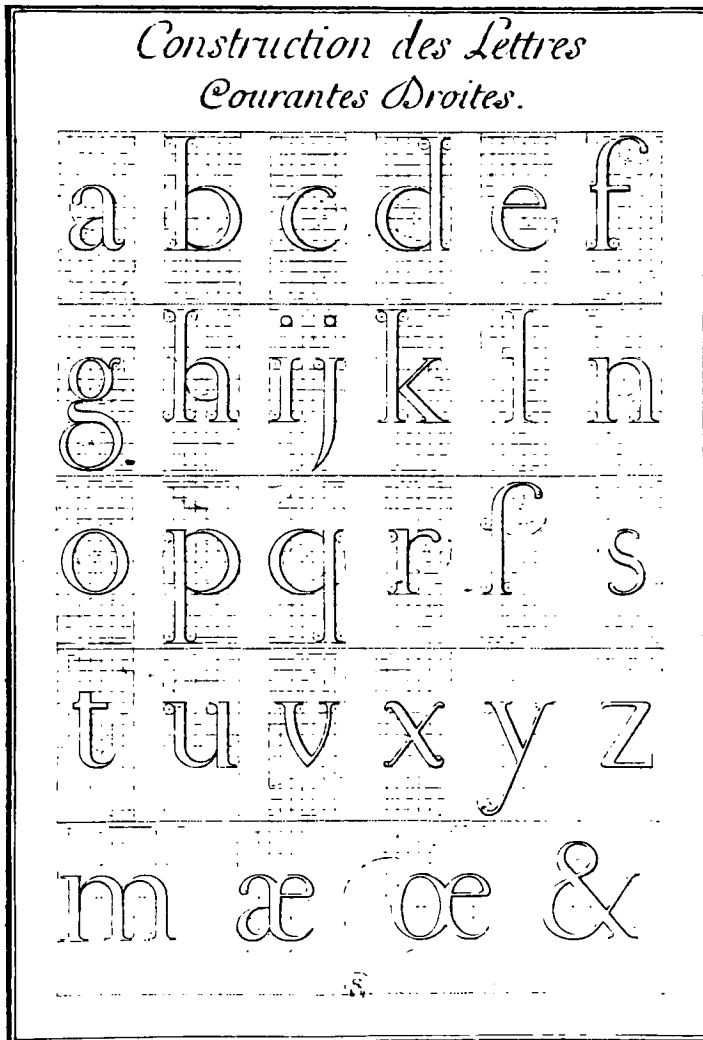
The Romain Du Roi (lower case) with matrix.

2 Meggs, Philip B., A History of Graphic Design, (New York: Von Norstrand Rienhold Company, 1983), p. 135.

Lettres Capitales Droites.
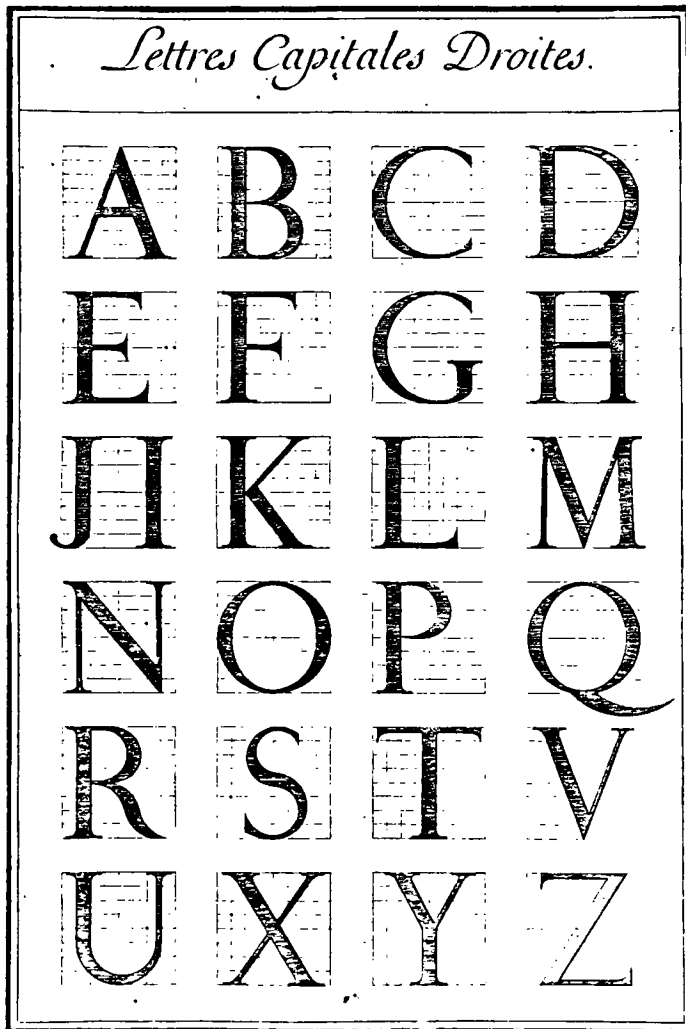
The Romain Du Roi (upper case) with matrix.

3 Meggs, Philip B., <u>A History of Graphic Design</u>, (New York: Von Norstrand Rienhold Company, 1983), p. 134.
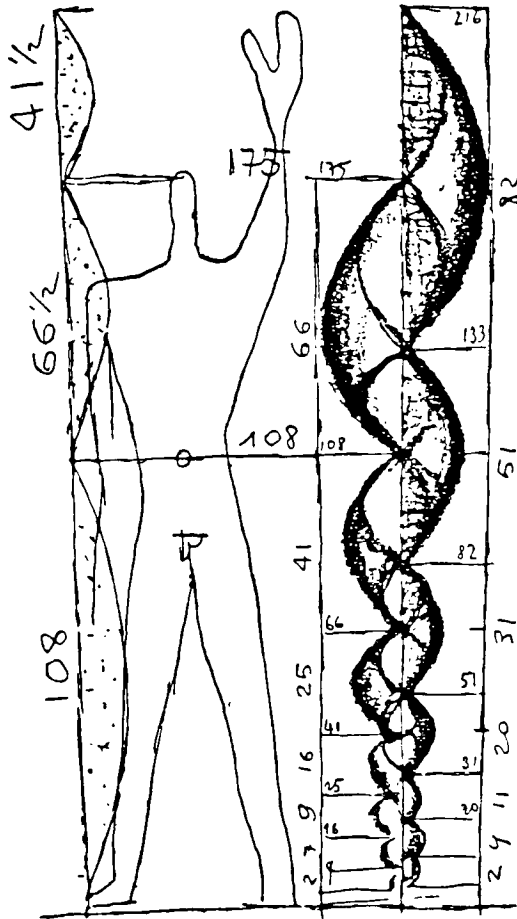
An illustration of Le Corbusier's "Le Modulor".

4 Muller-Brockmann, Josef, Grid Systems in Graphic Design, (New York: Hasting House 1981), p. 160.

Appendix B

Time Line

Appraisal Flow Chart

MARCH
1984

Thesis Anthology

Sript dvilopemunt →

First Drapt of script

Imagery search →

Second Draft (final)

Story Board →

Find corrections for script diuvegment

EVE

APRIL
1984

SUN.	MON.	TUES.	WED.	THURS.	FRI.	SAT.
	Script recording	STORY	BOARD			→

Production →

Presentation do for Thesis show —

APPROVAL PROCESS

Yes | Thesis Committee | Submitted for Approval

No

Outline

Script

Visual Development

Story Board

35mm Slides

Voice Over Recording

Programing

Video Conversion

Video
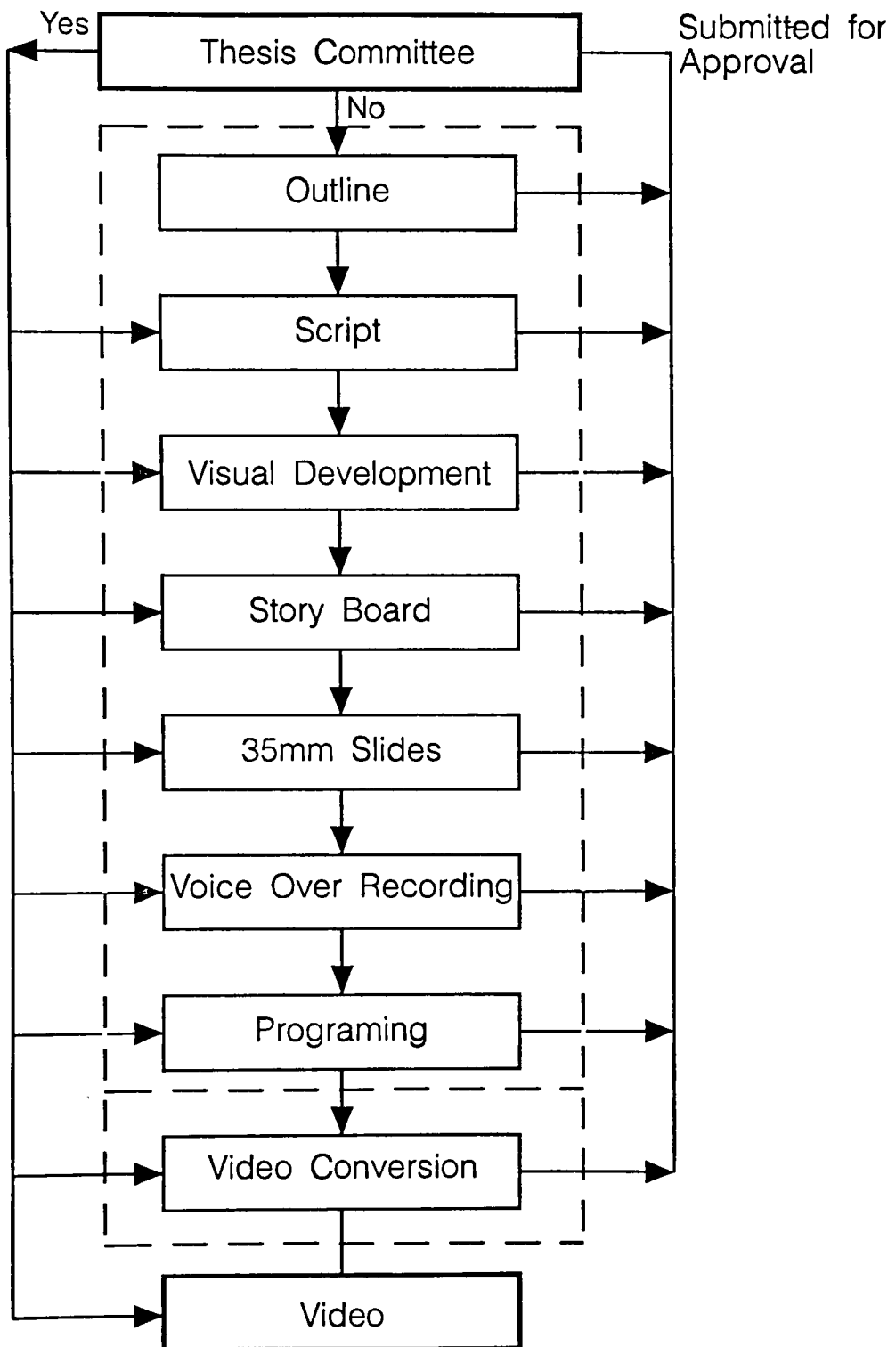
Appendix C

Outline

I. Introduction

    A) Historical preface

    B) Why we need VOS in our modern society

    C) Definition of VOS

    D) How VOS helps us as Designers

II. Basic Design Principles

    A) How basic design principles enhance the use of basic Visual Organizational Systems.

        1) Design principles can be utilized when using visual systems to help ensure a more aesthetic result.

        2) Design principles may be used to avoid monotonous repetition when using VOS.

        3) Design principles support VOS by assisting a viewer in surveying information on a visual level.

        4) The merging of VOS with design principles can better communicate a concept to an audience on a semantic level.

5) The use of design principles can enhance the organizational possibilities of VOS.

B) Some design principles are useful as support devises 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 fluc-
tuation 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 illus-
   trations 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

Script

Visual	Audio
TITLE SLIDE VOS	
	Man has used and developed methods
1. Historic References	to organize his visual world for
i.e. Egyptian, Medieval, etc.	centuries. Painting, drawing,
	architecture, type design, and the
	printed page are just a few
	examples of how visual systems
2. Cityscape	have been used in the past. Due
	to the complexity of our modern
	society and the involved
	information we must deal with as
3. Various examples of VOS	designers, visual systems are more
	important than ever. They will
	help to achieve our goal of
	communicating information.
4. TITLE SLIDE	A visual system can be defined as
"Visual Organizational	any interacting or interdependent
Systems"	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
5. Various Grid Systems	tools which help a designer
	clearly convey a concept to an
	audience. Josef Muller

Visual	Audio
	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
8. Carborundum series of different solutions created on same grid	supply a point of departure when solving a design problem. They can also offer a way to develop an underlying structure for building efficiency, controling 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   Even though visual systems form a
    design problem   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
10. Examples of   which are used by graphic
    Perceptual Principles,   designers. Some other links in
    Concept, Form, etc.   the chain are perceptual
                                principles, concept, form, and
                                basic design principles.

11. TITLE SLIDE   Basic design principles are some
    "Basic Design Principles"   of the most useful tools a
                                designer can use in conjunction
                                with a systematic approach to
12. Example of   design. Knowing how these
    "Aesthetic Results"   principles assist visual systems

Visual   Audio

                                                will help insure an aesthetic

                                                result in their applications.

13. TITLE SLIDE   One such prinicple is balance.

    "Balance"   Balance is termed as being

                                                symmetrical, asymmetrical, or a

14. Example Symmetry   combination of the two. Symmetry

                                                occurs when all the compositional

                                                parts can be evenly divided by a

15. Example Asymmetry   central axis. Asymmetry occurs

                                                when all or the majority of

                                                compositional parts cannot be

                                                divided by a central axis.

16. Example Combination   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

Visual   Audio

                                    taken into consideration when

                                    designing or using a visual

                                    system. This is Karl Gerstner's

17. Mobil Grid   "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 is another useful

    "Contrast"   principle. Contrast can be

                                    defined as a comparative appraisal

                                    in respect to differences. These

19. Examples of   differences may concern scale,

    Scale, Shape, etc.   shape, volume, direction,

                                    position, color, texture, or

                                    combinations of these variables.

                                    Creating a meaningful contrast

20. Show Combinations   between design elements allows an

                                    audience to readily understand

                                    divisions of information. This

Visual	Audio
21. Various "Spreads" from Container Corp. Brochure	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.
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
23. Examples of regular, irregular, etc.	flow. This recurrence in elements can occur on a regular, irregular, progressive, regressive or alternating basis. This example
24. Show Mask Sequence	illustrates a progressive rhythm from parts to whole, and light to

Visual   Audio

dark. The system supplies the
framework for the rhythm to
progress. The rhythm lends
additional information to the
information.

25. Review   These are just a few examples of
    Mobile Grid   how certain design principles
    Container Corp.   support visual systems. Systems
    Mask Sequence   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	Audio
	information in an aesthetic and meaningful way.
27. TITLE SLIDE 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 multipled 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
29. Egyptian "X" Student Work	Egyptian style letter "X" has been used as a base unit. Notice how the final result is block-like and
30. Sans Serif "4" Student Work	heavy. In the next sample, a sans serif numeral four has been chosen as the repeated element. This

Visual   Audio

                                    composition is much lighter and
                                    more active.

                                    There are many ways that a visual
                                    texture can assist in solving
                                    design problems. For example, a
31. Canadian Broadcasting   visual texture was implemented in
    Corp. logo   the designing of this symbol for
                                    the Canadian Broadcasting
                                    Corporation. The symbol is
                                    composed of the letter "C" which
32. Base Unit "C"   stands for Canada. This base unit
                                    has been multiplied and overlapped
                                    to represent the satellilte
33. Full Logo   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	Audio
	Visual texture can also be used in a decorative way. In this
34. Decorative Use Box/Bag	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.
35. Book Jacket	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.
36. Example Visual Texture	Visual texture works best with information that requires a single multiplied unit.
37. TITLE SLIDE "Pattern"	The next method of organizing information is pattern. A systemized pattern consists of an equal balance of individual modules and a "group concept".

Visual	Audio
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

40. Spoerri - NO Outline	to unit develops the theme. Here Spoerri is conveying the theme of movement and a car.
41. Metamorphosis Student Work	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 meta-morphosis of the letter "A into a compass. The metamorphosis is the
42. Examples Systemized Pattern	theme that runs through this systemized pattern. An organized

Visual	Audio
	pattern is best adapted to information that demands a sequential theme.
43. TITLE SLIDE 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
44. Example Constructional Grid	factor of this grid is the interwoven correlation of these
45. Dissected Elements	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
46. Rough Process of Aligning Elements	elements. Common attributes are found and aligned to create a consolidated entity. The final result exemplifies how this

Visual	Audio
47. Herbert Matter Poster Dissected by lines to see relationships	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.
48. Herbert Matter Poster NO Dissection	The final result shows how the constructional grid was used to create a vigorous statement about Swiss travel.
49. Henryk Berlwi Advertisement	This is an advertisement for Pluto Chocolates by Henryk Berlwi. The components of this layout are
50. Henryk Berlwi Advertisement Dissected by lines to show relationships	interconnected by visual lines. The advertisement is a cohesive and visually stimulating design. This method is best adapted to
51. Henryk Berlwi Advertisement NO Dissection	information that needs a dynamic solution.
52. TITLE SLIDE "Compositional Grid"	Another way a designer can organize information is with the

Visual   Audio

                                          compositional grid. A

                                          compositional grid is created by

                                          imposing design elements onto a

                                          predetermined structure. This

                                          structure should be rationally

53. Several Student Exercises   developed to suit the information.

                                          These student exercises show how a

                                          compositional grid has been

                                          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

    Student Work   about the bookbinding process. It

                                          was designed using a compositional

Visual	Audio
	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" Poster	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.

Visual	Audio
	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

Visual   Audio

58. Full Page Spread Consisting   yields a 12-point unit. The
    of Body Copy, Imagery &   correlation of body copy, image,
    Format Size   and the size of format should be
                                           taken into consideration when the
                                           point size is decided upon.

59. Full Page Spread   Once the unit size has been
    Left Side Body Copy   determined it serves as a measure
    with Imposed Grid   to create horizontal and vertical
    Right Side Grid   divisions. These divisions
                                           segment the page into modules.
                                           The modules can then be further
                                           divided to accommodate
60. Same Grid   information. They can also be
    Different layouts   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

Visual	Audio
	planned relationship between then vertical and horizontal divisions and how these relate to the overall design."
61. Container Corp. Brochure (2)	This is a brochure from Container Corporation of America. It is describing the durability and versatility of composite cans.
62. Container Corp. Brochure (2) (Layout 1)	The grid has been used to divide information in a logical manner. The photographic and typographic information was placed into horizontal divisions.
63. Container Corp. Brochure (2) (Layout 2)	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

Visual   Audio

                                that allows easy access of

                                information.

                                The typographic unit grid is the

                                perfect tool for creating a

64. Show Multiple Layout   unified appearance among multiple

                                related layouts. This is a grid

                                program designed for the National

                                Park System by Massimo Vignelli.

65. Unit Grid - Massimo V.   The unit grid was applied to 500

66. Pamphlets and Brochures   pamphlets and brochures which were

                                distributed to 350 parks. The

                                grid helped determine standardized

67. Examples   standardized column widths, head-

                                lines, 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

Visual	Audio
	vacation and sightseeing spots.
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
70. Visual Texture Example	communication. Visual texture works well with imagery that
71. Pattern Example	requires a single multipled unit. Pattern is used best with information that demands a
72. Compositional Grid Example	sequential theme. The constructional grid yields a dynamic solution. The

Visual   Audio

                                            compositional grid lends itself to

                                            a presentation that needs related

                                            multiple imagery in order to

75. Typographic Unit Grid   communicate an entire concept. A

    Example   typographic unit grid adapts well

                                            to complex and varied

                                            information.

                                            A systematic approach to design

                                            combined with aesthetic

77. FADE TO BLACK   considerations will make a

                                            stronger and more concise

                                            presentation of information.

Appendix E

Story Board

VISUAL
ORGANIZATIONAL
SYSTEMS
FOR THE GRAPHIC DESIGNER

music under ———>

Man has used and developed methods
to organize his visual world for
centuries.

AAAA
BBBB
CCCC
DDDD

Painting, drawing,
architecture, type design, and the

printed page are just a few
examples of how visual systems
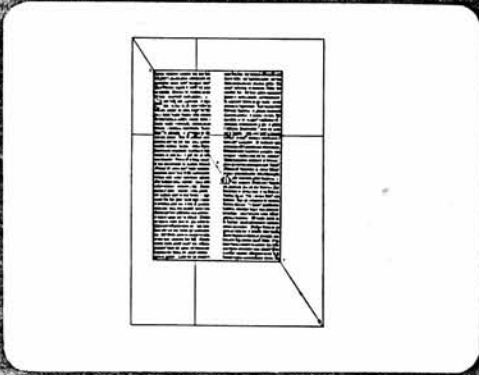
have been used in the past.
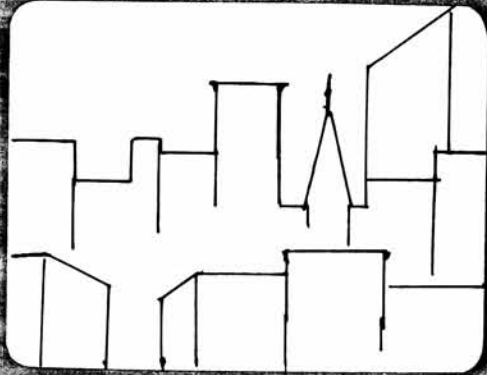
Due
to the complexity of our modern
society and the involved
information we must deal with as
designers,

visual systems are more
important than ever. They will
help to achieve our goal of
communicating information.

VISUAL SYSTEMS

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.

boîte à musique

boîte à musique
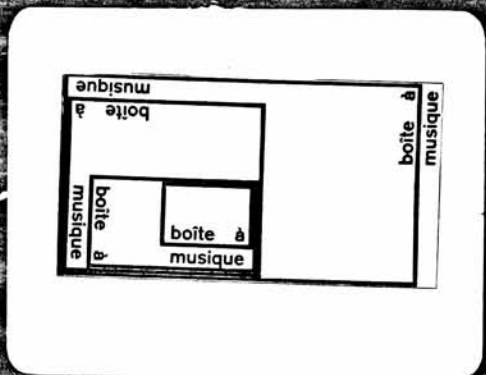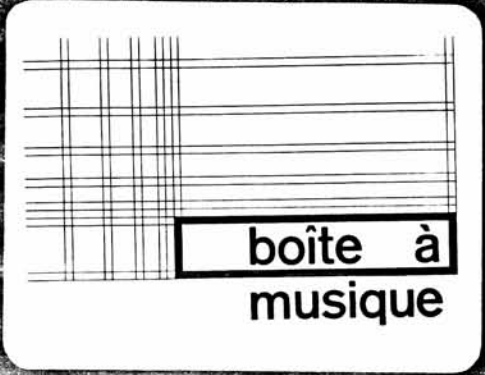
Visual systems are tools which help a designer clearly convey a concept to an audience. Josef Muller

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

boîte à musique

boîte à musique

boîte à musique

3
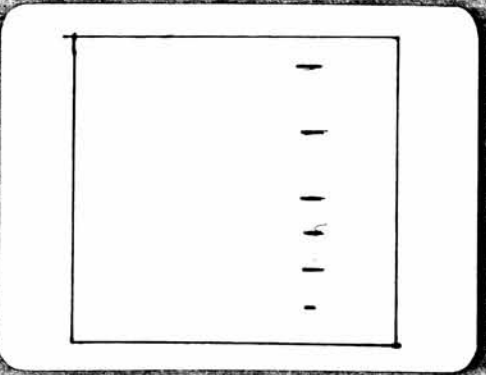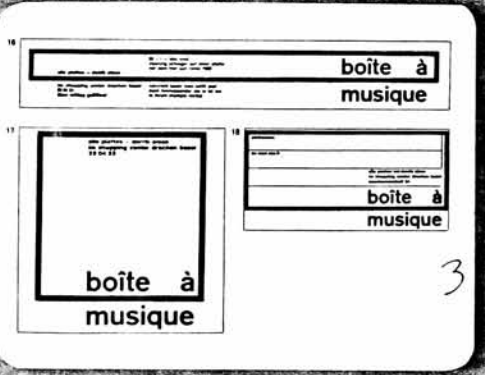
gives the solution to the problem a logical and material basis."

Systems can be simple or complex depending on the kind, amount, and intricacy of the information to be communicated.
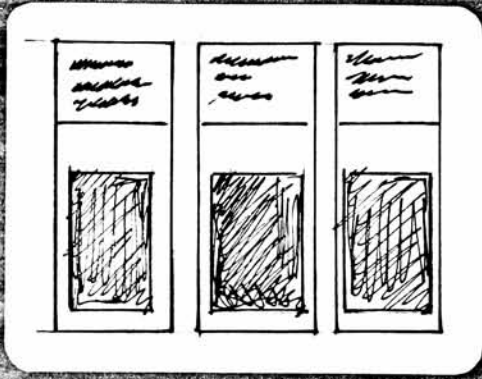
It is important to understand why
we use systematic approaches to
design. Knowing why will help
with the application of these
organizing tools in problem
solving.
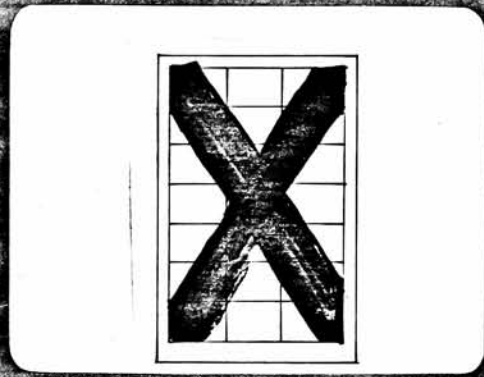
Visual systems can
supply a point of departure when
solving a design problem.
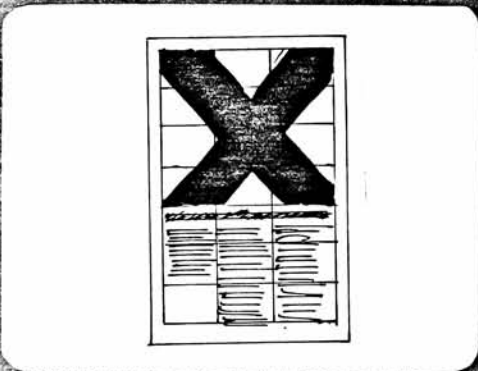
They
can also offer a way to develop an
underlying structure for building
efficiency, controling clarity,
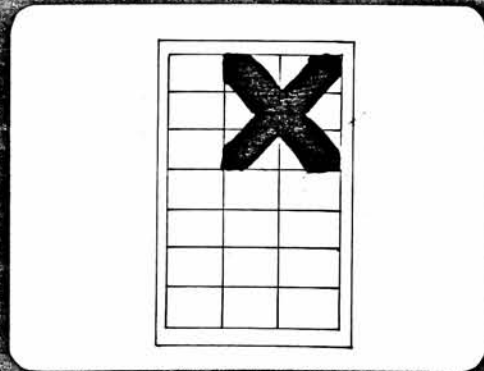
and building continuity into a
design. Allen Hurlburt wrote,
"When...(the system) is applied to
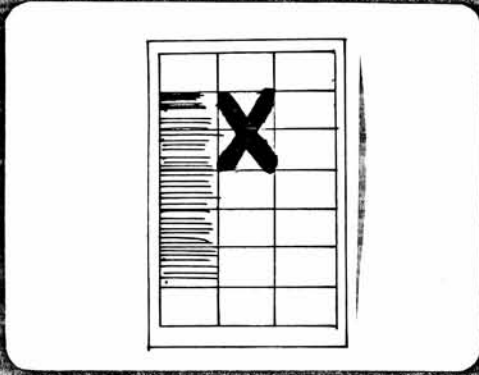
multiple units, it can generate a
sense of continuity and flow that
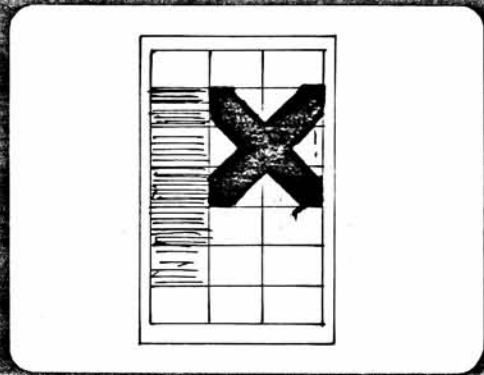
has a distinctive unifying
value."
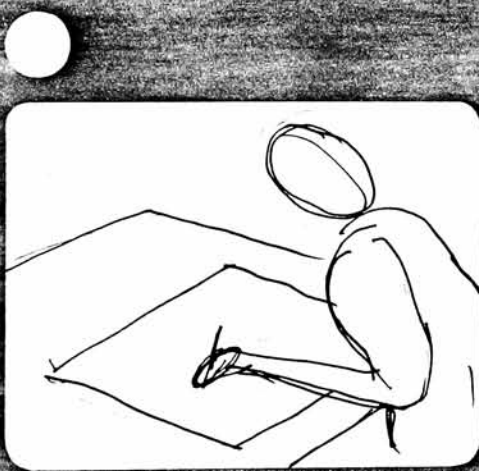
Even though visual systems form a
base structure to help solve
design problems, they are not the
total answer.
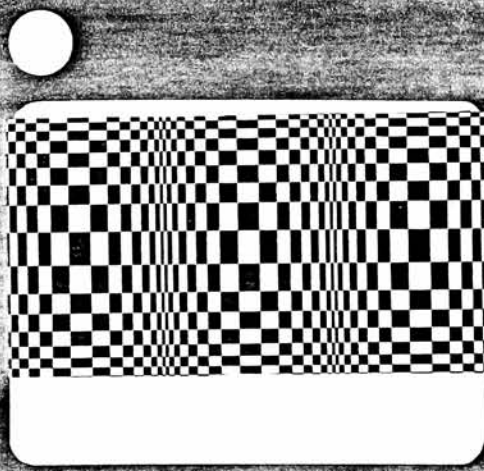
Visual systems are a strong link
in a chain of design implements
which are used by graphic
designers. Some other links in
the chain are perceptual
principles,

M⊛THER

BASIC DESIGN PRINCIPLES

concept, form, and 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.
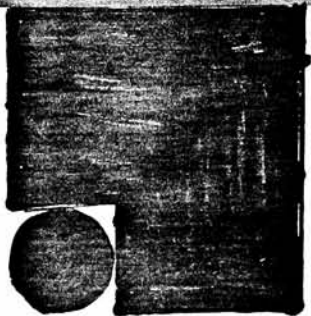
BALANCE

Knowing how these principles assist visual systems

will help insure an aesthetic result in their applications.

One such prinicple 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.
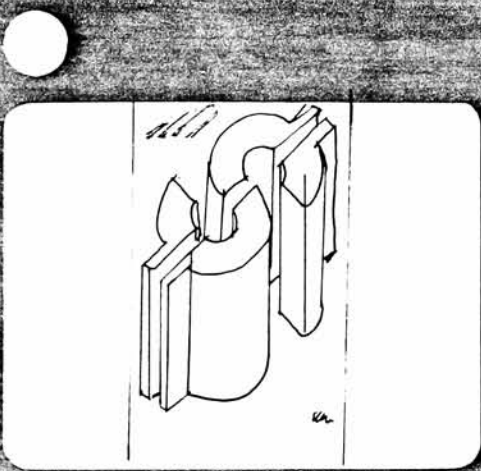
A combination takes place when the
majority of compositional parts
are symmetrical, but one or
several parts are in an
asymmetrical location.
These types of balance should be
taken into consideration when
designing or using a visual
system.
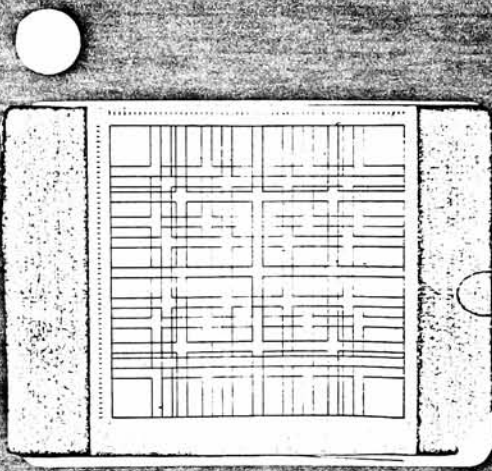
This is Karl Gerstner's
"Mobil Grid". The grid is
designed with flexibility of
spatial organization in mind. Any
type of balance can work in an
organized manner when applied to
this grid.

CONTRAST

olstoi **krieg** und friede

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,
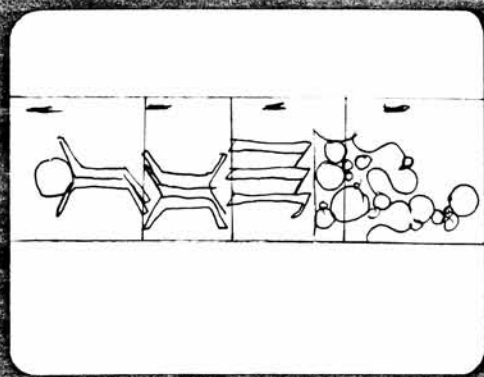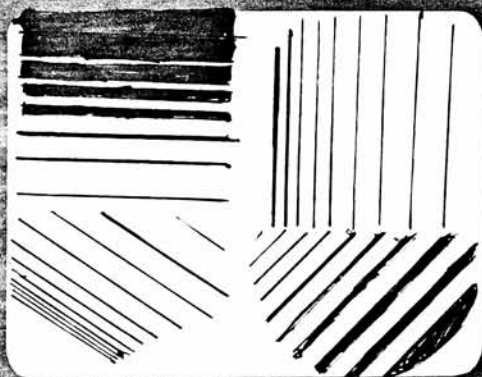
position, color texture, or
combinations of these variables.
Creating a meaningful contrast

between design elements allows an
audience to readily understand
divisions of information.
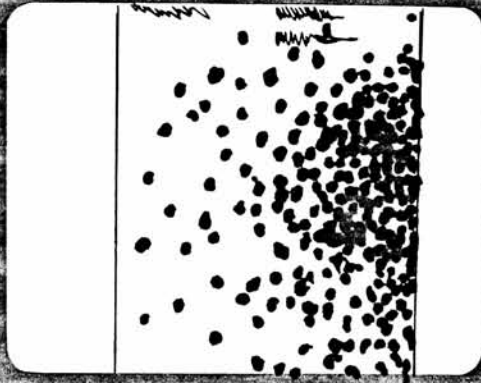
This

brochure from Container

Corporation exemplifies how color

was implemented to accent the
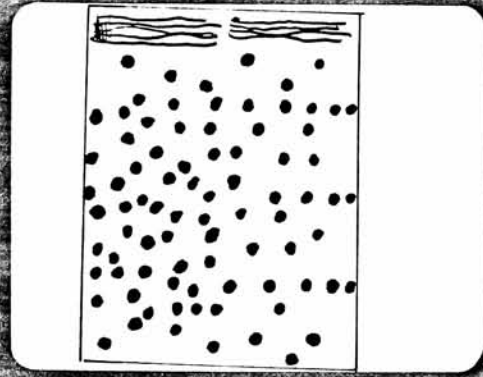
separation of information.   The

use of contrast in a systemized
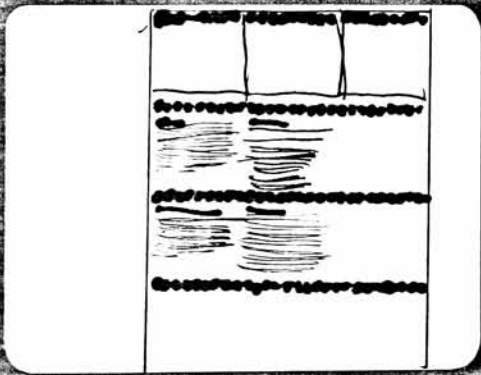
RHYTHM

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
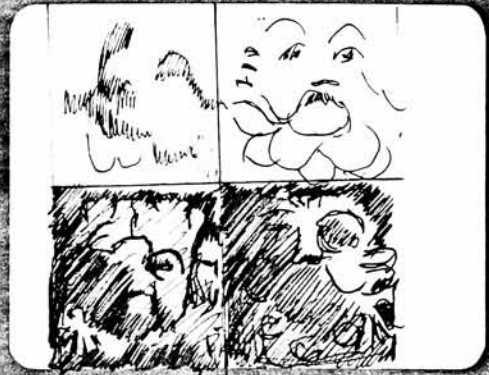
dark. The system supplies the
framework for the rhythm to
progress.
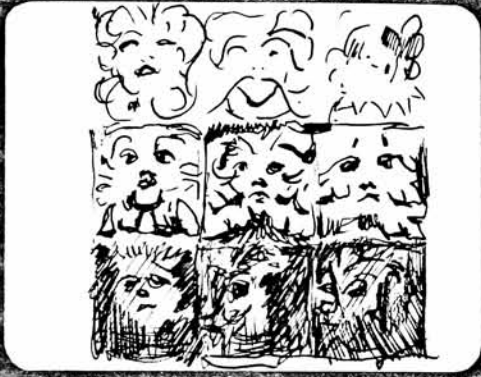
The rhythm lends
additional information to the
information.
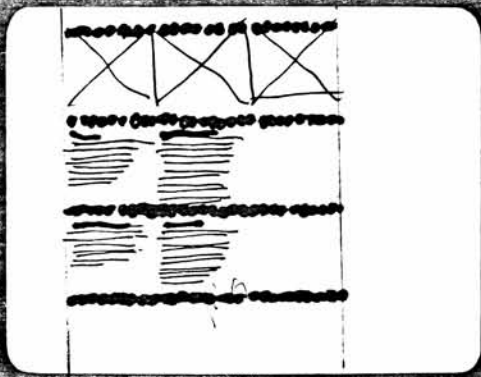
These are just a few examples of
how certain design principles
support visual systems. Systems
and design principles can accent
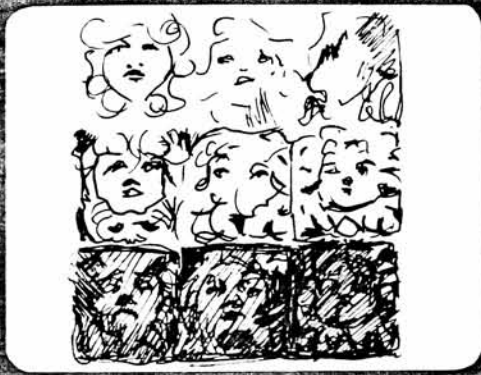
information to avoid monotony in
repetition, help a viewer scan
information on a visual level, and
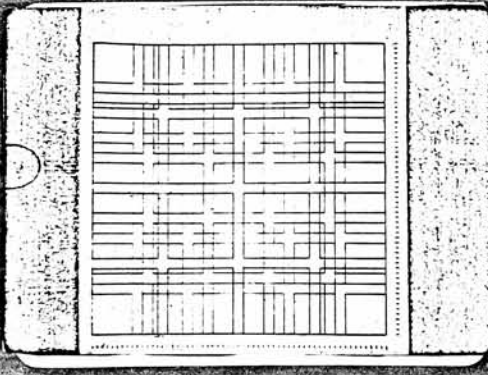
enhance the organizational
possibilities of the system.
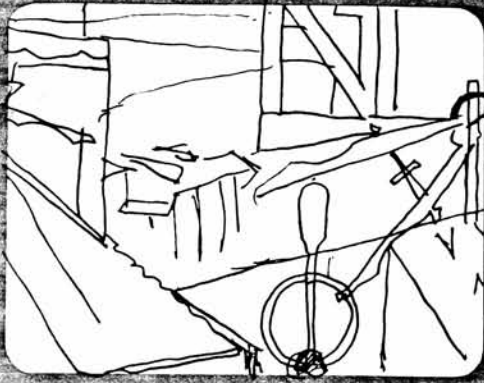
VISUAL
TEXTURE

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
multipled 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.

√
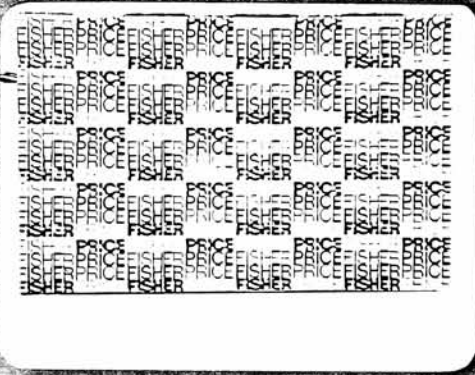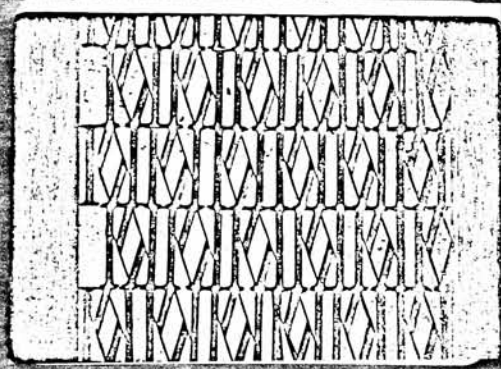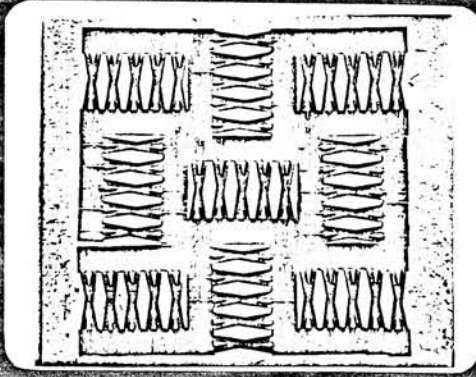
In this example, an Egyptian style letter "X" has been used as a base unit. Notice how the final result is block-like and heavy.

Ⴟ
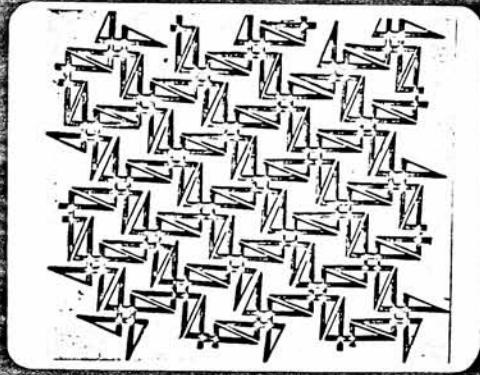
In the next sample, a sans serif numeral four has been chosen as the repeated element. This composition is much lighter and more active.
There are many ways that a visual texture can assist in solving design problems.
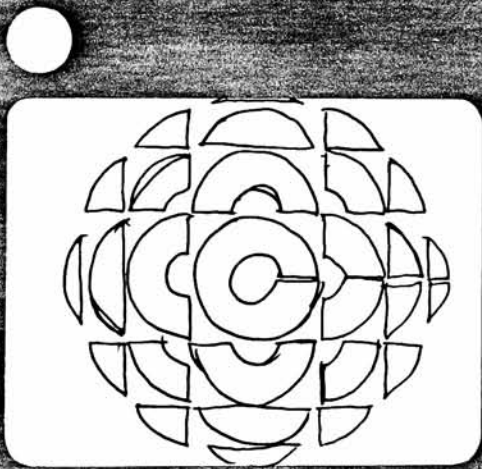
For example, a visual texture was implemented in the designing of this symbol for the Canadian Broadcasting Corporation.
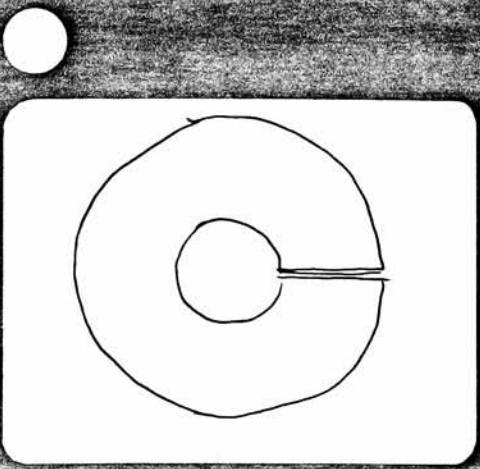
The symbol is composed of the letter "C" which stands for Canada. This base unit has been multiplied and overlapped to represent the satellilte stations that make up the Canadian Broadcasting Corporation.
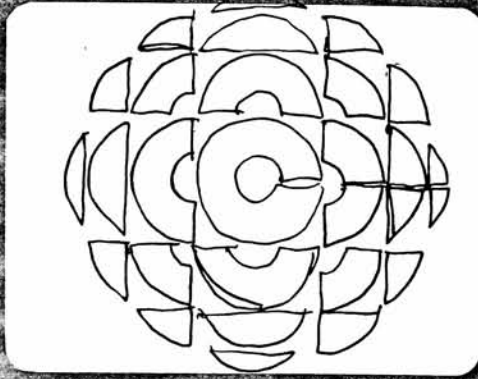
It is
obvious that the information was
adapted to a system appropriate to
its needs. The shape of the base
unit is meaningful and repeating
its form further communicates to
the audience.
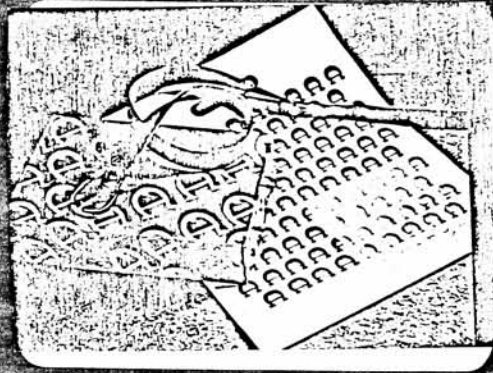
Visual texture can also be used in
a decorative way. In this
instance, a symbol for a leather
multiplied form. The texture was
then applied to a gift box and
shopping bag. The result is
decorative, but also reinforces
the identity of the manufacturer.
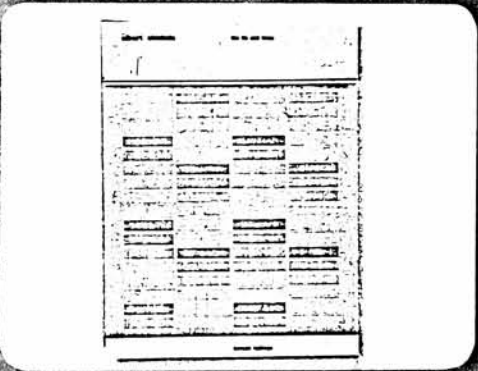
approach has been applied to a
book jacket. In this case, a
rectangle plus a sequential color
change has been used to create a
visual texture. The final is a
clean, concise layout.

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

PATTERN
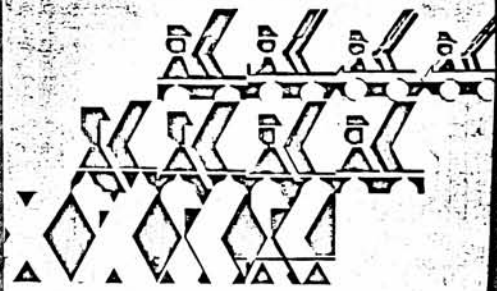
The next method of organizing information is pattern. A systemized pattern consists of an equal balance of individual modules and a "group concept".

The concept is communicated by the shifting of design elements within each module. Every unit contains a stage in the development of the pattern.
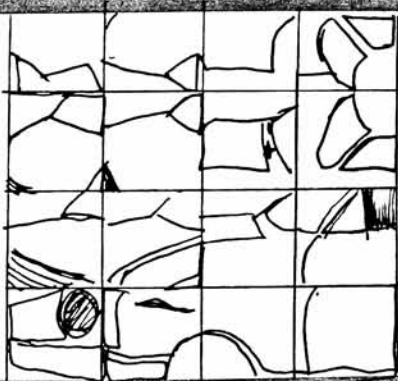
This example by Verra Spoerri is a photo essay of a car. The modular units give structure to the composition.
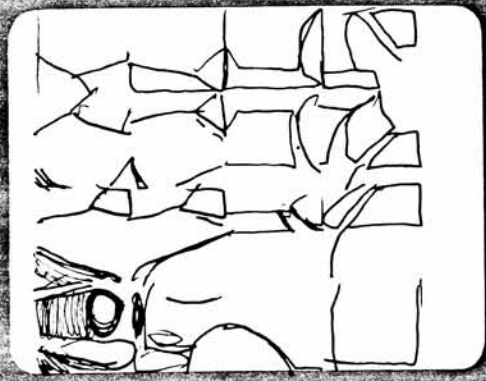
The shifting of photographic images from unit to unit develops the theme. Here Spoerri is conveying the theme of movement and a car.
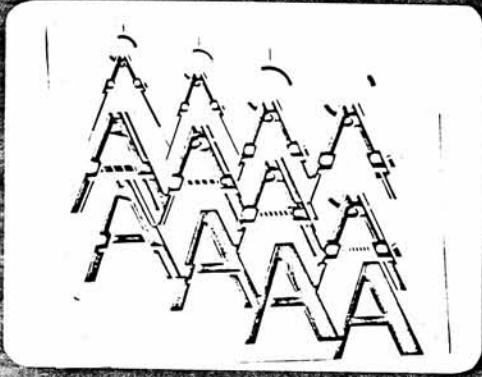
In this sample the letter form "A"
serves as a unit. The physical
characteristics of this letterform
changes from one unit to the next.
The final result is a meta-
morphosis of the letter "A into a
compass. The metamorphosis is the
theme that runs through this
systemized pattern.
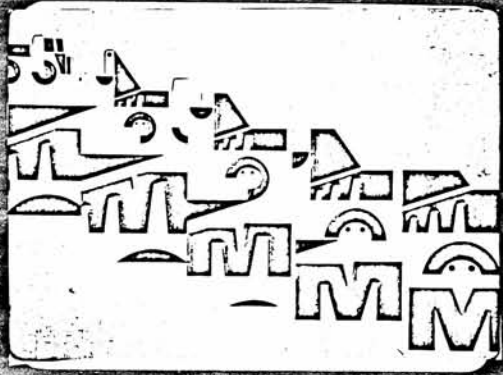
An organized

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.
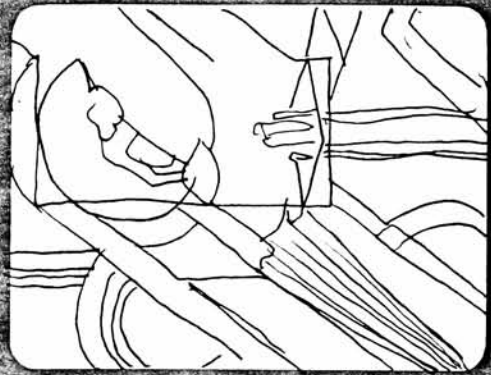
The unifying
factor of this grid is the
interwoven correlation of these
elements.
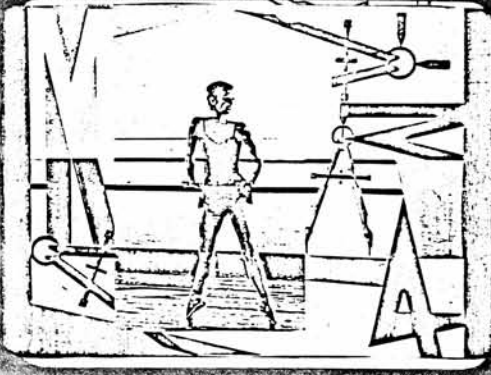
Each element is
dissected to discover its
relational proportions.
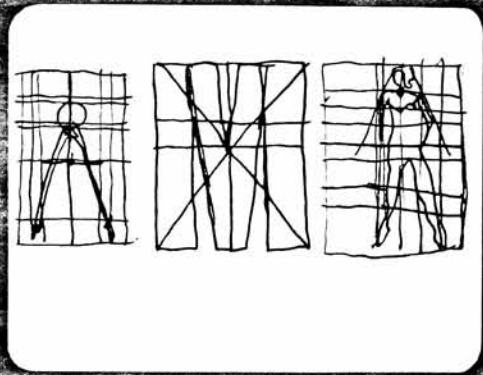
In this
example, a photo of a dancer, the
letter "M", and a compass have
been chosen as compositional
elements.
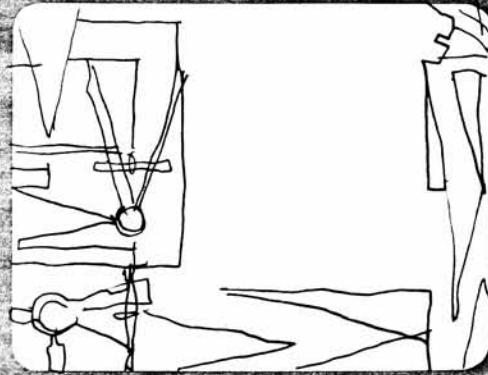
Common attributes are
found and aligned to create a
consolidated entity.
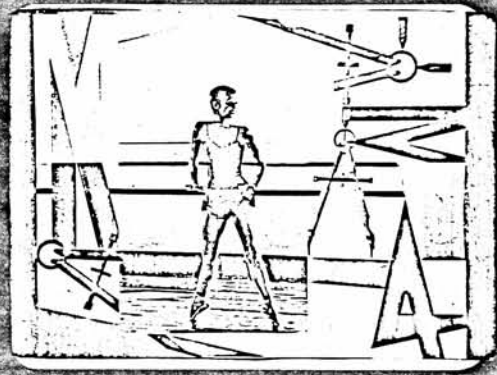
The final
result exemplifies how this
procedure can create a dynamic
visual statement.

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.
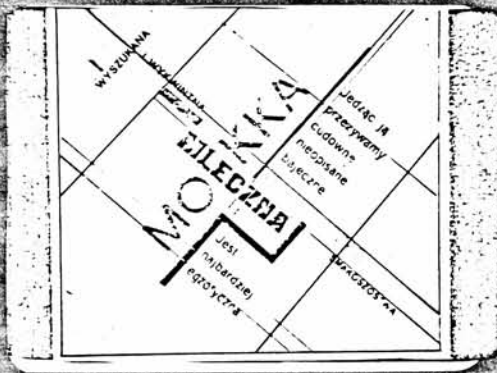
This is an advertisement for Pluto
Chocolates by Henryk Berlwi. The
components of this layout are
interconnected by visual lines.
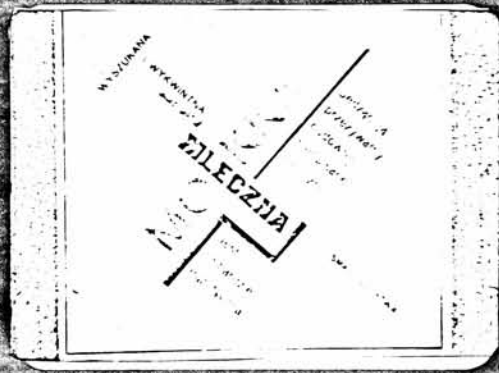
The advertisement is a cohesive
and visually stimulating design.
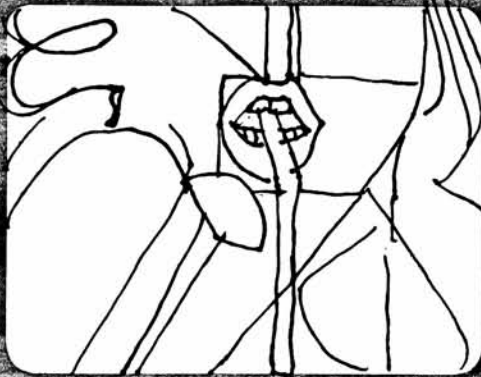
COMPOSITIONAL GRID

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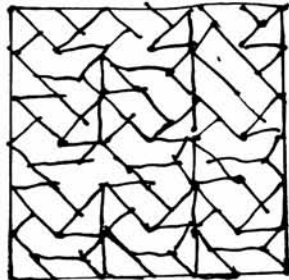
These student exercises show how a compositional grid has been puzzle is composed of nine units that are identical in size and imagery. The modules may be
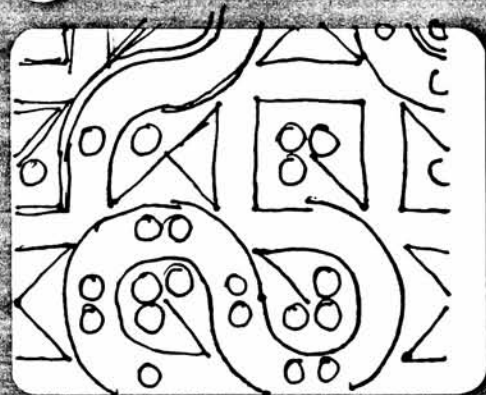
turned in various directions, the imagery and grid work together allowing for a continuous flow of the design.
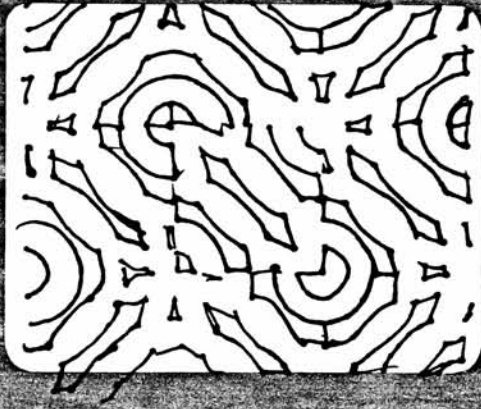
The final result is
an interacting and structured
scheme.

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
bookbinding process. When
necessary, the modules are
combined to house the typographic
information.

TYPOGRAPHIC UNIT GRID

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.

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.

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
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.

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.

Research and Development
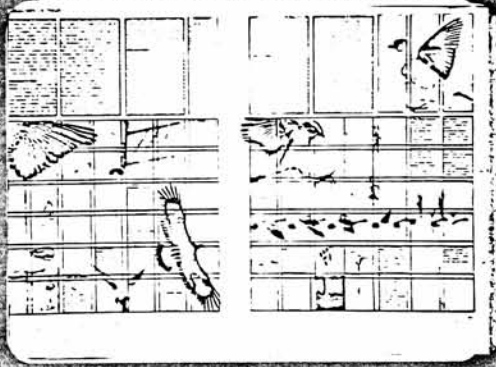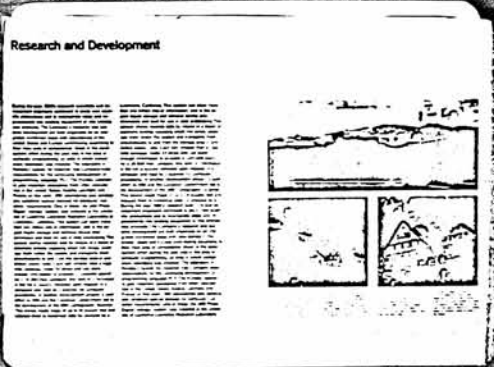
The modules can then be further
divided to accommodate
information. They can also be
consolidated to form larger
segments.

The size and shape of
the information dictates the
division or fusion of these
modules. Allen Hurburt wrote,
"The creative key to the
designer's grid is the carefully
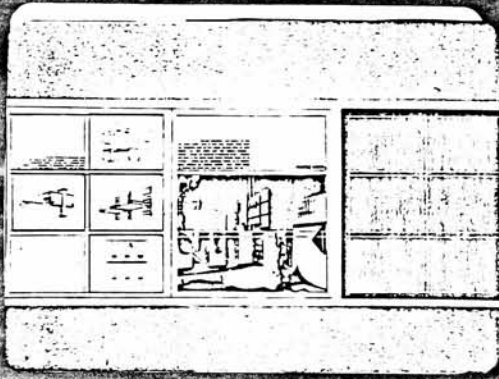
planned relationship between then
vertical and horizontal divisions
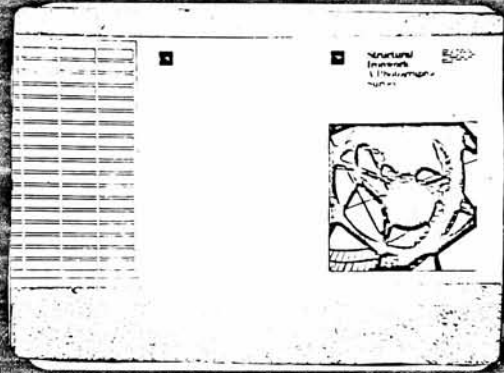
and how these relate to the
overall design."
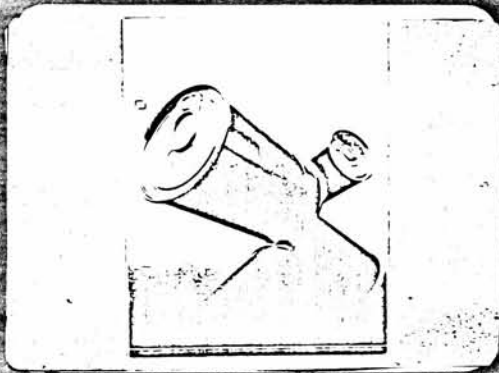
This is a brochure from Container
Corporation of America. It is
describing the durability and
versatility of composite cans.
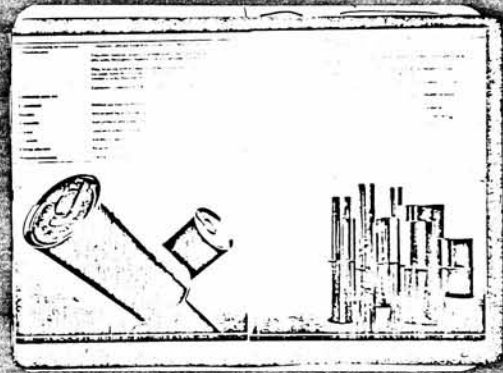
The grid has been used to divide
information in a logical manner.
The photographic and typographic
information was placed into
horizontal divisions.
The length and width of these
divisions were determined by the
unit grid.
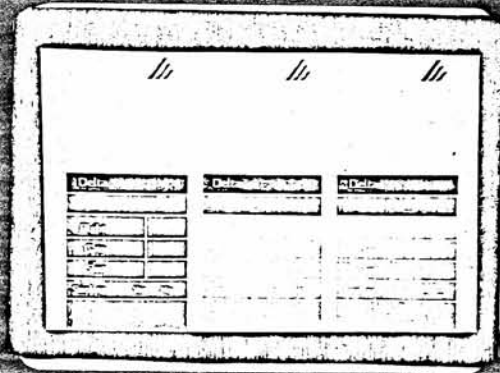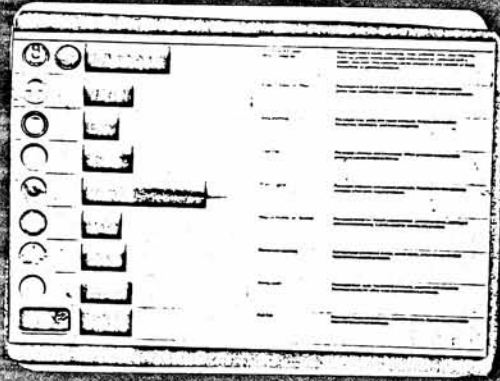
The vertical alignment
of the elements, which has been
directed by the grid, further
separates the information into
related columns. The final
outcome is an organized layout
that allows easy access of
information.

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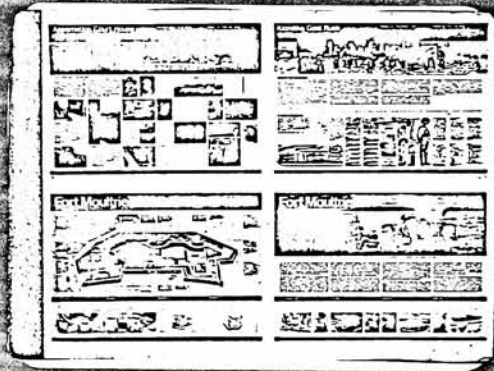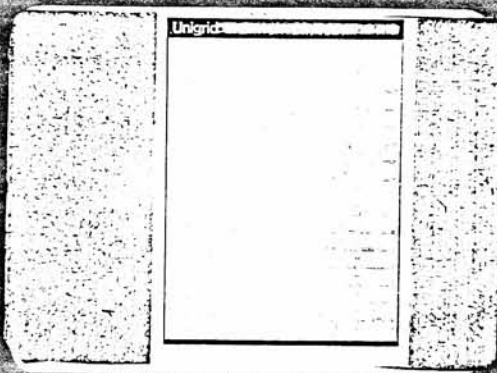
This is a grid
program designed for the National
Park System by Massimo Vignelli.

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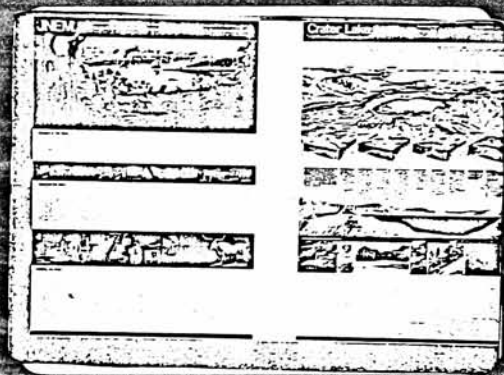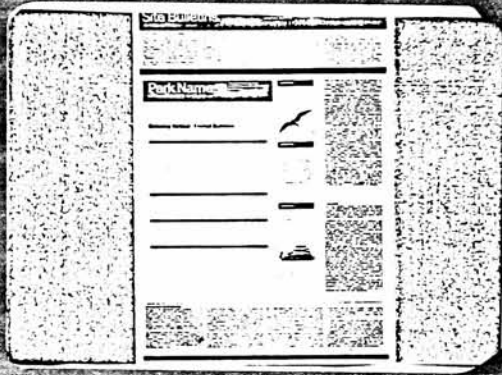
The
grid helped determine standardized
standardized column widths, head-
lines, and illustration sizes.

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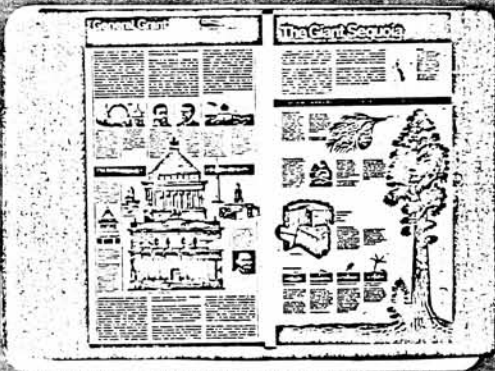
among all the printed material.
This unity portrays the park
system as a national network of

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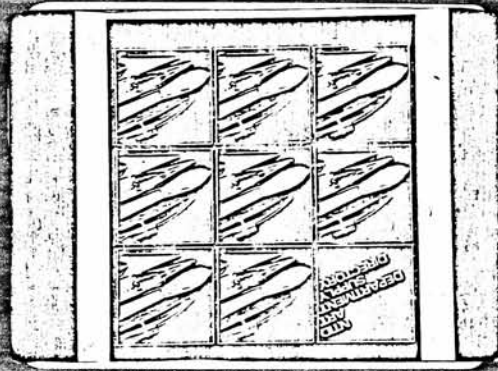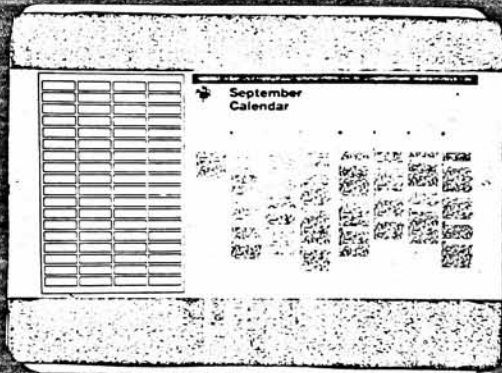
The typographic unit grid adapts
well to complex and varied
information. It creates a visual
scheme of information, and allows
the viewer to easily locate
desired knowledge.

All of these visual systems help a
graphic designer to organize
information.
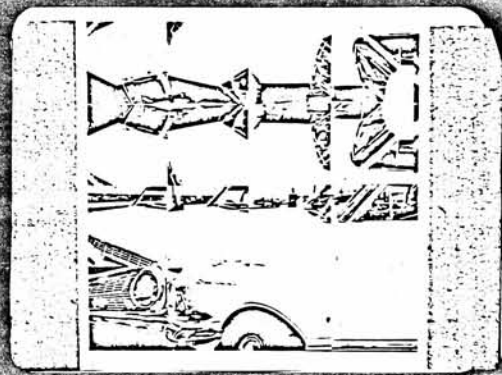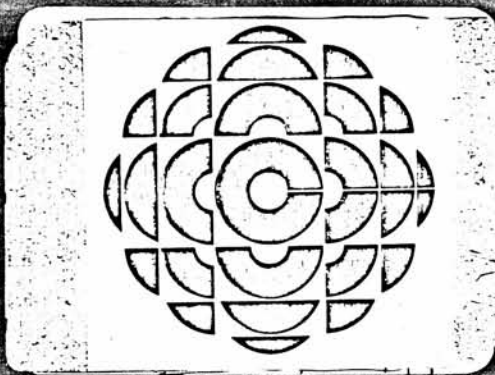
Visual texture
works well with imagery that
requires a single multipled unit.

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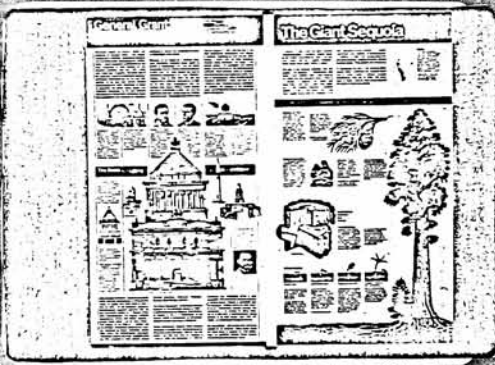
A
typographic unit grid adapts well
to complex and varied
information.
A systematic approach to design
combined with aesthetic
considerations will make a
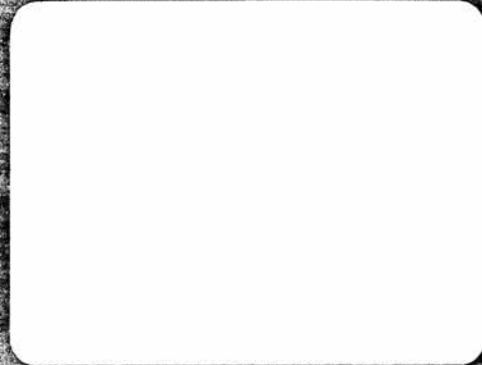
stronger and more concise
presentation of information.

Appendix F

Selected Visuals from the Video Tape

VISUAL TEXTURE
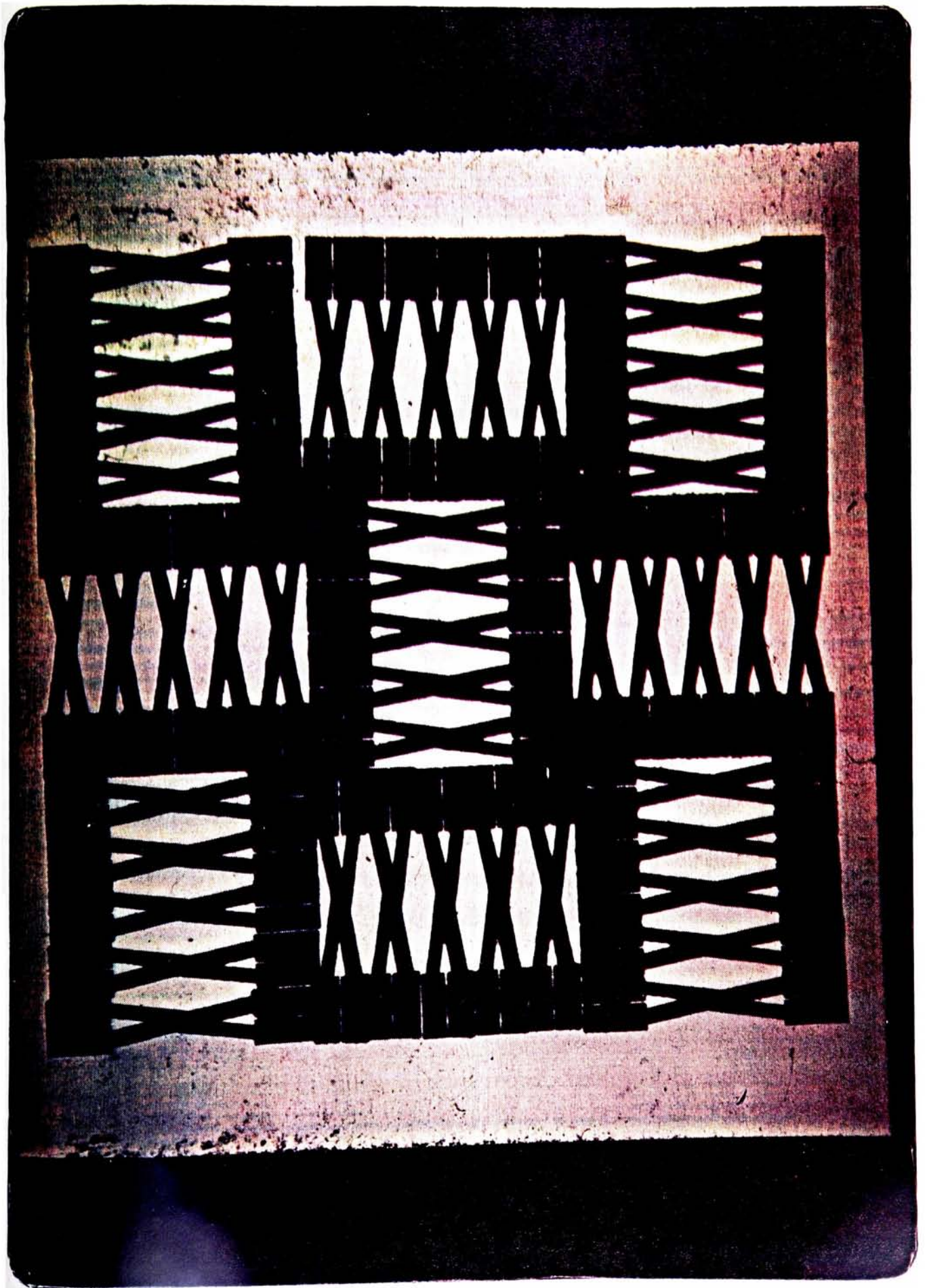
PATTERN
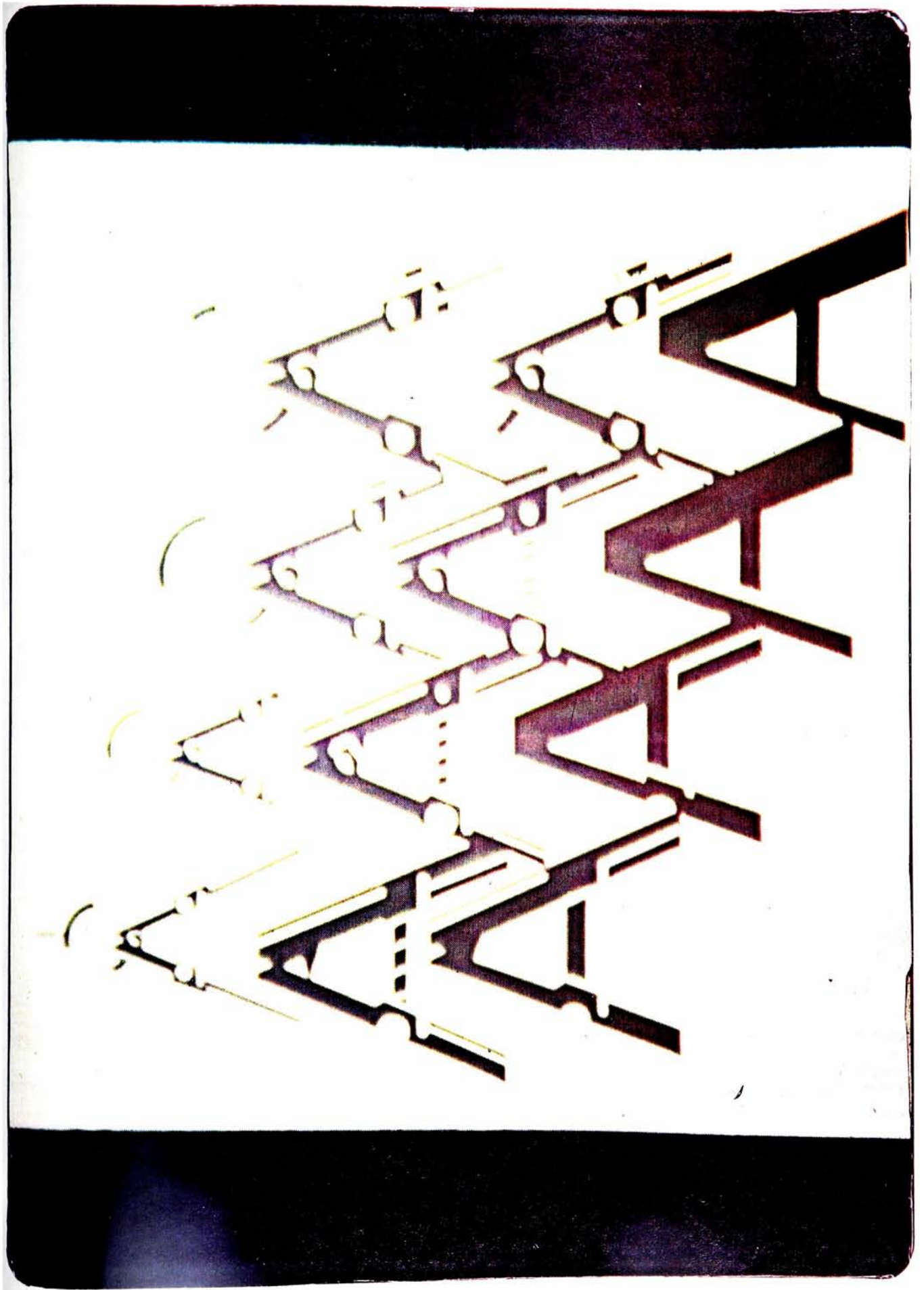
CONSTRUCTIONAL
GRID

COMPOSITIONAL
GRID

TYPOGRAPHIC UNIT GRID

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