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What every designer should know about visual semiotics: A Videotape presentation

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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

WHAT EVERY DESIGNER SHOULD KNOW
ABOUT VISUAL SEMIOTICS
A Videotape Presentation

by

Anne Elizabeth Battle

June 6, 1983

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The members of my thesis committee, Professor R. Roger Remington, Visiting Professor Heinz Klinkon, and Professor James Ver Hague deserve special thanks for their individual roles in the development of the teaching tool, "What Every Designer Should Know About Visual Semiotics."

There are many people that deserve acknowledgment that can not be named. Please understand that I have truly appreciated your help and know that without you, this thesis would have never become a reality.

Anne Elizabeth Battle

CONTENTS

ACKNOWLEDGMENTS	iii
Chapter	
I. INTRODUCTION	1
Problem Acceptance	3
Problem Analysis	5
Problem Definition	8
II. IMPLEMENTATION	12
Implementation Process	14
Narration Script	16
Visual Presentation Storyboard	26
Refinements	33
III. CONCLUSION	34
Appendix	
A Thesis Work Plan Proposal	36
B Journal and Report Excerpts	38
C Symbol Sign Book Excerpts	47
D Visual Syntax List	55
E Fine Arts Syntax List	59
F Instructional Text Grid	61
G Instructional Text Design Samples	63
H Suggested Reading List	68
FOOTNOTES	69
BIBLIOGRAPHY	70

CHAPTER I

INTRODUCTION

If there were one thing on which all with an interest in semiotics would agree--and there probably is not--it would be that a history of semiotic has yet to be written. This is hardly surprising, in view of the fact that we must first understand with some clarity what semiotic is, before we can hope to write its history; and what semiotic is concretely has only begun to be realized on a social scale in the most recent times.

John Deely
Introducing Semiotic, Indiana
University Press, 1982

On September 30, 1982, I proposed to develop an instructional tool that would deal with Visual Semiotics. This program was to be targeted towards students of Graphic Design.

The Visual Semiotics system of problem-solving is a relatively new way for designers to analyze and solve visual problems. The basic concept is logic which cannot be traced to origin, although Aristotle is credited with its origination in John Deely's book, Introducing Semiotic. Deely establishes that the first published edition on logic was Andronicus of Rhodes dated between 43 and 20 B.C. and deals with "forms common to any processes of reasoning." Many people followed this train of thought through time and have further developed it.

The basic concept of a triad semiotic structure, which is the basis of this thesis, was devised by Charles Morris, a contemporary theoritician. His principle works are: Signs, Language and Behavior (1946)

and Writings on the General Theory of Signs (1971). His use of the three components of Semantic, Pragmatic, and Syntactic is designed as a dissection method for analyzing literature.

I was introduced to the system of Visual Semiotics through my studies with Professor R. Roger Remington. As a direct result of this introduction, I attempted to use the Visual Semiotics system of analyzing complex information in solving visual problems in coursework and freelance Graphic Design work. I became convinced that this problem-solving technique was of tremendous value in solving visual communication problems.

I did not yet understand the immense scope of the field of Semiotics. I was able to use the system, but had difficulty with the terminology. I was unable to discern the difference between the disciplines of Semiotics and Visual Semiotics. I had many questions and found that there were no sources for simple answers to those questions.

I selected Visual Semiotics as the subject of my thesis research because I wanted a topic that was controversial, exciting, challenging and, if I accomplished my goal, one which would be of value to the field of graphic design education.

Problem Acceptance

Designing means creating order . . . reducing disorder and arranging elements into a whole that makes sense.

Max Bill

During the 1982 Rochester Institute of Technology Summer Session in Graphic Design, I was awarded a Graduate Teaching Assistantship. A part of my responsibility was to aid Professor Remington and his students in the execution of the course requirements. The coursework consisted of solving typographic problems using Visual Semiotics and visual Gestalt principles. Professor Remington emphasized the benefits of Visual Semiotics and how to use the system. It was extremely difficult for the students to understand the system. They were confused, primarily, by the introduction of new terminology and definitions.

The task of helping those students to understand the concepts became a personal challenge. I sought teaching materials on the subject of Visual Semiotics. I found that instructional tools dealing with Visual Semiotics did not exist.

The field of Visual Semiotics has only recently been introduced to designers. Hanno Ehses, a German designer, now on the faculty of the Nova Scotia College of Art and Design was the first designer to be able to make definite connections between Semiotics and Graphic Design. This was in the early 1970's. Ehses article, "Semiotics: Some aspects of the design process", Icographic, 1978, is one of the most important

literary pieces to bond these two disciplines in such a positive manner that it could not be ignored by design professionals.

To date, very few institutions of design education are prepared to teach Visual Semiotics although it is used and supported by the leading professional graphic designers of our time. Some of these supporters are Massimo Vignelli, Rudi deHarak, Ivan Chermayeff, Thomas Geismar and Sheila Levrant de Bretteville. Another important supporter is the American Institute of Graphic Arts (AIGA) which is the most influential organization for design in the United States.

Rochester Institute of Technology's Graphic Design department is planning to emphasize the use of Visual Semiotics, as part of the required curriculum next school year. This program stresses Visual Semiotics use as a problem-solving tool. I wanted to design an instructional implement that would aid the RIT Graphic Design faculty in introducing Visual Semiotics to college level students. One that would be interesting, provide simple explanations, aid students in using Visual Semiotics and familiarize them with some of the contemporary designers that utilize Visual Semiotics in their design applications.

Problem Analysis

Only when the designer is willing to accept that the process which begins with design can be analyzed by exposing the nature of its structure, only then can he begin to exert a certain amount of control upon the effect of his product and to use it as a precise medium for the presentation of visual information.

Hanno Ehses
Article, "Design and Semiotics:
Some aspects concerning the
design process", Icographic,
November, 1978.

My research began, officially, on November 30, 1982. I acquired reading lists, names of pertinent magazines, periodicals and people from the members of my thesis committee. Professor Remington opened his personal files on Semiotics to me. This act gave me an immediate source for my research. I did not recognize the value of this action until later in my research.

I interviewed my thesis advisers about their experiences teaching Visual Semiotics. I questioned students who had attended the RIT 1982 Summer Graphic Design Session about their problems and asked for suggestions to approach my goal.

I spent days in the Rochester area libraries searching for the books on my reading lists, often to no avail. The lists had been compiled for the "Semiotics of Art" conference (May 3-6, 1978) by Peggy Ann Kusnerz, The University of Michigan, University Library. Other lists were obtained from students and professors. Many of the books that were suggested were either not available in the English language or no longer in print.

My major sources of information became periodicals and interviews with people who are knowledgeable or in search of knowledge about Semiotics. Dictionaries, encyclopedic volumes, Eric documents, and Reader's Guides were of little value, since they referred primarily to the use of Semiotics in the field of Linguistics.

During the course of my studies, I interviewed many people. A few of those are Hanno Ehses, Aaron Marcus, Dr. Richard Zakia, Dr. Robert Morgan, Luvon Sheppard, Peter McSherrie, Francis Welles, Susan Poulakis, Caroline Hightower, Massimo Vignelli, Maryann Begland, Heinz Klinkon, and Professor Dr. Mihai Nadin. Some of these people, kindly, consented to be special thesis advisers for my thesis work. Although the interviews gave me little more information than I had found in my reading, the major value was in having access to outside sources of intellectual stimulation that was related to Visual Semiotics, solely. The conversations were always exciting and full of conceptual debates.

Specific premises became apparent. Semioticians and theorists can not agree on what Semiotics is. They are caught in a web of high level rhetoric that is difficult for the layman to pierce. It is difficult for the designer and the student/designer to obtain information that is related directly to the inter-relationship between Visual Semiotics and Graphic Design. To date, there is no way for students to have access to clear definitions, explanations and examples of Visual Semiotics. There is no instructional tool that can show students Visual Semiotics in action and its benefits.

I kept a journal, on my research findings, relevant quotations, interview notes, thoughts and conclusions throughout my thesis work. I have used that information in the writing of this thesis. The epitaphs, at the beginning of each segment are from those notes. At the end of the first ten week thesis period, I prepared a report on my studies and conclusions. I have included excerpts from both the report and my journal in the Appendix that were instrumental in the development of the premise for the videotape presentation, "What Every Designer Should Know About Visual Semiotics." They are a collection of my writings that will add personal dimension to my studies for the interested reader.

Problem Definition

Never assume that anyone, with a degree from Harvard, Yale, or anyplace else, has a more valid opinion than yours or is more intelligent than you.

Lou Dorfsman
(from a private lecture held in School
of Photographic Arts and Sciences)

Since no two semioticians can agree on what Semiotics is and the field is virtually open in relation to Visual Semiotics, I was free to develop my personal theories on how to introduce and teach Visual Semiotics. My development of a step-by-step procedure to using the system and simplistic definitions were needed and I had confidence that I could do a competent job organizing the information into a format that would be digestible for sophomore level college students.

I have nine years of classroom teaching experience that spans grade levels kindergarten to twelfth grade in visual arts. I have experienced and observed the confusion of students when confronted with the accepted formulas for teaching Visual Semiotics. I have worked with college level students and helped them struggle through the deciphering process needed to understand the definitions associated with Visual Semiotics. I am and was committed to helping students to understand the complex concept of Visual Semiotics.

I knew that through the use of Visual Semiotics that I could analyze the teaching problems, ask the appropriate questions, re-establish parameters according to those answers, and solve the problem to design an instructional videotape that would introduce Visual Semiotics

to students, in a manner that would not be condescending yet simplistic enough for students to feel comfortable using the system.

As the result of my thesis research, I was able to define Visual Semiotics on a basic level for students:

Visual Semiotics is a formal structuring of the natural dialogue that occurs between the designer and a design. It enables the designer to simplify complex problems by providing a simple method to organize the dissection of the information used to create the final work. The three components of this dissection method are Semantics, Pragmatics, and Syntactics.

Each of these three components has a specific use in the creation of a design piece that needs to convey a message to a specific audience. Someone using Visual Semiotics address each of the components to eliminate extraneous elements from the design process, elements which send unintended messages to the viewer.

Simple component definitions:

Semantics - Relating to the meaning or significance of a problem.

Pragmatics - Relating to practical or useful aspects of applying a problem to a user or viewer.

Syntactics - Relating the visual or aesthetic possibilities from which the designer makes selections.

The following Marketing Communication Plan explains the goals, objectives and reasons for selecting 3/4 inch videotape as the medium for the instructional tool.

Marketing Communication Plan

Client

Rochester Institute of Technology
College of Fine and Applied Arts
Graphic Design Department
1 Lomb Memorial Drive
Rochester, New York 14623

Situation

Client needs an instructional tool that deals with Visual Semiotics.

Goal

To create a system, using Visual Semiotics, that will assist students of Graphic Design in understanding the possibilities of this framework in organizing information when solving visual problems.

Objectives

Students will be:

- provided with simple explanations, definitions, and substantiated reasons for using Visual Semiotics.
- familiarized with contemporary designers and their design work that utilize Visual Semiotics.
- introduced to a simple, step-by-step procedure that will enable them to use the Visual Semiotics system.

Audience Profile

The audience consists of sophomore level, Graphic Design students at Rochester Institute of Technology. The group is composed of males and females. A majority of the group is comprised of female, Caucasian students. The group, on a whole, is from middle to upper-middle class socio-economic backgrounds. They are of average to above average intelligence and have successfully completed the freshman level founda-

tion curriculum. By the entrance to the sophomore level, they are expected to have developed sensitivities in working on 2-D and 3-D formats. During the sophomore year, the curriculum consists of freshman curriculum review, introduction of typography as a visual element, translation development, and the application of these visual syntactic elements.

Environmental Factors

The following environmental factors contributed to the selection of a videotape as the form of the instructional tool:

- The Rochester Institute of Technology Graphic Design department has an established videotape library that is accessible to students, staff, and faculty.
- The Rochester Institute of Technology Library's Media Resource Center has video equipment available for the private viewing of videotapes.
- The videotape cassette is a compact format that ensures that the presentation will remain in the form that I have designed and be safe from format vandalism.
- The videotape can be duplicated easily and at low cost.
- The videotape presentation can be copyrighted to protect the author's rights.

On February 15, 1983, my thesis committee received an explanation of my goals and objectives. This marketing plan is the result of that meeting.

CHAPTER II

IMPLEMENTATION

The purpose (of graphic design) is to solve problems . . .
the problems of the client.

Ivan Chermayeff

After defining the parameters of the project, I established how I would solve the thesis problem. I had studied the target audience's professional objectives and their biases. Also, I understood the career-oriented goals of the Graphic Design department of RIT. It was necessary to formulate a script outline that would meet the requirements of each of the groups.

I was able to isolate the questions that students asked most about Visual Semiotics. I used those questions as the foundation for conveying the information detailed in the Marketing Communication Plan. By using a question and answer technique, similar to the question and answer process of Visual Semiotics, I provided the students with simple explanations, definitions, and substantiated reasons for using Visual Semiotics.

In order to familiarize students with contemporary designers, I selected designers on whom the students would be able to find further information in the Rochester Institute of Technology Library. The videotape was designed as an introduction to Visual Semiotics. Further information, had to be readily available for the interested student.

The videotape script had to be written in such a manner that it would address the target audience's questions in an entertaining, fast paced, informative format.

Implementation Process

Design is not an art, but a creative pursuit.
Greg Berryman

The writing of the script was the major task of the period of the implementation process. There were ten separate revisions of the script written before a final version was created.

Each of the revisions was reviewed by my faculty thesis committee members. The last three versions were site tested for readability and comprehension by randomly chosen students, faculty, and staff from the departments of Graphic Design, Deaf Education, Interior Design, Industrial Design, Freshman Foundation and Packaging Design. Visual Semiotics is most beneficial in the applied arts, so the Schools for the American Craftsmen and Fine Arts were not included in the samplings.

The cross-section of readers was asked to target points of difficulty that they encountered in reading the script. It must be noted that due to time, it was not possible to test a videotape version that included narration, visuals, music, and the information in an actual classroom situation. The test reader process proved satisfactory for my needs, though. A successful revision was compiled that met the approval of the thesis committee, the test readers, and the creator.

Throughout my research, I had been keeping notes of images that I found to have Visual Semiotic value. These artworks could be analyzed using Visual Semiotics or could illustrate some aspect related to Visual Semiotics. I decided, semiotically, what images, instructional

text, and photographs would be needed. Some of the photographic and typesetting work I did myself. I designed and created the mechanical preparations, selected soundtrack music and directed all subcontractor work. Copy work and some of the typesetting was given to private vendors and the staff of Instructional Media Services (IMS).

The audio portion of the presentation was recorded by David Stone, IMS audio engineer. He provided narration voice samples for my review and selection of the appropriate narrators. Specific qualities were needed in the voices to address and retain the attention of the target audience. Jergen Wilson, professional disk jockey, and Marcia Slutzky, professional narrator and actress, were selected.

Once the audio track was recorded, the visuals could be selected, segments timed, and visuals could be placed in the appropriate slots. A storyboard was created to establish sequencing and imagery transition requirements. The environmental factor semiotic considerations established that the videotape should not exceed one-half hour. I was working for a time slightly shorter than that. The final version has a viewing time of 17 minutes, 37 seconds.

The Appendix entries (F) and (G) contain samples of the graphic design applications, in this presentation.

Narration Script

Audio engineer	David Stone
Job number	6697
Male voice	Jergen Wilson
Female voice	Marcia Slutzky
Time	17 minutes, 36 seconds

Codes

Male voice	Upper and lower case
Female voice	Capital letters

What Every Designer Should Know About Visual Semiotics

Questions and Answers

WHAT IS VISUAL SEMIOTICS?

It is a way to simplify complex problems by dissecting information into three components of Semantics, Pragmatics, and Syntactics. This is done through a self-questioning process used to eliminate extraneous components from the design process that have a tendency to send messages to the viewer that are not intended. The Visual Semiotics system is not the only way to analyze information, but it has had universal success for solving problems. This process has been used by designers, anthropologists, art historians, and linguists. All are occupations where large amounts of information must be analyzed and assimilated.

WHERE DID IT COME FROM?

The form of Semiotics that is relevant to designers is based on the writings of Charles Morris, a modern theoritician. His triadic or three part system was designed to be used as a dissection method for analyzing literature. It became widely known through its usage by: Claude Levy-Strauss in Anthropology, Umberto Eco in Linguistics, E.H. Gombrich in Art History. Hanno Ehses, a German designer, while on the faculty of the Nova Scotia College of Art and Design published the article "Design and Semiotics: Some aspects concerning the design process" in Icographic, 1978. In this article, Ehses states: "Only when the designer is willing to accept that the process which begins with design can be analyzed by exposing the nature of its structure, only then can he begin to exert a certain amount of control upon the effect of his product and to use it as a precise medium for the presentation of visual information."¹ Many designers thought that the concepts were too theoretical and wordy, at first. After explanation, they realized that they had been using aspects of Visual Semiotics in their own work without knowing that the process had a name. You have seen their contemporary designs at work! Thomas Geismar, Ivan Chermayeff, Massimo Vignelli, Walter Diethelm, Karl Gerstner, Adrian Frutiger. Semiotics has two primary uses: Analyzing works that have already been created, and creating new works. The designer and those in the applied arts use this system to aid in the creation of art works that communicate a message to an audience.

WHY DO I NEED TO KNOW ABOUT VISUAL SEMIOTICS?

Our civilization is continuously being bombarded by the media explosion. Tremendous amounts of detailed information must be deciphered, analyzed, and distributed. The designer is constantly faced with seemingly unmanageable amounts of data that must be communicated to a specific audience of the public. Visual Semiotics is a pertinent problem-solving system that can help the designer analyze, dissect and create solutions to complex design problems. As society demands the processing of even more information, the designer using Visual Semiotics will have a tool that will help to keep the problems manageable.

WHAT IS THE VISUAL SEMIOTICS SYSTEM?

This is the triad of Visual Semiotics. It is made up of the components of Semantics, Pragmatics, and the Syntactic component.

WHAT DO THESE WORDS MEAN?

The word Semantic relates to the meaning or significance of a problem. A sample Semantic or meaning question could be: Does this visual contain elements that communicate the meaning? The word Pragmatic relates to the practical or useful aspects of applying a problem to a user or a viewer. A sample Pragmatic question could be: How do poor lighting conditions, oblique viewing angles and other visual 'noise' affect this image? Syntactic relates to the visual or aesthetic possibilities that the designer selects from. A sample syntactic question could be: How well do the parts of this solution relate to each other?

WHAT ARE THOSE NAMES AGAIN?

Semantic, Pragmatic, and Syntactic.

HOW CAN I REMEMBER THOSE NAMES?

Instead of Semantic try using Meaning or Significance. Try Practical use instead of Pragmatic. Visual Aesthetic instead of Syntactic. Most people find it difficult to remember words that are not used frequently in daily conversations. If you use the real word for each category, you will be surprised how quickly you'll become familiar with them. A problem can be considered solved, if the meaning is apparent. It can be considered aesthetic or visually pleasing, but it is of no use to you or the client if it can not be applied to practical usage. An intermingling of the three concepts makes art that communicates. It will have meaning, visual integrity, and will be practical for use by the client or viewer. The work should meet all three of the criteria to be effective in communicating the desired message.

HOW DO I USE THIS PROCESS?

Accept the responsibility to solve the problem. Get to know the problem. Research the subject.

GET TO KNOW THE PROBLEM? WHAT DOES THIS HAVE TO DO WITH VISUAL SEMIOTICS?

This is the point when the Semantics of the problem are explored. All data collected at this stage will be used throughout your work to find an effective solution. Research the problem's meaning to the intended audience, the client, and to you.

WHAT DO I LOOK FOR, IN MY RESEARCH?

Each subject is unique, but you might try these suggestions: Research the history of the subject matter. Find out what the client's objectives are and the reasons for those objectives. Study the linguistic assumptions associated with the problem. Research the conscious attitudes towards the subject that the audience might have. This information can be obtained by becoming familiar with: the needs of the client, language used that is unique to the subject, materials, tools, and supplies pertinent to the topic, the processes involved, and special interest magazines that cater to the subject or the audience. Keep detailed notes! Reminder. Write everything down. Notes are time consuming, but will pay off later!

WHAT DO I DO WITH THE INFORMATION?

Examine the information. Categorize information by finding consistencies and inconsistencies. Study the inconsistencies, in depth, so that they can be manipulated to reinforce the problem's meaning, or eliminated because of lack of direct relevance on a large scale. Write a conclusion of the findings and define and establish the parameters of the problem. Now move to the Pragmatic procedure. Sample information from the client could be: I want a printed piece that tells my audience about this product. Sample pragmatic questions could be: What are the budget restrictions? What format should be used to reinforce the Semantic aspects? What will the piece be used for? Who is the target audience? Does this audience have special visual needs? These are just a sampling of the many questions that you can ask your-

self and the client. The Visual Semiotic system uses the questioning technique throughout each step. All questions must be answered honestly and thoroughly. Base subsequent decisions on the Pragmatic information combined with the Semantic research findings. Move to the Syntactic step! Review notes on meaning and practical aspects of the problem. Select ideas from the Visual Syntax List that relate to both the meaning and the practical aspects of your problem.

WHAT IS A VISUAL SYNTAX LIST?

It is a list of pre-composed visual suggestions. Samples from this list would include the concepts of figure/ground relationships, movement, transparency, typeface styles, and colors. Don't lose sight of your original concepts, thoughts and research. The Visual Syntax List is not a restrictive format. Artists have always searched in their personal bag of tricks for ways to solve visual problems. This list has been compiled to contain the results of many individuals' ideas. It will never be complete. You can add to it at any time.

I USED ALL THREE VISUAL SEMIOTIC CONSIDERATIONS FOR MY PERSPECTIVE SOLUTIONS. WHAT DO I DO NOW?

Check, recheck, add, subtract, and evaluate everything you do.

CHECK WHAT?

Check how your decisions in the Syntactic category have altered the previous decisions. Recheck each category. Change the questions asked, each time. Ask every pertinent question you can think of that relates to each category. A sample situation could be:

I LIKE THE VISUAL AESTHETICS OF THIS DESIGN. THE PARTS WORK WELL TOGETHER. HAVE I LOST SIGHT OF THE RELATIONSHIPS BETWEEN THE MEANING, THE VISUAL SYNTAX AND THE PRAGMATICS? I CHOSE RED AND BLUE INK ON WHITE PAPER FOR THIS SOLUTION. THOSE CHOICES REALLY REINFORCE THE MEANING OF THE PIECE. THE DESIGN IS VISUALLY STRONG. THE CLIENT CAN ONLY AFFORD TO PAY FOR A ONE COLOR PRINTING. PERHAPS, CHANGES CAN BE MADE THAT MEET THE SEMANTIC, SYNTACTIC AS WELL AS THE PRAGMATIC CONSTRAINTS. I'LL RECHECK THE VISUAL SYNTAX LIST, AND LOOK FOR OTHER ALTERNATIVES TO THE PROBLEM.

An example solution could be: A one color printing using line intervals to create a feeling that conveys the meaning, visual aesthetics and meets the practical use criteria. This could be printed on a colored stock. This process continues throughout the design of the piece. Remember! Every decision, every line change must be based on one of the three considerations. A good design has harmony between the components. Change one and the piece will not communicate the same message. Take a look at this design sample. Can you select the primary visual considerations in this full page ad? Is the primary consideration Pragmatic? If your answer is no, look again. This page was designed with practical use as the primary consideration. It is necessary to get large amounts of information to the consumer. Certain items must be highly visual to draw the viewer's attention to the fact that they are inexpensive. There must be a format that makes it easy

for the customer to have access to the information and the coupons. Is there a consideration for the Visual Aesthetics? The designer has used varied type sizes, type style, priorities, and color choices from the Visual Syntax suggestions. The selections do not seem to reinforce a meaning or do they? Do you see a consideration for the Semantic meaning conveyed here? Could the designer be communicating that the store is overstocked with almost every item that the consumer would have a need for? A message that is understood on a subconscious level, but is not visually aesthetic is being conveyed. Take a look at this design sample. Can you find connections between the Semantic, Syntactic and Pragmatic considerations, here? Were you surprised to find more than one consideration in such unlikely sources? Is there a connection between the type style selection, word meaning, and the practical aspects? (Strong visual statements are those in which all three considerations are integrated. If one consideration is removed, the work will be weakened.) Are you able to find those weaknesses?












IS THE VISUAL SEMIOTICS SYSTEM REALLY USED BY DESIGNERS?






















In the professional field, Visual Semiotics has been used to solve both simple and extremely complex problems. The American Institute of Graphic Arts, known as the AIGA, was given the problem of selecting appropriate symbol/signs to be utilized for recognition of services on an international level. Over the past several years, numerous international, national, and local organizations have developed sets of symbols to facilitate passenger and pedestrian orientation in transportation-related facilities and the sites of large international events. Some of

these groups have attempted to establish international standards, but have been criticized for the overall graphic quality of the drawings, as well as for some of the concepts. Through the use of Visual Semiotics, the AIGA was able to undertake this vast assignment, analyze it, evaluate it, and solve the problem. Thomas Geismar, partner in the design firm of Chermayeff and Geismar Associates and Chairman of the Committee on Signs and Symbols-AIGA states, ". . . To produce consistent judgments a more objective basis was needed. The three fundamental aspects served as the outline for the committee's evaluation."² Semantics, Pragmatics, and Syntactics. This is an example of the ballots used by individual AIGA Committee members to evaluate all of the symbols collected in the inventory. As a direct result of using Visual Semiotics, the committee made their decisions. They became convinced that it is more harmful to oversign than to undersign. To mix messages weakens the communication. While there may be some messages beyond this basic group that require symbols, only those messages that are truly essential should be considered. These are a few of the many symbol/signs that the committee's work influenced. Remember that the framework of using Visual Semiotics is an ongoing process. It is a questioning, analyzing and evaluating process. Check. Recheck. Add. Subtract. And Evaluate. If one consideration does not mesh and reinforce the other two steps, adjust the elements until they become one intertwined concept. Try it! It works in Graphic Design, in Signage, in Advertising, and in Photography. The Visual Semiotics system has proven to be a valuable tool for the competent Graphic Designer. It is an effective method in designing


visuals that must communicate a message. It can work for you. This process is a tool, like markers, triangles or grids that can help you be a stronger more effective designer. The question "Do you use Visual Semiotics?" will seldom be asked. The evaluation will come in how well any given problem is solved.

1	Visual Semiotics WHAT EVERY DESIGNER SHOULD KNOW QUESTIONS & ANSWERS	2	What Every Designer Should Know about Visual Semiotics QUESTIONS AND ANSWERS	3	What is Visual Semiotics?	4	What is VS.	5	Charles Morris	6	THE FORM OF SEMIOTICS IT BECAME WIDELY KNOWN THROUGH E.H. GOMBRICH IN ART HISTORY.	7
8	MUSIC STARTS Schubert: Symphony #5 in B Flat	9	ICOGRAPHIC	10	IN 'ICOGRAPHIC', 1976, IN THIS ARTICLE STATES	11	"ONLY THEIR AT WORK." THOMAS OELSHAR	12	YOU HAVE SEEN THEIR AT WORK.	13	FO	14
15	HANNO EISES, A GERMAN ART AND DESIGN	16	PUBLISHED THE ARTICLE "DESIGN AND SEMIOTICS" DESIGN PROCESS"	17	MASSIMO VIGNELLI	18	MANHATTEN	19	Signet Signal Symbol	20	WALTER DIERHEIM	21
22	The Book of Families	23	THE BOOK OF FAMILIES	24	THE BOOK OF FAMILIES	25	THE BOOK OF FAMILIES	26	THE BOOK OF FAMILIES	27	THE BOOK OF FAMILIES	28

46	Semantic 	Pragmatic 	Syntactic 				
53	meaning _____ _____ _____		1 Accept 2 _____ 3 _____		Explore Semantic intended and _____		1 history of 2 _____ 3 _____ 4 _____
54	An intermingling _____ _____ desired message.	How do I use this process?	Accept the responsibility _____ Research the subject.	Get to know the problem? What does this have to do with Visual Semiotics?	This is the point when the Semantics— and to you.	What do I look for, in my research?	Each subject is unique _____ might have
55	Familiar w/ _____ _____ _____		Examine _____ _____ _____	Move to Pragmatic _____ _____ _____	Are there? _____ _____ _____	All questions _____ _____	Go to Syntactic _____ _____ _____
56	This information _____ _____ detailed notes off later.	What do I do with the information?	Examine the information. _____ _____ para. of the problem.	Now move to Prag. Semantic aspects?	What will the pieces be used for? _____ each step.	All questions must research findings	Move to the Syntactic st

						
67	68	69	70	71	72	73
What is a Visual Syntax List?	What is a list of pre-composed concepts of	figure-ground relationships	movement	transparency	typeface styles, and colors.	
						
74	75	76	77	78	79	80
Don't lose sight of what do I do now?	Check Rethink everything you do.	Check what?	Check how your decisions could be.	I like the vis- alternatives to problem.	An example solution could be colored stock.	This process continues throughout the design of the piece
						
81	82	83	84	85	86	87
Remember! Every decision	Every line change must be same message	Take a look - Pragmatic? If your answer is no	Look again. is being conveyed	Take a look at this design sample weaknesses?	Is the Visual Semiotics system really used by designers?	In the prepress field complex prob.

88									94			
	The American Institute _____	Over the past several years international	national local organiza- tions	have developed sets international events	Some of these groups Some of the con- cepts	Some of these groups Some of the con- cepts	Visual Semiotics _____	Visual Semiotics _____	93	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	92	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	91	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	90	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	89	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	88	_____	_____	_____
95									102			
	As a direct result _____	To mix messages communication	While there considered	Those are a few of symbol/signs	That the com- mittee influenced	Remember _____	Visual Semiotics _____	Visual Semiotics _____	101	_____	_____	_____
	undersign	_____	_____	_____	_____	_____	_____	_____	100	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	99	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	98	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	97	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	96	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	95	_____	_____	_____
103									110			
	_____	_____	_____	_____	_____	_____	_____	_____	109	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	108	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	107	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	106	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	105	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	104	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____	103	_____	_____	_____

1	Special advisor _____ _____ _____	2	Goal _____ _____ _____	3	Special thanks _____ _____ _____	4	This tape _____ _____ _____ _____	5		6		7	
8		9		10		11		12		13		14	
15		16		17		18		19		20		21	

Refinements

Designing is not a profession, but an attitude.
Laslo Moholy-Nagy

A work copy was made of the final videotape presentation. There were difficulties that could not be seen in the two-Caramate version of the presentation, that I had been using. The timeframe was of immediate importance. I selected to make every possible change, in the time that was left.

Within a twenty-four hour period, I was able to make the major changes. Slides with typographic and density problems were remade. A Micro-Dot Dissolve Unit replaced an older, less accurate, Kodak version to achieve a variety of dissolve changes. Audio pulses were added to the narration tape, to assure synchronization of the images and the audio tape. Some of the visual images were removed to allow the audience time to study the remaining images.

Ideally, I would have opted for a retape of some of the audio narration, but was unable to do so. Time and financial considerations must be respected. Every change was made, that was possible. Each of the components of the Visual Semiotics system was observed. No decision was taken lightly or without using the questioning, analyzing, and evaluation process found in the Visual Semiotics system. The never-ending circle of Check, Recheck, Add, Subtract, and Evaluate was in constant use throughout the creation and production of the presentation.

CHAPTER III

CONCLUSION

. . Courses in Semiotics should be taught in the schools. We need to stress the value of meaning over form. We need to be able to communicate with our culture. We need to bridge the gap between what we do and what we can do.

Massimo Vignelli

(from Keynote speech, at the
First Symposium on the History
of Graphic Design, RIT.)

Problem-solving skills are the most beneficial aspect of the graphic designer's education. If a designer can master them, it is highly likely that the designer will be able to obtain an excellent professional position and function as a competent graphic designer. The Visual Semiotics system is a fine tuning of all of the established problem-solving techniques. It enables the designer to incorporate meaning into the form of the design. It prepares the designer to solve the complicated problems that arise in the multi-lingual, cross cultural, accelerated-timeframe situations that exist in modern society.

It is beneficial for the designer to think in a systematic, constantly questioning manner. The computer revolution is proving the necessity for rational, systematic, logical thinking processes. Time sharing computer systems are an economic exigency for many businesses and institutions. Systematic thinking processes can expedite the amount of work accomplished in a given timeframe. The field of Graphic Design

is being reshaped by the computer industry through computerized typesetting, electronic printing, and the diversity of paint systems. In addition to utilizing modern technology to create design solutions that are practical and cost effective, it is important for designers to be capable of giving personal integrity, meaning and visual aesthetics to their work. Visual Semiotics provides them with a needed critical evaluation format.

Design practitioners must use every tool available to push the field of Graphic Design to its highest level or we will become obsolete. The system of Visual Semiotics, if utilized, can provide a means to maximum communication for the graphic designer who wishes to adopt effective, systematic habits that will aid in solving the complex problems of today and the future.

This education must begin now. Courses in Visual Semiotics, in Graphic Design schools, should be mandatory in order to prepare student/designers to solve visual problems adequately. I would like my visual presentation to be used to introduce Visual Semiotics to those students. The Rochester Institute of Technology, Graphic Design department will begin to use it, June, 1983. I have already received requests for purchases of the videotape from graphic design educators representing Rhode Island School of Design and the Rochester City School District.

My thesis research, in the field of Visual Semiotics, has indeed proven to be controversial, exciting and challenging. It is too early to tell, but I hope that it will also prove to be of value to the field of graphic design education and the many students that it can aid in competent problem-solving.

APPENDIX A

Thesis Work Plan Proposal

The work plan is an accepted practice in the professional field of Graphic Design. It gives the designer and the client an understanding as to what is expected to be produced in the timeframe allowed for a project.

Each member of my thesis committee was provided with a copy of this work plan at our first meeting, on December 1, 1982. It was important for me to adhere to a set schedule, in order to have the visual presentation ready for the Graduate Thesis Exhibit, Bevier Gallery, April 22, 1983. The work plan made it possible to establish meetings with my advisers in advance and to know exactly what was expected to be reviewed, at those meetings.

Anne Elizabeth Battle
 Master of Fine Arts Degree Candidate
 Rochester Institute of Technology
 Graphic Design Department

THESIS PROPOSAL PROBLEM

Develop an instructional tool, that will deal with Visual Semiotics. This program will be targeted towards students of Graphic Design.

THESIS PROPOSAL WORK PLAN

PROBLEM ACCEPTANCE	September 30 - November 30
-Problem proposed by candidate	September 30
-Departmental approval	October 5
-Dean of Graduate Affairs approval	October 10
-Official starting date	November 30
PROBLEM ANALYSIS	November 30 - January 10
-Examine and get to know problem	
-Start keeping journal and notes on readings	
PROBLEM DEFINITION	January 10 - January 17
-Define and establish parameters of the problem	
-Set Goals and Objectives	
IDEATION	January 17 - February 14
-Generate ideas and possible answers to problem	
SELECTION OF BEST IDEAS	February 14
-Selection of best direction to pursue	
-Direction that will be followed for implementation	
IMPLEMENTATION	February 14 - March 10
-Execute and try out selected direction	
COMMITTEE PRELIMINARY EVALUATION	March 10
REVISIONS SHOWN TO COMMITTEE	March 24
REFINEMENTS MADE FOR THESIS PRESENTATION	March 24 - April 15
FINAL COMMITTEE DECISION	May 16

APPENDIX B

Journal and Report Excerpts

Beth April Smolev, a 1982 RIT graduate, suggested that I record my daily progress. It was an excellent suggestion. The journal gave me a personal record of my thesis activities. It was also the source for all of the information in this thesis. I was able to retrace my research findings, thoughts, conversations and conclusions from the journal record.

I have included in this Appendix some of the entries that were instrumental in the development of the videotape, "What Every Designer Should Know About Visual Semiotics."

Journal excerpt

Dialogue

The designer is in constant dialogue with each piece that he or she creates. Questions are asked such as, "Should this text type be placed here, or here?", "Will this typeface be the best one for this solution?" or "Would this image look better, if it were larger?" The system of Visual Semiotics establishes a structured form for dialectic expression when used in the design process. This process can aid the designer in organizing appropriate concepts, valid directions of pursuit, as well as, minimizing the amount of time that is wasted during the problem-solving process of any given piece. An effectively designed piece will also establish another hierarchy of dialogue. One that is between the artwork and the viewer. One where messages are discerned by the viewer on conscious and subconscious levels.

It is important that the creator's dialogue have a formal structure and be organized so that the artist can retrace the process that has influenced and guided the creation of the work. Original thoughts, concepts, research and vision can be combined to become one integral part of the artwork, rather than isolated segments that convey conflicting messages to the viewer.

An intermingling of the three Visual Semiotics concepts makes art that communicates its message to the viewer on a superficial plane as well as on a level that lies under the world of appearances. The work will have semantic significance, visual integrity and be practical for the application by the viewer. If the work is pushed to meet the rigorous

criteria, outlined by the Visual Semiotics system, it will be effective in communicating the desired message to the proposed audience. Through the use of dialogue, a work is initiated that evokes a dialogue with the viewer. This dialogue is initiated by the questioning, analyzing and evaluating process and is reinforced through Semantic, Pragmatic, and Syntactic considerations.

Journal excerpt

Symbol Selection by the Committee on Symbol/Signs AIGA

In the professional Graphic Design field, there is often a need to solve extremely complex communication problems. The American Institute of Graphic Arts, known as AIGA, was given the problem of selecting and redesigning appropriate symbol/signs to be used for recognition of services on an international level.

Over the past decade, many international, national, and local organizations have developed sets of symbols for use in facilitating passenger and pedestrian orientation in transportation-related facilities and the sites of large international events. Examples would be the extensive signage systems developed by various airports, rail stations, and at each of the Olympic Games sites.

Some of the groups that designed the signage attempted to establish international standards, but have been criticized for the overall graphic quality of the drawings, as well as for some of the concepts. Symbols that were designed for a particular culture were misread by many of the viewers with a different cultural orientation. This could be extremely dangerous, if an exit sign could not be understood, during a fire. Red is a common color for exit signs in this country, but other colors are used in other countries.

Through the use of the Visual Semiotics system, the AIGA was able to analyze the problem, ask the appropriate questions, re-establish parameters according to those answers, and solve the problem. The AIGA Committee on Symbol/Signs found through its investigation that it

was necessary to use a system that could produce consistent judgement and enable them to be more objective. Comments such as, "It works for me." were out of place when dealing with signage that could affect the lives of millions of people. The Visual Semiotics system was selected to aid their decisions.

Semantic questions were asked such as, "Does this symbol contain elements that communicate the meaning?" Pragmatic questions were asked such as, "How do poor lighting conditions, oblique viewing angles and other visual 'noise' affect this symbol?" As a direct result of using the Semiotic structure, the committee was able to make their final decisions. They realized that it is often more harmful to oversign than to undersign because the significant signs became lost in too much visual 'noise'. It became apparent that communications were weakened when concessions and relatively insignificant signs were mixed in with the signage system. A hierarchy of images had to be established. They realized that there were some messages that were not in the category of the truly essential, but required signage, also.

The final decisions by the committee are a set of symbols that meet the cross-cultural standards that are necessary in a civilization that is not longer limited by national boundaries. These symbols are used in almost every major port of entry in the world. They have been studied and evaluated as the most successful symbols designed to aid in service orientation. They eliminate the confusion that people face when thrust into an unknown environment and need to find a destination without the use of verbal language. The AIGA Symbol/Sign project is a major feat in contemporary symbol making and deserves the highest recognition

and esteem possible, in the field of Graphic Design (also see Appendix C).

Journal excerpt

Is Creativity Hindered by Visual Semiotics?

During my interviews, I have had a great deal of difficulty answering this question. As a former art teacher, it is important for me to be able to defend my belief in using the Visual Semiotics system.

Creativity was described by one of Ronald Padgham's sources as "how to think, not what to do." I especially enjoyed this definition in his lecture since it could be used in relation with Visual Semiotics. Several of the Fine Arts department faculty have difficulty accepting the premise of this framework being utilized in the creative process because it is a systematic way of thinking. The argument that art is emotive and cannot be confined to systematic thinking is recurring.

Visual Semiotics is a way to simplify complex problems by dissecting information into the three components of Semantics, Pragmatics, and Syntactics. This is done through a self-questioning system used to eliminate extraneous components from the design process. It aids the artist in systematic thinking and being able to express oneself in a manner that effectively communicates the message to the viewer.

The fine and applied artist have many similar needs. Each discipline strives to send messages to an audience through a chosen art medium. Whether that message is purely aesthetic or pragmatic is not an issue. The Semiotic structure does not bind the artist's brain because it is a system and has a name. It does not keep the artist from being creative. It is a way to think, not a systematic way to do each artistic activity.

The Syntactic category, which is the most heavily criticized component, is a list of pre-composed visual suggestions. Samples from this list would include the concepts of Figure-Field Relationships, Depth Relationships, Structural Relationships, Movement Relationships and the elements of visual syntax that relate to a particular discipline such as typography, photographic usage options, time, or color. A Visual Syntax List is not a restrictive format. Artists have always searched in their personal bag of tricks for ways to solve visual problems. My own list has been compiled to contain the results of many individual's ideas and my own. It will never be complete and I can add to it, at any time.

Artists constantly try new approaches in their working styles or the work become stagnant. Questions arise such as, "Should I cut, shave, or tear it?" What about the options that do not come to mind, easily? A list of visual options that can be used to reinforce the significance or message of a piece does not hinder in the creative process. Often, it gives a gentle push to the constipated brain (see Appendix D and E.)

Report excerpt

Definition of students' learning problems:

- Students have difficulty understanding the language used in explanations of Visual Semiotics.
- Students have a reluctance to using new terminology that is not frequently used in daily conversational English.
- Students do not have access to a body of design work that utilizes Visual Semiotics.
- Students do not understand how to use the Visual Semiotics system in their design work.

Proposed directions to follow:

- A system is needed to aid students in memorization of components.
- The components must be remembered and understood to be utilized in a meaningful way. A simplistic format must be devised that will not seem alien to student target group.
- The format must be limited in time (maximum one-half hour) and offer the students benefits that will be easily understood by them.

APPENDIX C

Symbol Sign Book Excerpts

The American Institute of Graphic Arts (AIGA) prepared a book entitled, Symbol Signs, in 1981. This book details the work that the AIGA did in connection with devising a system of passenger/pedestrian oriented symbols. This is the finest and clearest example of Visual Semiotics, at work, to date.

These excerpts are a few pages from that book that can help the novice understand what the group was striving to accomplish.

Symbol Signs

The system of
passenger/pedestrian oriented
symbols prepared by the
American Institute of Graphic Arts



Message Areas

Considerable time, effort and expense has been expended by various groups throughout the world for the development of pictorial symbols. By analyzing the results of these efforts, the AIGA Signs and Symbols Committee sought to find acceptable solutions among these existing symbols.

The first task was to develop a group of initial message areas. For this, the Department of Transportation Office of Facilitation, and the AIGA Committee formed the following list, divided into four categories.

Public Services contains messages which represent services widely used in transportation-related facilities.

Concessions includes messages that are related to commercial activities.

Processing Activities includes messages that represent important passenger-related procedures.

Regulations represents messages announcing mandatory procedures.

In this listing we have attempted to describe the message areas with wording that corresponds to conventional terms, without over simplifying. These are not necessarily the words that would appear on actual signs. The guideline section of this report offers recommendations about the suggested wording that should appear with the symbols.

Public Services

Telephone
Mail
Currency Exchange
Cashier
First Aid
Lost and Found
Coat Check
Baggage Lockers
Escalator Up
Escalator Down
Stairs Up
Stairs Down
Elevator
Toilets, Men
Toilets, Women
Toilets
Nursery
Drinking Fountain
Waiting Room
Information
Hotel Information
Air Transportation
Heliport
Taxi
Bus
Ground Transportation
Rail Transportation
Water Transportation

Concessions

Car Rental
Restaurant
Coffee Shop
Bar

Shops

Barber Shop/Beauty Salon
Barber Shop
Beauty Salon

Processing Activities

Ticket Purchase
Baggage Check-in
Baggage Claim
Customs
Immigration
Departing Flights
Arriving Flights

Regulations

Smoking
No Smoking
Parking
No Parking
No Dogs
No Entry
Exit
Fire Extinguisher
Litter Disposal

Organization

Methods of Evaluation

Within each message area, the inventory organized all the symbols into groups. All the symbols in a group are based on the same fundamental concept. Although it is not always possible to make entirely satisfactory decisions about which characteristics justify creation of a new group and which are insignificant, it was clear that for most messages, well defined symbol concepts exist. These groups and the statements intended to summarize them are included on the inventory and evaluation pages. Neither the order of the concept groups nor the order of the symbols within each group were intended to indicate preferences or judgments about their strengths and weaknesses.

Evaluations were made in two ways. Using the inventory pages as a guide, each Committee member was given a symbol concept evaluation sheet which enabled him to privately rate every individual symbol in the collection without discussion with other Committee members. Using a scale of 1 to 5, with 1 representing weakness and 5 representing strength, each symbol was rated on its semantic, syntactic, and pragmatic dimensions. The averages of these ratings are displayed on the Evaluation Chart pages under the headings Semantic, Syntactic, and Pragmatic.

In addition, the Committee as a whole evaluated the symbol concepts. This was done through discussions which concentrated on rating the relative strength of each symbol concept as grouped on the evaluation pages. These ratings are displayed on the Evaluation Chart pages under the column marked Group.

All of these ratings are of course subjective. However, they are based on many years of personal and professional experience by five individuals with varied interests and backgrounds.

Symbol Concept Evaluation Sheet

This is an example of the ballots used by the individual AIGA Committee members to evaluate all of the symbols collected in the Inventory.

		AIGA Transportation Sign and Symbol Project														
name																
message		ARRIVING FLIGHTS														
	source	semantic				syntactic				pragmatic						
1	ADV	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
2	ICAO	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
3	O'72	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
4	PG	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
5	IA	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
6	TC	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
7	D/FW	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
8	PORT	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
9	ATA	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
10	FA	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
11		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
12		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
13		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
14		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
15		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

Basis of Evaluation
The Committee's Recommendations

Frequently the words legibility, readability, and clarity enter discussions about symbols. While these words reflect realistic concerns, they are too inaccurate to be useful in evaluating symbols. To produce consistent judgments a more objective basis was needed. Three very fundamental aspects served as the outline for the committee's evaluations.

All visual communication, including symbols, have three distinct dimensions; semantic, syntactic, and pragmatic. The strengths and weaknesses of every symbol can be evaluated in relation to these basics of communication.

The **semantic** dimension refers to the relationship of a visual image to a meaning.
How well does this symbol represent the message?
Do people fail to understand the message that the symbol denotes?
Do people from various cultures misunderstand this symbol?
Do people of various ages fail to understand this symbol?
Is it difficult to learn this symbol?
Has this symbol already been widely accepted?
Does this symbol contain elements that are unrelated to the message?

The **syntactic** dimension refers to the relationship of one visual image to another.
How does this symbol look?
How well do the parts of this symbol relate to each other?
How well does this symbol relate to other symbols?
Is the construction of this symbol consistent in its use of figure/ground, solid/outline, overlapping, transparency, orientation, format, scale, color and texture?
Does this symbol use a hierarchy of recognition?
Are the most important elements recognized first?
Does this symbol seriously contradict existing standards or conventions?
Is this symbol, and its elements, capable of systematic application for a variety of interrelated concepts?

The **pragmatic** dimension refers to the relationship of a visual image to a user.
Can a person see the sign?
Is this symbol seriously affected by poor lighting conditions, oblique viewing angles, and other visual 'noise'?
Does this symbol remain visible throughout the range of typical viewing distances?
Is this symbol especially vulnerable to vandalism?
Is this symbol difficult to reproduce?
Can this symbol be enlarged and reduced successfully?

In actuality, these three dimensions are interrelated in complex ways. Nevertheless, recognizing them makes it possible to logically isolate and evaluate specific qualities.

The AIGA Committee's intent, throughout this project, was to take full advantage of work done to-date, to build on existing systems, to discover and assimilate strong concepts where they existed and concentrate on developing original designs only where no existing symbol was adequate.

It was always understood that each symbol would require at least some redrawing to give a common visual language to the system. The column headed Recommendations on the Evaluation Chart page reflects the AIGA committee's brief that was given to the designers following the evaluation and subsequent discussions.

Frequently the recommendations propose experimentation with alternative solutions. This is necessary because the symbols are visual elements and in the final analysis it is necessary to see the alternatives to judge them.

The recommendations do not necessarily correspond exactly to the judgments expressed in the evaluations. An essential consideration in the development of the symbols must be how they will relate to each other. The strict numerical ratings of existing symbols make no provision for this requirement.

Finally, in the course of the design and related discussions further ideas developed which were incorporated in the final drawings. It is because of this that the final symbol designs created do not necessarily correspond exactly to the committee's original recommendations.

Symbol Sources

Throughout this report the symbol sources are identified using the abbreviations shown in this list.

ADCA	Australian Department of Civil Aviation
ADV	German Airports Association
ATA	Air Transport Association
BAA	British Airports Authority
CSS	Canadian National Signing System
D/FW	Dallas-Fort Worth International Airport
FA	Frankfurt Airport
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
KFAI	KFAI AB, Sweden
LVA	Las Vegas Airport
MM	Mexico City Metro
NPS	National Park Service
NRR	Netherlands Railroads
O'64	Olympic Games, Tokyo 1964
O'68	Olympic Games, Mexico 1968
O'72	Olympic Games, Munich 1972
O'76	Olympic Games, Montreal 1976
Pg	Picto'gratics
Port	Port Authority of New York and New Jersey
SP	Swedish National Parks
S/TA	Seattle-Tacoma Airport
TA	Tokyo Airport
TC	Transport Canada, Air
UIC	International Union of Railroads
WO'72	Winter Olympic Games, Sapporo 1972
X'67	Expo 67, Montreal
X'70	Expo 70, Osaka

Telephone

1



X'67



O'72



ATA



UIC



BAA



S/TA



IATA



SP



WO'72



D/FW



X'70



Pg



NPS



KFAI



NRR



TA



Port



TC



ICAO



ADV

2



O'68

3



O'64

4



ADCA

Concept Description	Symbol Source	Evaluation				Symbol Design Recommendations
		Semantic	Syntactic	Pragmatic	Group	
1 Telephone handset.	X'67	5	3	3	5	<p>This message presents a dilemma for the committee. The inventory clearly shows that the telephone handset is widely used around the world. But it is an awkward shape, one that might be confused with other symbols, such as the wrench used in highway signs to represent repairs.</p> <p>To the committee, both the telephone dial, O'64, and the front view of the telephone, O'68, are clearer representations of a phone. The problem is that they represent obsolete telephone styles.</p> <p>While it is not our intention to develop new symbols where another has already been well established, we believe that the symbol used for telephone is one of the easiest to establish because the instrument is so universally used and known. Therefore, we advise that in addition to developing a satisfactory drawing of a handset, there should be experiments with a front view of an up-to-date phone.</p> <p>We feel that none of the drawings of the handsets are completely satisfactory. The object should not be over simplified and abstracted, as for example the X'70 version. It should also not be merely a photographic depiction, like the ICAO version.</p> <p>The committee feels that it makes little difference whether the image is placed vertically or at an angle. That decision should involve an evaluation of the relationships between this drawing and the others in the initial group.</p> <p>Summary: Modify drawing of Group 1 concept; experiment with front view of modern telephone.</p>
	O'72	5	3	3		
	ATA	5	4	4		
	UIC	5	4	4		
	BAA	5	3	4		
	S/TA	5	3	4		
	IATA	5	3	3		
	SP	5	2	3		
	WO'72	4	2	2		
	D/FW	4	2	2		
	X'70	5	2	3		
	Pg	5	2	3		
	NPS	5	3	3		
	KFAI	4	2	2		
	NRR	5	2	2		
	TA	5	3	3		
	Port	5	3	3		
	TC	5	3	3		
	ICAO	5	2	3		
	ADV	5	3	3		
2 Telephone dial.	O'68	5	5	5	5	
3 Front view of dial telephone.	O'64	5	5	4	5	
4 Handset and dial.	ADAC	3	2	2	3	

APPENDIX D

Visual Syntax List

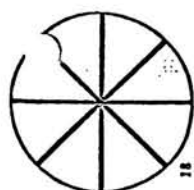
The Visual Syntax List is a simple list of pre-composed visual suggestions from which the designer may make selections. It is used in conjunction with the other two semiotic components. The designer selects ideas from this list that will reinforce the conceptual thrust of the design problem.

This particular list is a combination of suggestions by R. Roger Remington and Aaron Marcus. Marcus published portions of the list in his article, "Visual Syntax of Concrete Poetry," Visible Language 8 (Autumn, 1974):333-355. This article explains how the Visual Syntax List is utilized in the creation of concrete poetry.

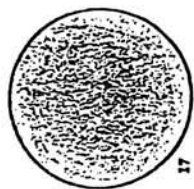
ELEMENTS OF VISUAL SYNTAX

Figure Field RelationshipsEmphasisScaleDepth RelationshipsElementParallelismIntersectionStructural RelationshipsCentroidal (point)LinearPlanar, grid elementPlanar, grid rhythmMovement RelationshipsCentroidal (point)Linear, complexityLinear, orientationPlanar, ungriddedPlanar, grid orientationELEMENTS OF VISUAL SYNTAX
(Typographic)

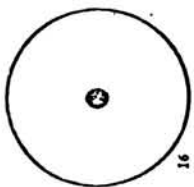
1. Traditional (figure)	2. Figure	3. Field
4. Field (plane)	5. Interlinear (line)	6. Intralinear (point)
7. Plane	8. Line	9. Point
10. Opaque	11. Translucent	12. Transparent
13. Opaque	14. Translucent	15. Transparent
16. Point	17. Field	20. Rings
18. Line intersection	19. Spiral	
21. Horizontal	22. Vertical	
23. Diagonal (135°)	24. Diagonal (45°)	
25. Parallel	26. Intersecting	
27. Point	28. Line	29. Plane
30. Regular	31. Irregular	29a. Combination (constructional grid)
33. Spiral	34. Radial	32. Progressive
36. Path	37. Pulsation	35. Peripheral
39. Right	40. Down	38. Bidirectionality
41. Lower-right	42. Upper-right	
43. Left	44. Up	
45. Upper-left	46. Lower-left	
47. Combination		
48. Random		
49. Right	50. Down	
51. Lower-right	52. Upper-right	
53. Left	54. Up	
55. Lower-left	56. Upper-left	
57. Combination		
58. Typeface	59. Typesize	60. Type weight
61. Posture	62. Kind of letter	63. Color of type
64. Line spacing	65. Kerning	66. Word spacing
67. Column width	68. Type of column	69. Ident
		70. Letter Spacing



18



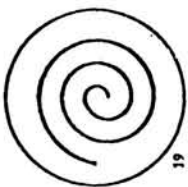
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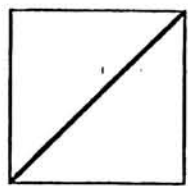
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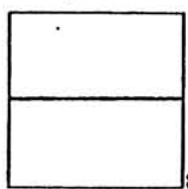
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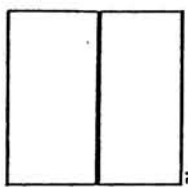
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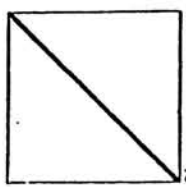
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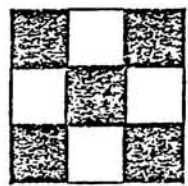
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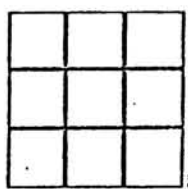
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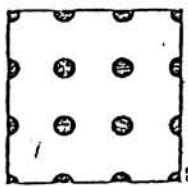
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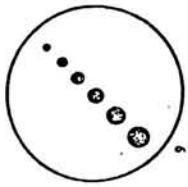
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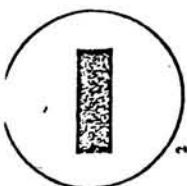
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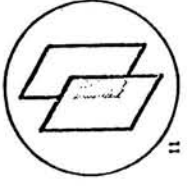
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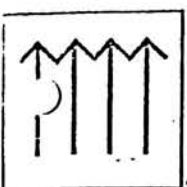
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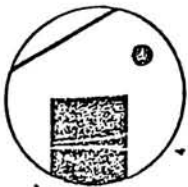
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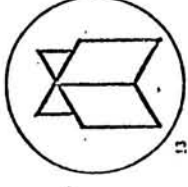
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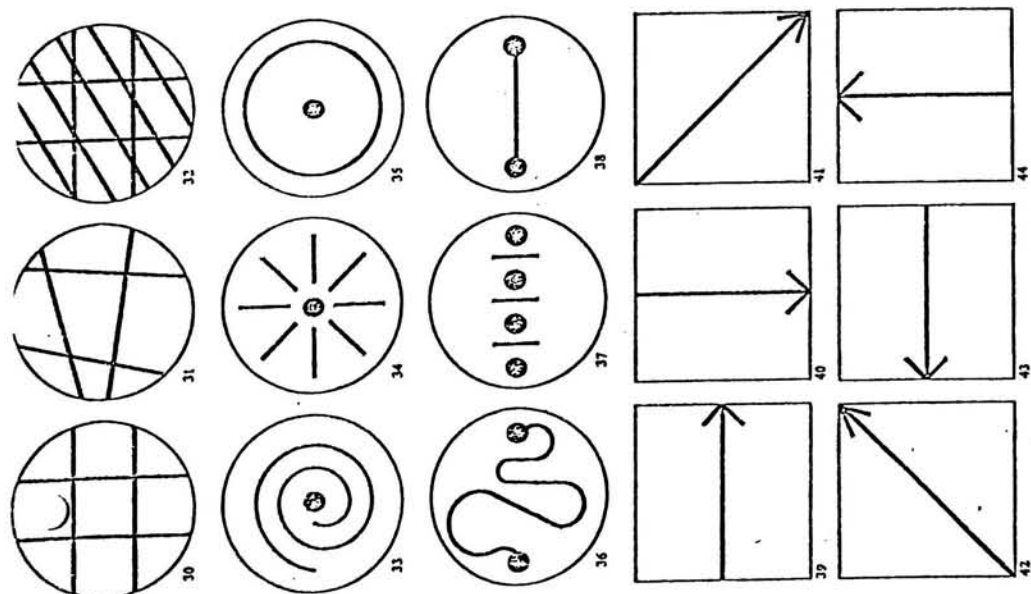
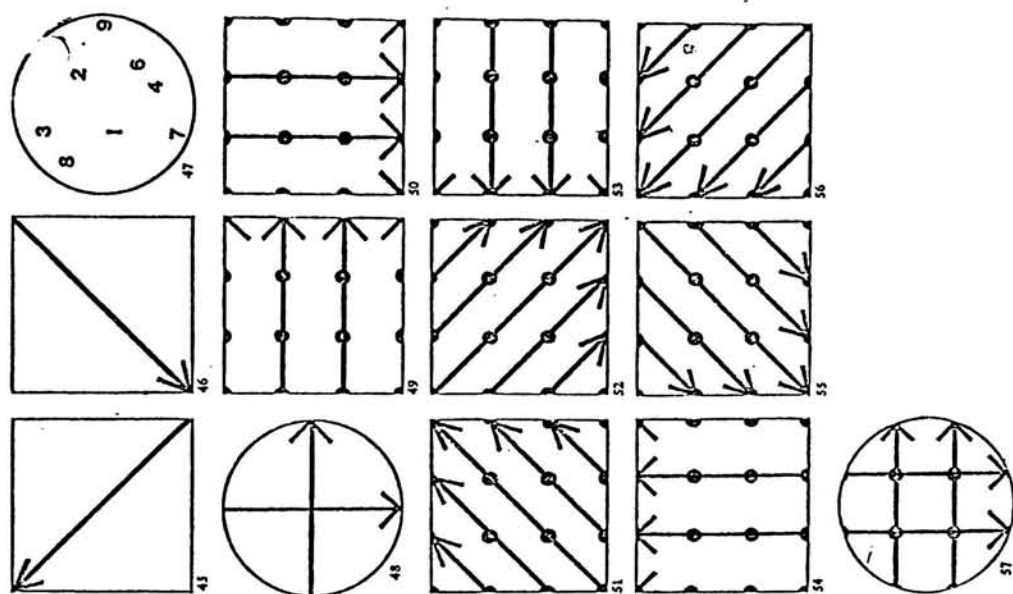
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13



APPENDIX E

Fine Arts Syntax List

The Visual Syntax list concept is not limited to the applied arts. The following Appendix entry is an attempt by artist, Robert Serra, to create a list of suggestive maneuvers for the artist. At this time, the menu concept is not widely accepted, but the field of Visual Semiotics is still in its formative stage. The concept of the Visual Syntax list has much to offer to the fine artist and should not be dismissed without investigation.

This list is copied from the book, The Avant-Garde, written by Grégoir Müeller (1972), page 94.

TO ROLL
 TO CREASE
 TO FOLD
 TO STORE
 TO BEND
 TO SHORTEN
 TO TWIST
 TO TWINE
 TO DAPPLE
 TO DAPPLE
 TO CRUMPLE
 TO SHAVE
 TO TEAR
 TO CHIP
 TO SPLIT
 TO CUT
 TO SEVER
 TO DROP
 TO REMOVE
 TO SIMPLIFY
 TO DIFFER
 TO DISARRANGE
 TO SHAVE
 TO OPEN
 TO MIX
 TO SPLASH
 TO KNOT
 TO SPILL
 TO DROOP
 TO FLOW
 TO SWIRL
 TO ROTATE
 TO SMEAR
 TO FLOOD
 TO FIRE
 TO IMPRESS
 TO INLAY
 TO LIFT
 TO CURVE
 TO SUPPORT

TO HOOK
 TO SUSPEND
 TO SPREAD
 TO HANG
 OF TENSION
 OF GRAVITY
 OF ENTROPY
 OF NATURE
 OF GROUPING
 OF LAYERING
 OF FELTING
 TO COLLECT
 TO GRASP
 TO TIGHTEN
 TO BUNDLE
 TO HEAP
 TO GATHER
 TO ARRANGE
 TO REPAIR
 TO DISCARD
 TO PAIR
 TO DISTRIBUTE
 TO SURFEIT
 TO SCATTER
 TO COMPLEMENT
 TO ENCLOSE
 TO SURROUND
 TO ENCIRCLE
 TO HIDE
 TO COVER
 TO WRAP
 TO DIG
 TO TIE
 TO BIND
 TO WEAVE
 TO JOIN
 TO MATCH
 TO LAMINATE
 TO BOND
 TO HINGE

TO MARK
 TO EXPAND
 TO DILUTE
 TO LIGHT
 TO REVISE
 TO MODULATE
 TO DISTILL
 OF WAVES
 OF ELECTROMAGNETIC
 OF INERTIA
 OF IONIZATION
 OF POLARIZATION
 OF REFRACTION
 OF SIMULTANEITY
 OF TIDES
 OF REFLECTION
 OF EQUILIBRIUM
 OF SYMMETRY
 OF FRICTION
 TO STRETCH
 TO BOUNCE
 TO ERASE
 TO SPRAY
 TO SYSTEMATIZE
 TO REFER
 TO FORCE
 OF MAPPING
 OF LOCATION
 OF CONTEXT
 OF TIME
 TO TALK
 OF PHOTOSYNTHESIS
 OF CARBONIZATION '67-'

SERRA

TO CONTINL

APPENDIX F

Instructional Text Grid

This grid is the foundation for the placement of all text used in the videotape presentation, "What Every Designer Should Know About Visual Semiotics."

APPENDIX G

Instructional Text Design Samples

The following pages are samples of the videotape instructional text that were made on a 6500 Color Xerox Copier. They are as accurate, as possible, without viewing the actual tape. They are included to give examples of the color choices, typeface styles and systems used in the formulation of the instructional text frames.

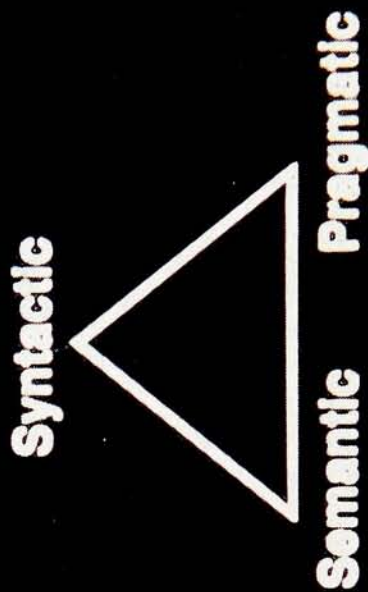
Visual Semiotics

What Every Designer Should Know

Questions & Answers

Charles Morris

The Triad of Visual Semiotics



Explore Semantics

Research the problem's meaning to:

**intended audience
the client
and you**

Visual Semiotics

**Semantic
Pragmatic
Syntactic**

APPENDIX H

Suggested Reading List

The following list of books are available, for the interested student, in the RIT Library. They will aid the student that has viewed the videotape, "What Every Designer Should Know About Visual Semiotics" in a fuller understanding of the subject of Visual Semiotics. The bibliographic list will be helpful, although many of the texts are difficult to locate.

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3. Adrian Frutiger, Type, Sign, Symbol, Zurich, Switzerland: ABC Edition, 1980.
4. Karl Gerstner, The Art of Karl Gerstner, Cambridge, Massachusetts: MIT Press, 1981.

FOOTNOTES

1. Hanno Ehses, "Design and Semiotics: Some aspects of the design process," Icographic, November, 1978, p. 38.
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