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## SYMBOLS

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## Dedication

This thesis is dedicated to my beloved family who had patience while I pursued my thesis and earned my Master of Fine Arts in Computer Graphic Design. My family was very generous with their time, hospitality and thoughts. Through letters, on the phone and in person they demonstrated to me what others already knew: that I am capable of accomplishing success.

Back row on left is Gerald Matthew, Anne Maureen and Eric John Front row is Steven Mark, Mary Therese, Christine Marie and Kevin Luke



#### Introduction

Why is it that symbols have always attracted people? The symbol is a drawn language that communicates a message.

The Executive Art Director of *Time* magazine Nigel Holmes was an intellectual who analyzed the symbol. He was aware of the importance of symbols and the ways that designers translate their design of symbols on layouts and applications. Holmes wrote:

A symbol stands for something. It is visually precise; it attempts to get at the essence of an idea-either by being a non-literal, visual metaphor. A symbol can give an identity to a subject and by repeated use, can come to equal it.<sup>1</sup>

With the use of history, maps and timelines, I will investigate the development of pictographs and trademarks. I also include the use of Computer Graphics to solve my design problems.

This thesis is a study of the European and Asian symbols chosen for the purpose of expanding my knowledge of style and design.

<sup>1</sup>Nigel Holmes, <u>Designing Pictorial Symbols</u> (New York: Watson-Guptill Publications, 1985), 11.

#### History

Figure #1 'Hall of Bulls,' Dordogne, France



Figure #2 Two elk, Jamtland, Sweden



Figure #3 Rock drawing, Bohuslan, Sweden



The earliest development of pictures and symbols was the rock drawing. Humans made their marks by carving and painting, which are called petroglyphs when carved and petrograms when painted.<sup>2</sup> The rock drawings have been found in various locations all over the world. This paper will discuss only a few examples from Sweden and France. The records of the pictorial cut and painted marks on the walls have survived from Ice Age. about 60.000 years before our time.3

The rock drawing from France is located in Dordogne. The art has a dynamic figure and it represents a form of activity. It is on the left wall of Lascaux and known as the 'Hall of Bulls.' This rock drawing was made between 15,000 - 13,000 B.C. As shown in figure #1 the drawing was created by painting on the wall and it has a pictorial image describing an animal.<sup>4</sup>

The other rock drawing from Sweden is located in Jamtland which is shown in figure #2. The image appears to be a simple drawing of two elk. This rock drawing was made during the early Ice Age. Another rock drawing at Bohuslan, Sweden is more of a picture writing shown in figure #3. It is more likely made using rock-scratching method and is dated from the Bronze Age about 1800-1000 B.C. During the earlier Ice Age, rock drawings were the first stage of images, pictorials and symbols towards communication. For example, the rock drawings became a method for communication connected to spoken sounds and descriptive gestures. This leads to the use of signs in association with the same statements.<sup>5</sup> The earlier rock drawings became a script that communicated the thought of spoken sounds.

<sup>2</sup>Hans Jensen, <u>Sign, Symbol and Script.</u> (New York:G.P. Putnam's Sons. 1969), 32.

<sup>3</sup>Adrian Frutiger, <u>Sign, and Symbols Their</u> <u>Design and Meaning.</u> (New York: Van Nostrand Reinhold, 1989), iii.

<sup>4</sup>Horst de la Croix and Richard G. Tansey, <u>Art through the Ages</u>, (New York: Harcourt Brace Jovanovich, Inc. 1980.), 24,25.

<sup>5</sup>Frutiger, 112.

#### Idea-writing

Figure #4 Chinese characters of Horse (archaic) & Horse (modern)



Figure #5 Latin characters, From the hieroglyph to the modern phonetic character A



Writing is known to have existed from the time drawings or signs became visible in relation with spoken syllables, word or phases. It is a record of thought and speech.

The earliest scribes existed in the fifth millennium B.C. in the Middle East.<sup>6</sup> With the help of signs known as pictograms, they represented objects, dates and actions. Writing style did not begin until the early people started to arrange the signs in horizontal and vertical rows conforming to their own linear train of thought.<sup>7</sup> The arrangement of signs and the repeated use of signs developed into continous script cultures.<sup>8</sup>

The origin of all scripts that have come into existence through a natural course of development was certainly pictorial signs.<sup>9</sup> Pictorial and Alphabetical scripts are the two main categories that will be examined.

First scripts remaining pictorial in this category are scripts that have undergone no revolutionary change even through hundreds of years.<sup>10</sup> The earlier people kept their signs at the pictorial stage and later stylized them. The Chinese script is the best example. In figure #4 you see the sign for a horse clearly recognizable in its archaic form, and this sign as it has later been systematized.<sup>11</sup> This shows the basic strokes and movements still present in the

modern sign. The basic strokes are four legs, head and tail etc.

Alphabetical script are scripts whose original picture signs have been changed over the centuries to phonetic signs. The reduction of strokes went to extreme simplification. The best example is the Latin alphabet in figure #5. The illustration demonstrates in the first panel an early pictorial sign for a bull. The pictorial sign of the bull shows all of the details of ears, horns and an eve. Through the development of the sign the pictorial parts of the image are removed little by little over time until the first alphabet letter A is formed.<sup>12</sup>

<sup>6</sup>Adrian Frutiger, <u>Signs and Symbols Their</u> <u>Design and Meaning</u>, (New York: Van Nostrand Reinhold, 1989), 113.

> <sup>7</sup>Frutiger, 113. <sup>8</sup>Frutiger, 114. <sup>9</sup>Frutiger, 113. <sup>10</sup>Frutiger, 114. <sup>11</sup>Frutiger, 114. <sup>12</sup>Frutiger, 114.

At the end of the second millennium B.C. a vast number of writing systems were used in the Near East region to document a variety of languages.

Much trading that took place on the eastern shores of the Mediterranean. The Phoenicians and Near Eastern cultures of that area made contact with each other by land and by sea. This contact enabled them to develop an understanding of various tongues and scripts. It involved the understanding of the consonants b, d, g, etc. and the combination of the syllabic signs as ba, di, gu, etc. Today the Phoenician consonantal signs are known for their originality and deserve to be recognized as being the root of all alphabetical scripts.<sup>13</sup>

An organization chart in figure #6 is designed in a way to understand the development of Phonetic sign A. At the center of the chart is the Phoenician sign "aleph," that was influenced by Egyptian, Sumerian, Cretan, and other styles of pictogram and ideogram. The upper part of the chart consist of the time span of nearly 2,000 years [3,000 to 1,000 B.C.] Many steps have been left out because certain stages have not yet been discovered.<sup>14</sup>

At the lower part of the chart the Semitic-Arabic, Indian, and Western scripts of the world's alphabets of today are developed. We can see that the main style of script in the chart developed differently in each area beginning in the early part of the first millennium B.C. This is because at that time there was no contact or standard communications between these countries.<sup>15</sup>

The left-side of the chart describes an important part in the development of Western scripts. The Greek civilization found it necessary to develop further the imprecise vowel fixing of the Phoenicians. which was adequate for Semitic languages but not for the writing of the highly inflected old Greek language.<sup>16</sup> For example the A and E are derived from pronouncing sounds as "ha" and "he," "I" from the sound of "J," "O" from the tough word "ain" and "U" from "W."17

The overall chart emphasizes the styles of different language signs which were strongly influenced by the writing instruments and materials employed.

<sup>13</sup>Adrian Frutiger, <u>Signs and Symbols Their</u>
 <u>Design and Meaning</u>, (New York: Van Nostrand
 Reinhold, 1989), 143
 <sup>14</sup>Frutiger, 143.
 <sup>15</sup>Frutiger, 144.

<sup>16</sup>Frutiger, 144.

<sup>17</sup>Frutiger, 144.

## Phonetic sign A



## The Worlds Script Culture

Scripts have always been one of the superior concerns that support a culture. Priests have often used sacred writing as a special activity. Early scripts have been used in religion, trade law, and science. Religious scripts have been used extensively as a medium of expression in the past as well as today.<sup>18</sup> For example the different cultures develop writing as a form of expression in the same way as graphic art and painting.

The map figure #7 indicates Judea as the center of the development of the Hebrew alphabet. During the 5,000 years of Jewish tradition that alphabet has been modified through the years.<sup>19</sup>

The Greek and Latin cultures of the northwest Mediterranean continued into Christianity, through branches of Eastern Orthodoxy which is called Cyrillic scripts. Also Catholic and other Christian faiths covered more than half the world.<sup>20</sup> They developed scripts derived from Roman alphabets to the Renaissance minuscule, which are phonetic scripts.

The Mohammedan faith of Islam scattered the Arabic style of writing across North Africa, Asia Minor and then far to the foothills of the Himalayas. It is located to the southeast on the world map script culture.<sup>21</sup>

The sacred expression of the Hindu faith came into

Northern India forming an independent script called Devanagari in the early 11th century. This still is the official national script of India today.<sup>22</sup>

In the same region of India around 500 B.C. Buddhists appeared beside the ancient Hindu system. They immigrated toward the southeast and brought their scripts into existence which were obtained from Devanagari and the Pali languages of Indonesia.<sup>23</sup>

Map in figure #7 demonstrates the flow of certain script cultures into the different geographical regions of the world.

<sup>18</sup>Adrian Frutiger, <u>Signs and Symbols Their</u> <u>Design and Meaning.</u> (New York: Van Nostrand Reinhold, 1989), 146-147. <sup>19</sup>Frutiger, 147.

<sup>20</sup>Frutiger, 147.
 <sup>21</sup>Frutiger, 147.
 <sup>22</sup>Frutiger, 147.

# The Worlds Script Culture

Figure #7 Early world's script culture

The scripts are the principle forms of alphabet of the script cultures in the modern world.



Christianity шрифта	Hinduism भी जांभव्यक्ति का	Confucius	今天同
Christianity προσθεντα	Hinduism හිපදවීමට	Confusion	<b>★</b> 他 #
Judaismאתכם דבר	Buddhism		Æ ₹ ₹
انشرک للاً عُشی نتالIslam	Buddhism រោឌជាអ្នក	こした。部屋	
کل بی رخ یار دوش نبتHinduism		Ę	

7

## Pictograph

Today pictographs are symbols that refer to an object, an action, a process, or a concept.<sup>24</sup> They communicate a message by breaking language barriers. Pictographs can take the place of written words and can effectively communicate a message.

Four main examples of pictographs will be examined in the following areas: transportation, sports, national parks and historical societies. This will focus on the importance of pictographs as communication symbols.

First, the use of transportation and airport signs have become an necessary part of our lives in America and around the world. Typically drivers information consists of road condition information, such as a sign indicating "Falling Rocks" or "Level Crossing" or "Steep Descent."<sup>25</sup>

For the airport signs the flight attendant as well as the passenger uses the national language and English for signals of emergencies such as the Exit, Flight, and Bus.<sup>26</sup> It reduces the anxiety of communication barriers when attending to the variety of people of different languages.

Second, sports arenas and national parks are often structured using pictographic symbols for particular events. The image and form usually are simple, informational silhouettes for people during the sports entertainment and in national parks.

During the meetings of enormous amounts of people at Olympics and entertainments in national parks there is a need of a signage system which uses visual organization. The pictographic symbols are designed to orient and guide visitors during these events.

Last, pictographs are well designed as educational information in museums, historical societies, etc. They are used in the same style and format as the national parks pictographs but are used for educational purposes because the pictographs communicate information easily.

A pictographic symbol for sports can be designed in a generic image of a particular sport. For example a bicycle image represents to the various audiences that they are permitted to ride on a bicycle in a particular area. Frutiger commented that safety signs and pictograph signs must have a strict international unity for obvious reasons.<sup>27</sup>

<sup>25</sup>Adrian Frutiger, <u>Signs and Symbols Their</u> <u>Design and Meaning</u>, (New York: Van Nostrand Reinhold, 1989), 347.

<sup>26</sup>Frutiger, 348.
<sup>27</sup>Frutiger, 353.

<sup>&</sup>lt;sup>24</sup>Gregg Berryman, <u>Notes on Graphic Design</u> and <u>Visual Communication</u>, (California: William Kaufmann, Inc., 1979), 18.

Figure #8 Pictograph examples:



Transportation

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Sports



National Park

Trademarks are signs or "marks" which identify goods in all varieties.<sup>28</sup> Trademarks were used for identifying products of trade and manufacturing goods.

The three early developments of the uses 'marks' will be examined in the following areas: cattle branding, traders' marks, and craftsmans' marks. This will give a better understanding of the 'mark' as it developed in the past.

First, the brand marks that were used by stockbreeders gave them the opportunity to indicate ownership of cattle. In North America during the 17th century there were no permanent geographical location in the boundaries of property. So the owners' motives to do cattle branding were based on their individual will to mark property.<sup>29</sup> The purpose of stockbreeders to brandmark their cattle was to keep them at all times assembled in herds.<sup>30</sup> They were to be driven from pasture to pasture in search of food. It became necessary for owners to mark their herds.

The method of marking the cattle and animals for life was by burning a sign into the horn and the skin or hide, making a brand mark.<sup>31</sup> This brand mark is one of the earliest developments of marks. This type of ownership of herds is still used all over the world. In figure #9 shows the early cattle brand marks.

Second, trademarks were developed for many products. The trader would mark products such as sacks, cases and bundles of spices, groceries, fruit, and so on.<sup>32</sup> When importing and exporting products it became a necessity for traders to mark the products to prevent mistakes being made during transportation. Upon the use of products in the market place the package signs became marks of identification of the goods inside the pack and signs of quality.33 The mark of ownership has become the trademark.

The illustrations or pictorial images were used as marks by the traders for their products. The earliest of these marks are seen during the 14th and 15th century. The earliest styles were symbols and abstractions in the way design was produced. The examples of the marks are shown in figure #10 as following: indications of the signs of the compass, the scales, the cross, the ship, the flag, etc.<sup>34</sup>

Last, the craftsman's mark has been used to display the handicrafts of the potter, gunsmith, painter and porcelain maker to name a few. With pride in themselves and their profession it was in the interests of the maker to sign their work by stamping in a mark as confirmation of the finished product.<sup>35</sup>

Examples found in Egypt

and Mesopotamia are shown in figure #11. These are early craftsmens' marks on pottery.

Other signs were used by a variety of craftsmen, many centuries ago. Examples of the craftsmens' marks are shown in figure #12 as follows: 1, 2, 3: Ancient ornamental bakery marks from the Near East, pressed into the dough before baking. Circa 1500 B.C. 4: Potter's mark on an ancient Roman oil lamp. 5: Ceramic marking sign, Doccia, Italy.<sup>36</sup>

The craftmens' marks are pictorial and decorative images representing their finished crafts. These are one of the earliest marks that the craftmen developed. The marks promoted and advertised their work.

Presently, trademarks have become a part of our consumer goods. An example is a trademark printed on the packet of tea and coffee. Trademarks are recognized all around us in our daily life. For instance a trademark for Bell Telephone is highly recognizable.

With a number of products in the market it became necessary to mark or abbreviate signs. This gives the viewers an opportunity to recognize the products which causes the marks and signs to become memorable.

The modern graphic designer has the responsibility to develop a trademark with the strongest pictorial image and the most attractive graphic effect. Figures #13-15 show various types of trademarks and we will examine these in the following sequence: Trademarks based on abstract figures, on letters and elements, on formation with contrasting areas, and finally abstraction that lead to unwanted similarites.<sup>37</sup>

First, trademarks based on abstract figures shows the image with pictorial content and represents the figure ground relations. They have the graphic effect of depicting images such as the animal or railway tracks. The trademarks give the visual effect of recognition.<sup>38</sup>

Second, trademarks can use letters or elements that demonstrate the ability to resemble letterforms in a abstract image. In most organizations and companies the use of initials are supportive to the graphic expression. The following examples of trademarks that succeed in this esthetic are shown in figure #14. These marks have letters fused together which create a graphic images.<sup>39</sup>

In figure #15 are examples that best demonstrate trademarks and the images which consist of spiral movement, simulating 3 dimensions and 2 dimensions. The last two trademarks in this group consist of formations with abstract contrasting areas and they lead to unwanted sim-

milarities.<sup>40</sup> The third trademark in figure #15 is an example of unwanted simmilarities because it conveys an image which creates movement to the extreme of around, toward and through the mark. These movements make this trademark difficult to read. This would be in conflict with the purpose of a trademark; to clearly and easily recognize a company's symbol.

After viewing the trademark images we see that past graphic designers' esthetics have influenced present designers, as they analyze these older marks for solutions. It forces the designer to question what is being communicated, what is being represented, and who is the audience?

<sup>28</sup>Peter Wild, International trademark design. (New York: Van Nostrand Reinhold Co. 1979), 6. <sup>29</sup>Adrian Frutiger, <u>Signs and Symbols Their</u> Design and Meaning, (New York: Van Nostrand Reinhold, 1989), 325. <sup>30</sup>Frutiger, 325. <sup>31</sup>Frutiger, 325. <sup>32</sup>Frutiger, 326. <sup>33</sup>Frutiger, 326. <sup>34</sup>Frutiger, 327. <sup>35</sup>Frutiger, 327. <sup>36</sup>Frutiger, 328-329. <sup>37</sup>Frutiger, 332-338. <sup>38</sup>Frutiger, 332. <sup>39</sup>Frutiger, 334. <sup>40</sup>Frutiger, 334-335.



Figure #9 Cattle branding marks from North America, during 16th and 18th century

13









Figure #10 Traders' signs of the 14th century



Figure #11 Pottery grid marks



Figure #12 Craftsmen's mark from many centuries



Figure #13 Modern trademark based on concrete and abstract figures



Figure #14 Trademarks of letters and elements



Figure #15 Trademark of contrasting areas and abstraction

#### **Dimensions-Arts**

The three distinct dimensions of all visual arts and symbols are as following:

<u>Semantic</u>: a way to plan for a defined meaning of a visual communication.

How well does this symbol represent the message? Does the visual image

communicate the message that the symbol represents?

Will those unfamiliar with the concept understand the symbol?

Is the symbol understood by the target audience?

<u>Syntactic</u>: the intended relationship in a visual communication to one another.

How does the relationship of the symbol communicate? How does the design of the symbol communicate? Is the important information noticeable first?

<u>Pragmatic:</u> a measure that refers to the relationship of visual communication to a user.

What will be the effectiveness of the symbol when enlarged or reduced? Is the symbol appropriate for the target audience? Can the target audience see the symbol?

All of the above are interrelated in complex ways. Successful design requires that these concepts be part of the designers' thinking. These also provide a method of evaluating the qualties of designs.<sup>41</sup>

<sup>41</sup>Aiga, <u>Symbol Signs</u> (New York: Hasting House, Publishers, 1982.), 20.

## Glossary of Symbols

<u>Combination Marks</u>: Symbol and logo used together. Also called signature. Constant space relationship.

<u>Devanagari</u>: The alphabet in which Sanskrit and many modern Indian languages are written.

<u>Lettermarks</u>: Letters formed in type. Used to identify company, often to shorten long name, not pronounceable.

<u>Logos</u>: A word or words in type. Identify company, brand, project, group. Pronounceable. Can be legally protected.

<u>Minuscule</u>: A small, cursive script developed from uncial between the 7th and 9th centuries A.D. and used in medieval manuscripts. A letter written in this script.

<u>Pictogram:</u> Any pictorial representation of numerical data or relationships.

<u>Pictographs:</u> Public symbols. Used to cross language barriers for direction, safety, transportation. Use encouraged by all.

<u>Symbols</u>: Marks without type used to identify a corporation, agency or institution. Can be legally protected.

<u>Trademarks</u>: Legal names for unique marks which may be registered, protected by law

#### and sold as desired.

<sup>42</sup>Gregg Berryman, <u>Notes On Graphic</u>
 <u>Design and Visual Communication</u>, (California:
 William Kaufmann, Inc., 1979), 10.
 <sup>43</sup>William Morris, <u>The American Heritage</u>
 Dictionary of the English Language, (Boston:

Houghton Mifflin Co. 1979), 860-837.

#### Modern computer

Today a modern computer graphic designers can use Macintosh computers with various application programs which are available for the designer to choose from. We will examine the following programs: Aldus Persuasion, Aldus Freehand, Adobe Photoshop, Computer-Eyes, and Xapshot Canon.

First, Aldus Persuasion is a comprehesive desktop presention program. It consists of built-in outlining, Auto Template technology, and charting tools. Aldus Persuasion is the only program to produce overheads, 35mm slides, handouts, and speaker notes.<sup>44</sup>

Second, Aldus Freehand is a flexible drawing program that enables the designer to create illustrations, organization charts and complicated technical illustrations.<sup>45</sup>

Third, Adobe Photoshop is a sophisticated graphics application designed for artists who work with graphic images. The program provides the user tools and commands to paint new images. It also provides the user the ability to retouch existing digital images that were created by a scanner and video capture equipment.<sup>46</sup>

Fourth, ComputerEyes is a professional program that provides the user the ability to capture full-color and black-and-white real-world images. It is one of the most valuable and useful programs developed for the Macintosh computer.<sup>47</sup>

Xap Shot Canon is a still video camera that can be used to take pictures electronically. The pictures can be erased and displayed on the 13" Macintosh computer . Xap Shot camera is an entirely new camera because it is a still video capture equipment.<sup>48</sup>

These various application programs are available and are very useful for artists because they can be widely used educationally and for advertising department.

<sup>44</sup><u>Aldus Persuasion User Manual</u>, (USA: Aldus Corporation, 1991), 3.

<sup>45</sup>Harry C. Edwards & Lin Compton
 O'Leary, <u>Aldus Freehand Learning Aldus Freehand</u>,
 (USA: Aldus Corporation, 1988), i.

<sup>46</sup>Lynne Fitzpatrick, Kisa Hurtt, Minette Norman, Tanya Wending, <u>Adobe Photoshop</u> <u>Classroom In A Box Student Workbook</u>, (USA: Adobe Systems Incorporated, 1991), 1.

<sup>47</sup><u>ComputerEves Professional Series Color</u> <u>Digitizer for Apple Macintosh Computers Owners</u> <u>Manual</u>, (USA: Aldus Corporation, 1991), 7.

<sup>48</sup><u>XapShot Instructions</u>, (Japan: Canon Inc. 1988), 2.

#### **Experimental Inquiry**

Figure #16 Branding iron of the 1800's from Ohio



Figure #17 Branding iron of the 1800's from Ohio



During the cold winter with the ice frozen on the brick walls of Rochester Institute of Technology, in upstate New York I found myself using the Adobe Photoshop tools retouching a photograph of a branding iron as shown in figure #16. The moments of exploring the techniques amazed me.

I entered the Computer Graphic Lab of RIT, to scanned images of my photographs and retouched the images. I chose to save it as a PICT file because Aldus Persuasion under system 7.1 subscribes to designers to use EPS and PICT file formats on slides. I chose RGB display mode of color, 32 bits/pixel, and diffusion.

After I returned to the computer program of Adobe Photoshop, I displayed the photographic image of the branding iron on the 13" screen of the Apple Macintosh computer to perform work. I saved a second image for backup file in case errors occured. I selected the branding iron image with the Lasso tool from the Main tool palette and copied and pasted it onto a new page layout. Then I used the Eye-dropper tool and chose black for the background color. Next I clicked on the Paint bucket tool and dumped the color onto the background.

There are no rules as to where to start. I analyzed the photographic image and saw the areas of shapes and forms of the image that needed to be retouched. After my analysis of the branding iron for the retouching, it enabled me to see the layers of shapes and forms. Then I added a silhouette background into the blur method around the branding iron image as seen in figure #17. The purpose of blurring is to create a smoother image and to blend in the background for smoother effect.

By adding my visual details of the pixel colors, forms and touch up color such as the lighting, I use a Line tool to dilute the high contrast lighting. This method is used to enhance the details of the branding iron.

During the process of retouching in the application of Adobe Photoshop I used the copy, cut, and paste commands from the back-up of my second image to cover any errors that might happen while I retouched the photograph. When I use the copy, cut, and paste commands on my photograph the results were exactly as I hoped.

I completed the final process of retouching the branding iron photograph on the 13" Apple Macintosh screen with the RGB color. Then I used the 32 bit color system pallette and Dither-Diffusion. After I set the color pallette I saved the photograph as a PICT file format. I chose this type of palette using the

## **Experimental Inquiry**

diffusion dither to accomplish the smoothest image.

Shortly after my PICT file of the photograph was closed, I took the PICT file to my disk and my SyQuest folder. My photographic image is best shown on the 13"Apple Macintosh screen.

Winter is a grand time for hitting the Apple Macintosh computer during class hours. One can forget how cold it is outside, while busy on the computer. The progress and process of my experimental inquiry added to the collection of my photographic images.

#### **Experimental Inquiry**

Figure #18 Photograph image of landscape from Transfer, PA. 1993.



Figure #19 Photograph image of landscape from Transfer, PA. 1993 and Adobe Photoshop techniques, 1993



During the winter quarter I discovered the techniques of using the Adobe Photoshop tools to retouch a photograph of a landscape scene as shown in figure #18. The event of exploring the techniques surprised me.

In the Computer Graphic Lab of Rochester Institute of Technology, I scanned the image of the landscape photograph as seen in figure #18. I saved the image as a PICT file as advised by Aldus Persuasion to import files as a PICT or E.P.S. I chose RGB color, 32 bits/ pixels and diffusion after I completed the use of the Microtek scanner.

After I finished the scan image I returned to the computer program of Adobe Photoshop. I opened the photographic image of the landscape on the 13" screen of the Apple Macintosh computer to accomplish a title layout. I saved a second image for backup in case of errors that might arise. I selected all landscape images, and used the Brightness/Contrast method under the Image Menu and adjusted the colors. I chose to blur the photograph for a subtle image. Under the menu I selected the filter then chose Blur and Gaussian Blur in radius of 3 pixels then okayed it. The photograph appeared in eery glowing effects.

After I completed this process I analyzed the image and chose the location for the title. This enable me to decide on the choice of color for the text.

For the text I chose medium gray and Helvetica Bold using 72pt. Under the style menu for the text in the Text Tool I selected bold, antialiased, and alignment left. The text appears on the screen in the text marguee. I located the title on the dark area of the landscape image. While the text was still in the marquee I chose to stylize the title by using the trick of Lens Flare at 145%, Lens type is 50-300 mm zoom and located the highlight on the text allowing it to appear dramatic as shown in figure #19.

Upon completing the layout design for the title slide I saved the image as a PICT file format in 32 bit color pallette. My title layout for the landscape image is best shown on the Aldus Persuasion presentation.

Winter quarter is a time for staying indoors to get away from the cold winters of Rochester. The ability to use my time to explore using the Adobe Photoshop techniques enhances my design ability. When I discovered the use of the Adobe Photoshop I was able to create several graphic images for the Slide presentation. Through this I learned the use of the tools and retouching the digital images created by the microtek scanner and video capture equipment. My process enabled me to put some of my design ability into a practical use for the slide presentation.

I saved all of my digital images as a PICT file, RGB color mode and 32 bit color pallette. Then I sorted the PICT files into folders such as a folder for title layout and a folder for history layout. This structure kept my files in a liner format.

The installation of Aldus Persuasion 2.1 motivated me to put forth work into the slide presentation. I started out with the outline form to develop a positive sense of my presentation structure. Then I moved to the Slide view to modify and polish each slide in turn.

I chose dark background color to enhance the white typeface. The background is a gray and black gradient and a solid black background for design purposes with digital images. For title and text I chose white Helvetica bold and Folio typeface.

Then I set up a grid structure for this slide presentation. I chose a constructional grid that starts from a photo then added guide lines. After the guide lines are added then type was added. This type of grid is used consistently and gives order to the composition, layout and balance.

After the set up of the constructional grid I imported the PICT files of the digital images into the slide presentation. Having a structured layout plan saved time in the flow of importing images for my slide presentation.

The advantage of using the Aldus Persuasion is that it enables me to use the imported images to format them and enhance them in a design that works well visually.

In figure #20 are samples of the Slide presentation that were created using the program of Aldus Persuasion 2.1. They are well presented and work with the objectives. The examples give the design style, choice of typeface and the use of a liner structure layout.





Figure #20-Slide Presentation

## Conclusion

My research, in the field of Symbols has examined the question "Why is it that symbols have always attracted people?"

The illustrations of rock drawings, scripts, pictographs and trademarks are signs that have been developed over many thousands of years. These convey messages through forms of non-verbal communication. For example, alphabetical signs and pictorial language are abstract in character and used in a written or printed expression of communication.

History and timelines of pictographs and trademarks are very informative and can connect us to both the past and modern times. They can serve as a direction to the future and at the same time preserve something of the past.

# Appendix A

On the following pages is my timeline of journals and reports of the Thesis project.

## Timeline

Thesis proposal on September 25, 1992.

Thesis proposal approved on October, 1992.

Research study during September–November, 1992.

During Thankgiving break I took photographs of trademarks and pictographs that is related to my thesis topic on November 17, 1992 & November 30, 1992.

Developed the photographs using the ComputerEyes application on December 1, 1992.

Using the Adobe Photoshop I used the tools to improve the images such as touch up and sizing on December 1, 1992.

Revisement with Barbara Fox on December 4, 1992.

Committee meeting with the Advisors and faculty on December 9, 1992.

Reviewed my literature and made adjustments to revisions December 10, 1992.

Read literature and wrote a draft on chapter 3 on December 11, 1992.

Scanned and developed images related to my research on December 16, 1992. Scanned logos from products and save as a PICT then I went into Adobe Photoshop to improve image on December 17, 1992.

Discovered that the Xapshot Canon camera battery not in working order so I used my camera to take photographs of pictographs and logos the wheather was great to take the advantage of it on December 24, 1992. (Christmas Eve)

Picked up the photographs at the One Hour Photo service on December 30, 1992.

Went in my disks and files to sort through the earlier photographs and trashed 57 photos that I consider no good for this project on January 3, 1993.

Scanned in the photographs from the Christmas break using the Microtek scanner in color scanned using Adobe Photoshop application on January 8, 1993.

Trashed more photographs that were done with the Xapshot Camera and scanned in three pictographs that I bought at the Strawberry Mall at Pennsylvania on January 9, 1993.

Studied the use of Adobe Photoshop as the application to apply in retouching the photographs. Also I worked in the area of RGB, Index, cut,

## Timeline

and paste photographs to enhance the image on January 10, 1993.

Meet with my Cheif Advisor Robert Keough to review my process on January 13, 1993.

Studied a series of photographs using the Adobe Photoshop application completed at least 27 images on January 13, 1993.

Scanned in logo images that I found to be useful for this project on January 14, 1993.

Studied a series of photographs using the Adobe Photoshop application on January 19, 1993; 7-11p.m.

Studied a series of photographs using the Adobe Photoshop application on January 20, 1993; 9a.m.-4p.m.

Typed information in for Thesis project and organized the resource of information that I gathered. Then I wrote my Presentation outline for the design project on January 21, 1993.

Scanned images for slide presentation and worked in Adobe Photoshop on January 24, 1993.

Scanned images and saved as a PICT file on January 25, 1993.

Studied in the application of Adobe Photoshop and continued working on the PICT files on January 27, 1993.

Installed the program of Aldus Persuasion 2.1 and designed the background layout for the slide presentation on January 28, 1993. Then I was disappointed that I could not import any of the PICT files into the slide presentation.

Reading day on the program of Aldus Persuasion for further study in the program to design my slide presentation on January 29,1993.

Imported the PICT file into the slide presentation. Set up the grid system and did design process on January 30, 1993.

Studied the Aldus Persuasion slide project on January 31, 1993.

Process work in the program of Aldus Persuasion on the Slide Presentation project on Febuary 3, 1993.

Did minor touch on project on Febuary 4, 1993.

Wrote Thesis report on Febuary 9, 1993.

Typed Thesis report on Febuary 10, 1993.

Review Slide Presentation Febuary 11, 1993.

#### Timeline

Designed a Liner layout for the Thesis report on Febuary 14, 1993.

Thesis Committee meeting on Febuary 17, 1993.

Revision process on Thesis project on March 9, 1993.

Meeting with Bob Keough going over the Thesis project for the 35mm slides to be developed on March 10, 1993.

Worked on the Image Q for the Thesis project on March 16, 1993.

Spent the day going through trial, error and labor with Bob Keough on the process of shooting pictures from the Montage FR1 into the ektachrome film on March 17, 1993. (Saint Patricks Day)

Tested the Caramate for the show on March 20 & 21, 1993.

Revision on Thesis project for the Thesis Exhibition on March 21, 1993.

Preplanning Meeting for the Graduate Thesis Show #2 on March 22, 1993.

Accomplished the process of shooting pictures from the Montage FR1 into the ektachrome film on March 17, 1993. Set-up Thesis project in the tray holder for the Exhibition on March 25, 1993.

Installation Orientation Meeting on April 1, 1993.

Installation day on April 2, 3 & 4, 1993.

Graduate Thesis Show #2 on April 9, 1993. (Good Friday)

Revisions with Barbara Fox on my Thesis report on April 21, 1993.

At last this Thesis Project and Thesis report is accomplished. I am pleased with it. I have a pride in what I am able to accomplish.

# Appendix B

The following pages contain information about the use and objectives for the Thesis Project.

## Equipment & Software

Equipment: \*A Macintosh IIcx and 7.01 system. \*256 color monitor. \*At least 4mb of RAM. \*Silver scanner & Microtek scanner. \*Xapshot Canon camera & video capture equipment. \*Montage FR1. Software: \*Aldus Freehand \*Aldus Persuasion 2.1 \*Adobe Photoshop 2.0 \*Computer Eyes-Color Video Digitizer for Apple Macintosh Computer.

\*Image Q. \*Quark XPress Thirty-six slides

Subject matter SYMBOLS

Audience is educational for the visual arts students and for the first year Computer Graphic Design students, Graphic Design students in the under graduate and graduate level.

Will have a list of measurable objective.

Using an Auto Template of my own design will consist of 36 slide presentation with outline, handouts and notes.

Using the Xapshot Canon camera and shoot pictures of various trademarks and pictographs relating to my topic of Symbols. This will enhance my observation and research on this project to begin to see what is used in the public places.

Using the the Microtek scanner to scan images for the project.

Using the following software:1)Aldus Freehand 2)Aldus Persuasion 2.1 3)Adobe Photoshop 2.0 4)Computer Eyes-Color Video Digitizer for Apple Macintosh Computer. 5)Quark XPress

# Measurable Objective

After the presentation on the topic about Symbols the viewer will be able to: 1) Write the dates of the timeline. 2) Identify the symbols and to familiarize themself of the map. 3) List Religions of the world's script culture. 4) Write dates of Graphic summary of phonetic sign A. 5) Identify trademarks and pictographs. 6) To compare the trademarks and pictographs. 7) To compare the branding iron and cattle branding marks of North America. 8) Familiarize themself of the symbols vocabulary. 9) To identify the rock drawings and compare them. 10) To recognize the Chinese and Latin characters.

#### Presentation Outline

Objective: To present to the Computer Graphic Design and Graphic Design students the information of Symbols.

I. <u>Introduction</u> \*Why is it that Symbols have always attracted people?

II. <u>History</u> \*'Halls of Bulls,' Dordogne, France \*Two elk, Jamtland, Sweden \*Rockdrawing, Bohuslan, Sweden

III. <u>Idea-writing</u> \*Chinese characters of Horse (archaic) & Horse (modern) \*Latin characters, From the hieroglyph to the modern phonetic character A.

IV. <u>Graphic summary of</u> <u>phonetic sign A</u> \*Organization chart of phonetic sign A

V. <u>The Worlds Script Culture</u> \*Early world's script culture

VI. <u>Pictograph</u> \*Transportation \*Sports \*National Park

VII. <u>Trademark</u> \*Branding iron during the 1800's, A keyhole mark, Ohio \*Branding iron of modern use during the 1900's, #6, Meadville PA. \*Cattle branding marks

from North America, during 16th and 18th century

\*Traders' signs of the 14th century

\*Pottery grid marks \*Craftsmen's mark from many centuries

\*Modern trademark based on concrete and abstract figures

\*Trademarks of letters and elements

\*Trademark of contrasting areas and abstraction

VIII. <u>Dimensions-arts</u> \*<u>Semantic</u>: a way to plan for a defined meaning of a visual communication.

\*<u>Syntactic</u>: the intended relationship in a visual communication to one another.

\*<u>Pragmatic</u>: a measure that refers to the relationship of visual communication to a user.

IX. <u>Glossary of Symbols</u> \*Combination Marks \*Devanagari \*Lettermarks \*Logos \*Minuscule \*Pictogram \*Pictographs \*Symbols \*Trademarks

X. Conclusion

## Presentation Graphics

Graphics to consider when designing this project: \*Simple background \*Computer Generate Design \*Photographs and Video camera images \*Rules and lines \*Graphic elements The design of the slide presentation lavout: \*13" Macintosh screen is used. \*35mm Slides is used. \*Helvetica bold typeface will be used for the title and Folio bold typeface will be used for head title and text. \*The title will be located centered and 36pt. \*The text is 22pt., 18pt., & 14pt. \*The structure will be used in a liner format.

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