

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

*Muse as Artist,
Selected Women Artists Past and Present*

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Introduction

The purpose of this thesis was to create an electronic book on the subject of women in the visual arts. The search for a paradigm in the design of such a "book" is currently being explored within the multimedia community of computer graphic designers. As new technology appears at an ever increasing rate, the need to disseminate information rapidly also increases. It is therefore imperative that graphic designers interject themselves into the process because it is through the designer that communication will flow to the prospective user. The quality of the design work will determine the quality of the communication.

The significance of this project was to combine technology, graphic design and art history in a new and meaningful way. Using a computer as a delivery system for an electronic book is not altogether new. Principles of design were applied to this animated interactive multimedia presentation. Electronic presentations open up a whole new realm of visual communication, beyond the printed page, that uses all the strengths of visual design combined with the strengths of electronic technology. Thus provides a more complete interpretation of the subject matter, an added dimension if you will.

Limiting factors include, time, the capacity of the machine itself, the software program and the somewhat scanty information about women artists, in particular, color images of them and their work. The effective use of time is a major consideration when working on a project an interactive multimedia project. How much time is spent on research, development of the idea, implementation and refining the product needs to be weighed carefully to ensure success.

The central processing unit of the computer is limited by the amount of memory installed. This poses a problem for the

*the
search
for a
paradigm*

Introduction

computer graphics designer in much the same way as an architect who must deal with the size of the space for the structure he/she is designing. As this book was to be image intensive, it required more memory than a book of text. The animation program used, although fairly complex, had constraints with regard to image palettes and play back time.

A final limitation was the lack of information about women artists, specifically western european since 1550. During the last twenty years a fairly large body of research material was written, but images of women artists and their work, especially in color, were scant and not always of high quality.

Assumptions made for this project were that the user would be at least college educated and familiar with the Macintosh environment. Art history as a discipline is generally taught at the university level and a user with some art history knowledge would benefit the most from the program. This is not to say that a user without the specific background would not gain from the experience. Knowledge of the Macintosh interface design and the ability to maneuver within the environment would make the experience more pleasurable, and the user could spend the time enjoying the program instead of discovering how it worked. Lastly, it was assumed that users would read and be able to follow the directions on the main introductory screen.

For the purposes of this report the following definitions apply:

Interactive multimedia- a presentation program that combines one or more of the following: graphics, animation, sound, video, and data base that allows the user to interact with the technology.

Memory- the amount of storage needed to hold the basic

*images
of
women
artists*

Introduction

instructions for the computer and to operate the software as well, the more memory the faster the machine will operate.

Software--the program written to perform on the computer whether word processing, animation or drawing program.

User interface design-- refers to the way the icons and text are arranged, shaped, and colored on the computer screen to provide a coding system for the user to access the program(s) in the computer.

CARL- an index to articles in over 10,000 multidisciplinary journal 1988- present

Hypermedia--can be used interchangeably with the word multimedia when referencing computer generated presentation programs.

Research

Research was conducted in the content areas of interactive multimedia, women in the visual arts and the history of the book form. Research material was selected to encompass a historical as well as current perspective. The first two received more attention than the last.

Articles surveyed on the subject of interactive multimedia covered the topics of design education, user interface design, evaluation methods for hypermedia, use of interactive multimedia for business presentations and its development for educational use. The list of articles was generated from a Carl

multimedia

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search.

"Discovery Through Experimentation, Art and Educational Computing in Secondary Schools" (Computer Graphics July 1991) and "What next? A provocative look at Curriculum, Creativity and Organization in teaching Artists and Designers to use Computers" (Computer Graphics , ibid.) both concern themselves with education. "Discovery Through Experimentation..." was written about the experience educators encounter as they try to incorporate the use of the computer in arts education. Various educators across the United States contributed to the article showing a diverse set of economic, cultural, and geographic factors encountered as computers are increasingly utilized as a teaching tool. "What next?..." was written about the need to train artists and designers in the use of the computer from the perspective of higher education. It discusses a number of problems, from the creation and implementation of computer training in the arts for artists and designers, environments that are conducive to learning, and questions about future directions of the computer culture.

Another article, "Menus, mice and mom" (Computer Language Sept. 1991) focuses on the design of user interface from three different points of view. The use of color was

Research

explored at length by David Bulman who concluded that color is used as a "surrealist carnival". Aaron Marcus, principal of a computer graphics consulting firm, divides user interface into five parts: metaphor, mental model of tasks, movement, look and feel. Marcus felt that designing interfaces is still in the Model T days and that in the future they will be customized by the user and may include 3D and images. Lastly, Donald Norman, an author, wants to see interfaces designed to make learning easier, improved use of color, and the idea that interfaces which help support the user's view of the task.

"An Approach to the Evaluation of Hypermedia" (Computers Education Vol. 17, No. 1 1991) printed in Great Britain is collaboratively written by three authors and discusses methods which may be applied to the evaluation of Hypermedia. The evaluation is based on six models: the classical experimental model, the research and developmental model, the illuminative model, the briefing decision-makers model, the teacher as researcher model and the case-study model. The authors point out in the article that hypermedia was a new learning environment that allows flexibility to both author and learner but is also potentially more difficult for learners to manage conceptually and practically. Therefore, an evaluation was necessary to determine if the learning that was taking place was done so in a manner appropriate for the learner.

"Hypermedia and the Study of Ancient Culture" (IEEE Computers Graphics and Applications July 1991) describes a project begun in 1972 to put all Greek literary texts on line; multilingual research capabilities were added at a later date. In the 1980's the Perseus Project was conceived and designed to complement the collection of literary material of the project mentioned above, adding essays, maps, drawings, motion

hypermedia

as

a

new

learning

environment

Research

video, color still images of Greek art and civilization. The author, Gregory Crane concludes with two challenges-that of meeting educational goals as effectively with hypermedia as with conventional methods and to determine what new questions and tasks are now possible.

“Atlanta Gets the Gold, Multimedia presentation helps Atlanta win bid as host city to 1996 Summer Olympic Games” (Computer Graphics World July 1990) . Details the creation of the presentation that was at least partially credited for helping Atlanta earn the right to host the games. A team of Georgia Tech designers used a variety of computers, including the Personal Iris, Sun and Sparcstation systems, and worked for a year to make the presentation. The presentation sounds spectacular acheiving the level of a movie production, complete with a star, lighting , props, sound, and music.

women,
in
the
visual
arts

The second topic researched was women in the visual arts. Articles and books surveyed encompassed feminist art history writings from 1971-1990. Combined, these articles and books gave an in-depth view of women's historical, cultural, and political relationships to the arts.

The research gave evidence that missing from the past were a large number of women artists who made significant contributions to art. New methods were created for examining the visual, social, and economic past that effected the lives of those artists. Femininism and Art History , is a compilation of articles which examine the benefits art history receives from discoveries and intellectual process from other disciplines. Vision and Difference, Femininity, Feminism and the Histories of Art discusses feminist interventions in the world of art. Another book, Women, Art and Power uses new methods of analyzsing visual images of the past to discover certain

Research

relationships in those visual representations.

Several articles about women and craft confirmed that the separation of craft from art is artificial. A social construct is often created to devalue work, in this case, art work that is associated with women. The articles, "Crafty Women and the Hierarchy of the Arts" from the book Old Mistresses; Women Art and Ideology , and "Art History and Its Exclusion: the Example of Dutch Art" from Feminism and Art History , both consider the chasm between fine art and craft. Judy Chicago's book The Dinner Party describes the complexities completing a large installation .

women

art

and

craft

The last group of articles read focuses on the problem of the visual representation of women, not only in the arts, but in other visual media as well. Finding a solution to the problem of changing the pervasive negative images of, and attitudes about, women, created by the patriarchy is the theme of the book Looking On. The individual articles speak to the main theme of the book but do so in a slightly different manner from each other. This series of articles is particularly appropriate for women artists expressing feminist content/substance, aesthetics and iconography for women in their work.

In summary, there are two major concepts a woman artist needs to consider before/while undertaking the lofty goal of re-defining representations for women: one, a clear understanding of how images are created and why; and two, there are a number of ways in which the dominant ideology can be disrupted. The methods and the subsequent results of those methods depend on the experience of the individual artist.

In the search for non traditional philosophies of book design the investigation lead to the discovery of avant garde

Research

book. Breaking the Bindings: American Book Art Now, explores the creative activity of book arts in the United States . It seeks to reaffirm the value of the printed book, but also to recognize the changing conditions of the world, especially regarding technology, and the changing concept of the book in relation to the new technology. A team of faculty members and graduate students from the University of Wisconsin, organized a show of artist's books from around the country.

Avant garde books is the term used to describe the non traditional book form explored by artists prior to 1945. An exhibition held at Franklin Furnace (New York , 1989) for which Avant Garde Books 1900 - 1945 was published, chronicles the creation of innovative books by the constructivists, surrealists, symbolists, dadists and others. The author discusses the philosophical foundations for these books with respect to each movement. In general, "the principle strategy of the avant garde movement was to change the relation between sign and reality, and thus to generate new meaning and to change reality" (page 6). Many visual examples were used to illustrate the points made in the publication.

Lastly, The New Cranbrook Design Discourse is a book that combines the use of new technology with a "philosophy based on playful experimentation with traditional craftsmanship and styles" (page 6). The book itself was produced on a Macintosh computer and the text arrangement reminiscent of the experiments by the constructivists, surreallists and others mentioned in the Avant Garde Book 1900 - 1945.

The research discussed above was both informative and stimulating with regards to the development of this project.

creative

book

arts

Procedure

Conceptualization of the project and the procedures used to produce the final form of the electronic book are discussed below. A philosophical foundation was developed from the literature, and an ideal project was then conceptualized and outlined. The design parameters- both visual and technical- were determined; the project was constructed and then refined for presentation.

Philosophically, the project possessed two areas of thought. One: that the use of technology was not to merely show what it could do, but how it could be utilized to enhance human understanding of a particular subject matter, such as women artists, and second: was to use the technology to show a relationship between women and the history of art that could change the perception of woman as artist, place art next to craft, and juxtapose contemporary artists (living) with their predecessors, thereby showing a legacy from the past and perpetuating it for the future.

*the
relation
between
sign
and
reality*

An ideal project was one that included an animated introduction/title page, instructions for using the project, a brief philosophical statement to set the tone of the project, several chapters about women artists from the past to the present, a chapter that showed stereotypical imagery of women, and a chapter about one or more contemporary artists that would include their vita, work, and a live video interview. The project also needed to possess a glossary, bibliography and credits.

Design objectives were then decided upon. The goal was to create an animated interactive electronic book that utilized state of the art technology to present the subject matter in a manner that served the subject itself. In addition, animation techniques were to be applied in such a way as to suggest additional communication. For example, the screen dissolves were meant

Procedure

not only to add visual interest to the project but to suggest a coming out of the past, out of the shadows in the way that women artists have revealed themselves in recent history. The structural design was kept as simple as possible to eliminate potential problems and to focus on the content of the book and its visual interface. The structural design allowed for expansion or editing as time permitted.

The technical parameters of the project were to employ a Macintosh II computer with a 13" color monitor, key board and mouse. Other equipment utilized for the production phase of the project included color flatbed scanners and film scanners. It was decided that all of the project would be shown or accessed from the Macintosh with no peripheral equipment.

Next, the specific content of the chapters was selected. The past was to go only as far back as 1550, because information about women artists was very limited. The present would extend to 1992. Women artists were identified from each century, and one of those identified was chosen to represent that century. Criteria used for the selection process included the significance of the artist to women's artistic heritage, the artist's influence on others, and the availability of information and imagery of and by the artist. Portraits of the selected artists and images of their work were then located. To present these women artists in a context that would appear logical and to illustrate the fact that they were not just exceptions but in fact, part of a larger heritage, a timeline was designed to place these women historically among their peers, of both men and women. The inspiration for this timeline came from the one designed for the George Eastman House that had a verticle format, which applied nicely to the format required on the Macintosh screen. By placing the timeline down the left hand side of the screen the remainder of the screen was available to

*an**animated**interactive**electronic**book*

Procedure

show art work and some textual information. (Appendix)

Scanning the images into the computer was the most time consuming aspect of the physical production of the project. Each image was scanned using a flatbed or film scanner. All of the images from books were scanned using a Microtek color flatbed scanner or the Agfa Focus Color Plus flatbed scanner. Images brought into the computer from the Microtek needed "despeckling", a filter function in PhotoShop (a photo retouching program) that reduced the moire pattern which often appeared when scanning from halftoned images. The Agfa scanner had a "descreen" option in a dialog box that allowed for the removal of the moire pattern during the scanning process. Color slides were scanned using a Nikon LS 3500 film scanner. Once the images were scanned they were cropped, resized, color balanced, adjusted for brightness and contrast, and reduced in terms of resolution in order to save memory space. The color space was changed from RGB to Indexed color to reduce the amount of memory required.

The images were brought into MacroMind Director (an animation program) and each chapter was constructed using a grid. Continuity was provided by using color coding, alignments, transition patterns and the consistant placement of elements, such as rule lines and the navigational button bar.

Each of the chapters (centuries) were linked to each other and were accessed by the portrait icons located at the top of the timeline (Appendix). Movement within the century was accomplished by clicking on the portrait of the woman artist whose work the user wished to view; her portrait and very brief vita would be revealed. The user could then view a number of art works by that artist by using the navigational button bar located in the lower right hand corner of the screen. In the case of the 17th -19th centuries there was one artist per

*a
timeline
provides
structure
and
context*

Procedure

century and they were signified by a light colored outline around the portrait of the artist.

The introduction screen was designed to include a philosophical statement and instructions for the program. The last parts of the project to be implemented were the title and the title animation. The title was the most difficult part of the whole project. What to say and how to say it was extremely difficult to decide. Finally, "Muse as Artist, Selected Women Artists Past and Present", was selected to signify the problem of woman as both subject and artist. Images that illustrated the concept were selected and then animated.

*muse**as**artist*

Results

The final product was completed as imagined, with most of the desired content and met the goals of the thesis proposal.

The main problems that arose were related to the software package used for delivery. For example, the black and white images of the women artists required one color palette and the color images of their work required another, but the program was only capable of showing one at a time on the screen. A compromise was reached to subordinate the black and white to the color palette, resulting in less than wonderful black and white images.

Another problem that required experimentation was the blending of the colors used in the timeline to create colors that would enhance the color images of the art work shown. The "blend" feature for the cast members (individual elements of each screen) in MacroMind Director (the animation program used to create the project) was utilized to achieve the final results. However choosing a black background made for interesting results when the blending took place (the yellows turned green and so forth).

Scaling the images to fit the space allowed caused some of them to develop a square grid pattern that was noticeable. In some instances the images were rescanned and resized; in others the scaling is still visible. For example see the portrait of Mary Cassatt in the 19th century timeline. (Appendix)

A problem not apparent in the color print-outs, found in the appendix, was the use of the different modes of creating typography in the animation program. The headlines and subtitles were created using a paint program. The body text was made using the text box which relies on the fonts installed on the computer for display. Using the project on another machine becomes a problem- in this case, if the fonts are not available on another computer the text will be shown as the

*title**page**animation**completed**last*

Results

default text, which changes size, spacing and readability. Each method used to produce type has its advantages and they were utilized for those purposes.

Finally, the live video that was originally to be used in the 20th century chapter of the book was not integrated because the programming language sent with QuickTime (a software package that is capable of bringing live video segments into the computer) was not accurate. A number of people on campus tried to get it to work and were unsuccessful. Consequently, the videos were brought into the computer, but not included in the book, which was a disappointment.

overcoming

the

technical

difficulties

Conclusion

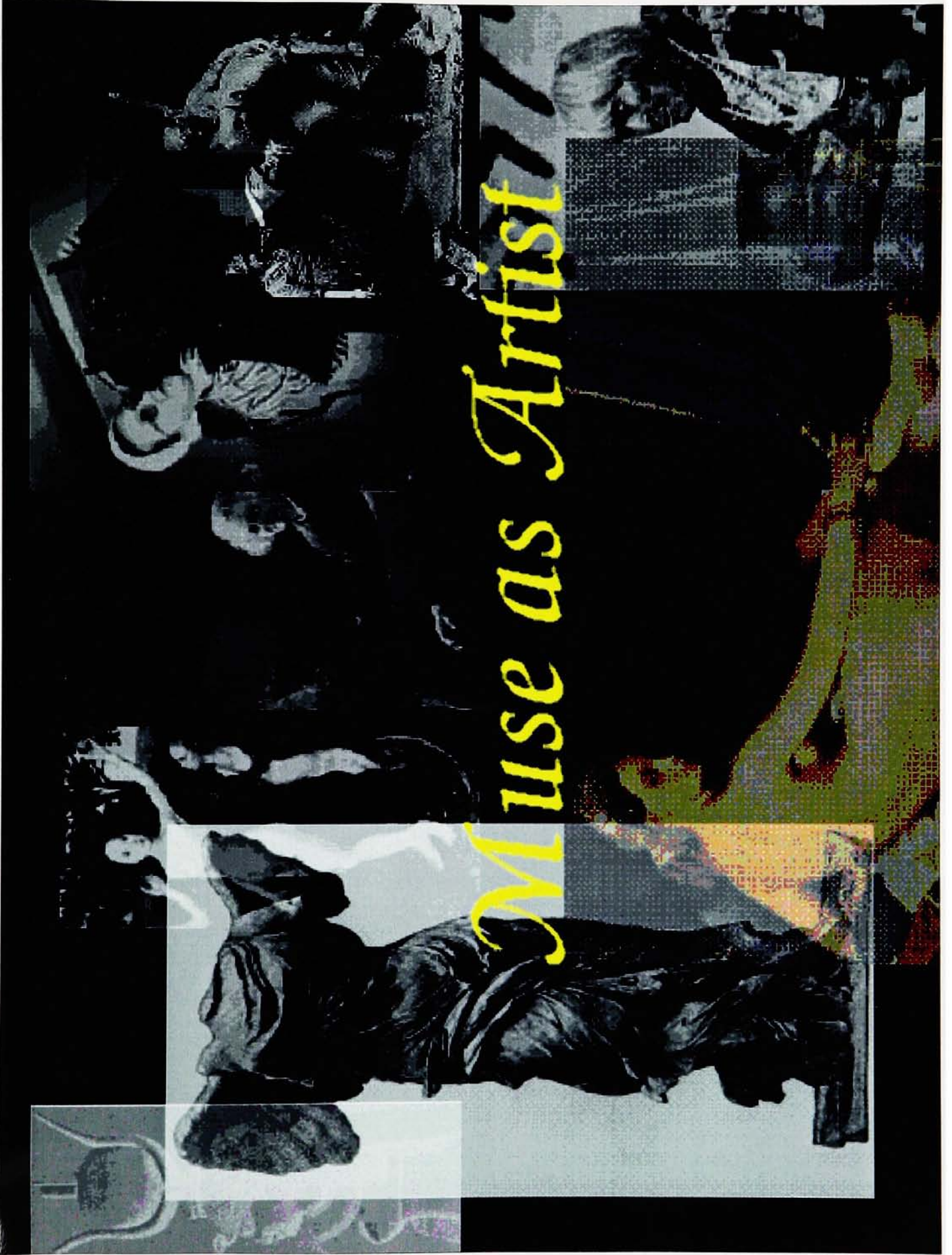
In conclusion, the final project was satisfactorily completed. It was not as extensive as originally envisioned, but met most of the conceptual and design goals established in the beginning of the project. Producing interactive multimedia projects on the computer is still in its infancy, this was a fairly successful experiment with the technology. The potential exists for some very exciting design work to take place. As the software and the hardware become more sophisticated and less expensive, the real rewards of this technology will become available to the people for whom it was designed.

It is my belief that much more work needs to be done by designers and developers, conceptually and visually, before interactive multimedia programs can become a remedy for educational shortcomings. The widening chasm in America between the haves and have nots, makes the position of the computer in our society ambiguous. On the one hand computers were developed to enhance human performance, and yet, due to their cost, they are inaccessible to the vast majority of people. While the spread of computers has been phenomenal, comparatively speaking, relatively few have access to them, except through their places of work.

Another aspect of computing to ponder is its ultimate effect on society. Designers and artists are using it as a tool today with mixed success, that is the work often looks "glitzy" while sacrificing content. Will this tool, like the typewriter, have unanticipated effects on the work environment? Will it cause ill health in those who spend untold hours in front of its screen? These and other questions probably will not be answered for years, but they are the kinds of questions that need to be asked as the world of multimedia evolves.

*a
remedy
for
educational
shortcomings ?*

Muse as Artist



Introduction

The purpose of this project is to combine technology, graphic design and art history in a new manner. The principles of design are applied to this interactive multi media presentation in an attempt to show a paradigm for disseminating information in a more complete interpretation.

Art history is the academic discipline that develops a chronology of stylistic progression of the so-called fine arts of painting, sculpture and architecture that represents predominantly white male artists. However, women have produced art despite the fact of their omission from histories, and institutional and social constraints on their art training. This art history, if you will, is dedicated to those women of substance who pursued their goals despite the odds.

The icons shown on the left are used throughout this interactive program to allow the user to "navigate" between the centuries represented, the artists represented and the art work of each artist.

The first icon stands for this "main menu" and by clicking the cursor on it, you will return to this screen.

The left and right facing portraits stand for moving backward (left) or moving forward (right) with in the program.

The white outline indicates the artist(s) that are featured in each century.

And the last icon is a series of "buttons" that represent the four centuries included in this program. Clicking on one of the century buttons will take you to that century.

Purpose

Art History

Instructions



17C

18C

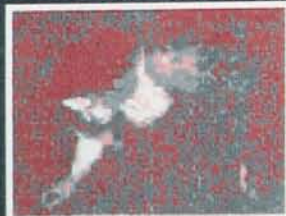
19C

20C

17th Century



Artemisia Gentileschi



Artemisia Gentileschi
1593 - 1653

Rubens
1577 - 1640



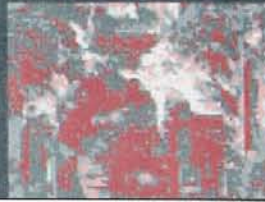
Clara Peters
1594 - 1657



Judith Leyster
1609 - 1660



Elizabetha Sirani
1638 - 1665



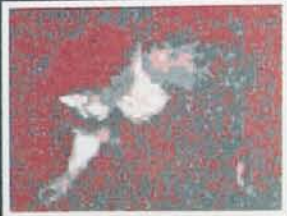
Rachel Ruysch
1664 - 1750

Bemini
1598 - 1680



Gentileschi of Roman birth, daughter of a painter, practiced her art in Florence. She challenged the humanist constructions of feminine education and deportment created during the Renaissance by becoming an artist. Considered a Caravaggisti, her paintings focus on the heroic aspects of womanhood. Significantly, she presented herself as the allegory of painting in a self portrait thus doubling the meaning of woman as artist. (Shown above)

17th Century



Rubens
1577 - 1640



Clara Peters
1594 - 1657



Judith Leyster
1609 - 1660



Vermeer
1632 - 1675

Elizabethta Sirani
1638 - 1665



Rachel Ruysch
1664 - 1750

Bemini
1598 - 1680



Susanna and the Elders 1610



18th Century



Angelica Kauffmann



Rosalba Camerra
1675 - 1757

Boucher
1703 - 1770



Angelica
Kauffmann
1741 - 1807



Adelaide
Labille-Guiard
1749 - 1803



Anne
Seymour Damer
1748 - 1828

Fragonard
1732 - 1806



Elisabeth
Vigée-Lebrun
1755 - 1842

David
1748 - 1825



Kauffmann was the first woman painter to challenge the masculine monopoly over history painting exercised by the Academicians of the day. Born in England, she traveled to Italy to study painting and in the process met several influential English painters. She developed a Neoclassical style of painting that she helped introduce to England after her many years in Rome. Her work was widely known during her lifetime through the dissemination of engravings.

18th Century



Rosalba Carriera
1675 - 1757

Boucher
1703 - 1770



Angelica
Kauffmann
1741 - 1807



Adelaide
Labille-Guiard
1749 - 1803



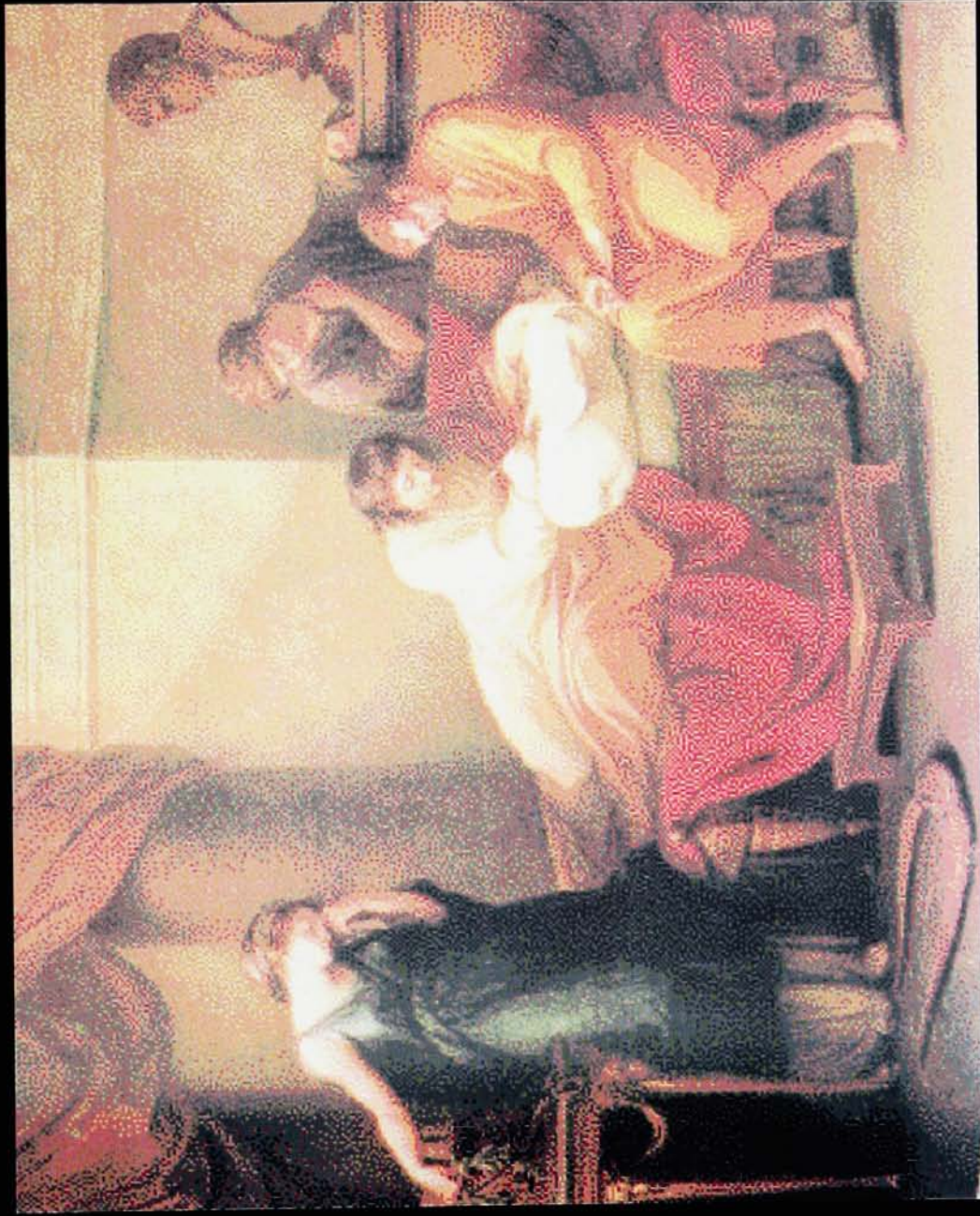
Anne
Seymour Damer
1748 - 1828

Fragonard
1732 - 1806



Elisabeth
Vigée-Lebrun
1755 - 1842

David
1748 - 1825



Virgil Writing His Own Epitaph at Brundisium 1785 59 1/2" x 82"



19th Century



Mary Cassatt



Rosa Bonheur
1822 - 1899

Whistler

1834 - 1903



Berthe Morisot
1841 - 1895

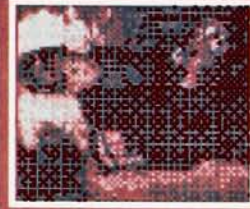


Edmonia Lewis
1845 - after 1909

Ingres
1781 - 1867



Elisabeth Ney
1833 - 1907



Mary Cassatt
1844 - 1926

Renoir
1841 - 1919



Cassatt, an upper middle class American began her art training in the United States, then moved to Paris to complete that training. She was very much a part of the Impressionist movement and was a friend of Degas. Although she is mainly known for her paintings of women and children, she also painted portraits and genre scenes and created a number of color etchings.





19th Century



Mary Cassatt



Rosa Bonheur
1822 - 1899

Whistler
1834 - 1903



Berthe Morisot
1841 - 1895

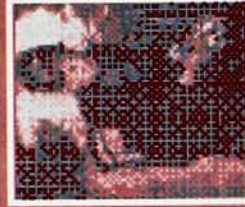


Edmonia Lewis
1845 - after 1909

Ingres
1781 - 1867



Elisabeth Ney
1833 - 1907



Mary Cassatt
1844 - 1926

Renoir
1841 - 1919



Young Woman in Black 1883





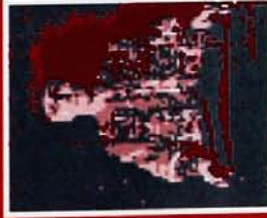
20th Century

Sonia Delaunay

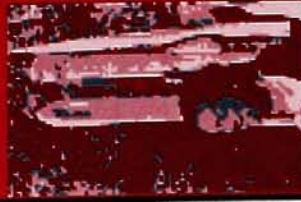


Sonia Delaunay
1885 - 1974

Picasso
1881 - 1973



Louise Nevelson
1899 - 1988



Barbara Hepworth
1903 - 1975



Frieda Kahlo
1907 - 1954

Erancusi
1876 - 1957



Cheryl Leo-Gwin
1942 -

Dali
1904 - 1989



Delaunay, born in Russia, moved to Paris to practice her art. She helped develop Orphic Cubism, an offshoot of the cubist movement. She applied her theories about color to her textiles and embroideries and eventually opened a couturier designing clothes based on those theories. The paintings in this chapter show her sense of style and color.



20th Century



Sonia Delaunay
1885 - 1974



Louise Nevelson
1899 - 1988

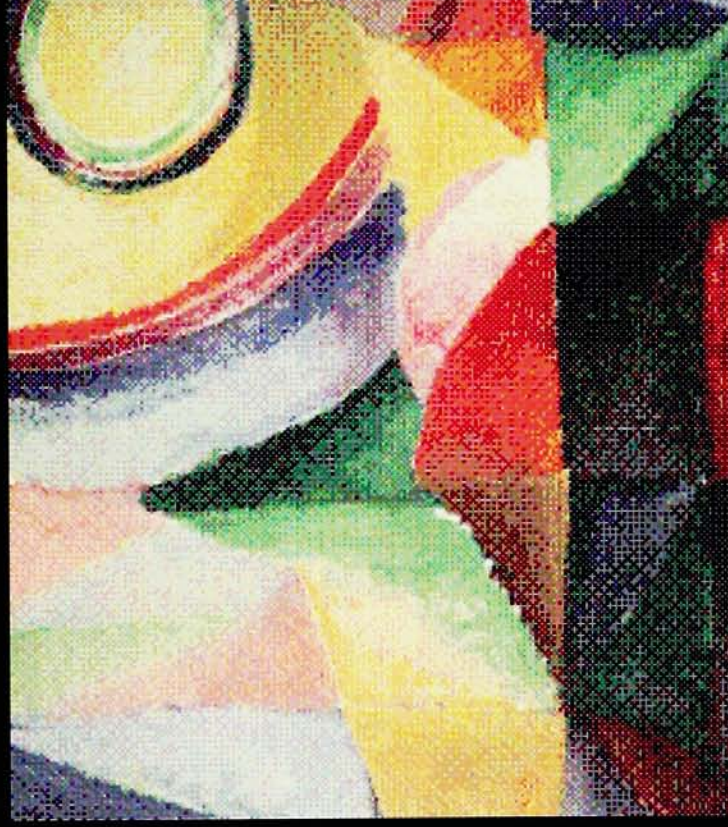


Frieda Kahlo
1907 - 1954



Cheryl Leo-Gwin
1942 -

Dali
1904 - 1989





20th Century

Louise Nevelson

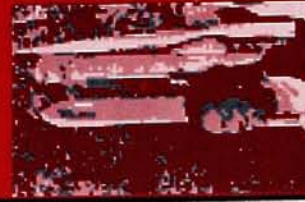


Sonia Delaunay
1885 - 1974

Picasso
1881 - 1973



Louise Nevelson
1899 - 1988



Barbara Hepworth
1903 - 1975



Frieda Kahlo
1907 - 1954

Brancusi
1876 - 1957



Cheryl Leo-Gwin
1942 -

Dali
1904 - 1989



Nevelson, born in Russia and raised in the United States declared early in life that she planned to be a professional sculptor. Her assemblages of found wooden forms painted black gave her international recognition during the late 60's. She is considered to be one the foremost sculptors of the 20th century.



20th Century

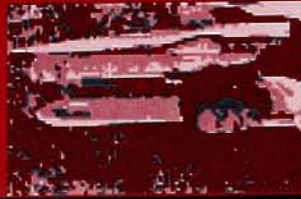


Sonia Delaunay
1885 - 1974

Picasso
1881 - 1973



Louise Nevelson
1899 - 1988



Barbara Hepworth
1903 - 1975



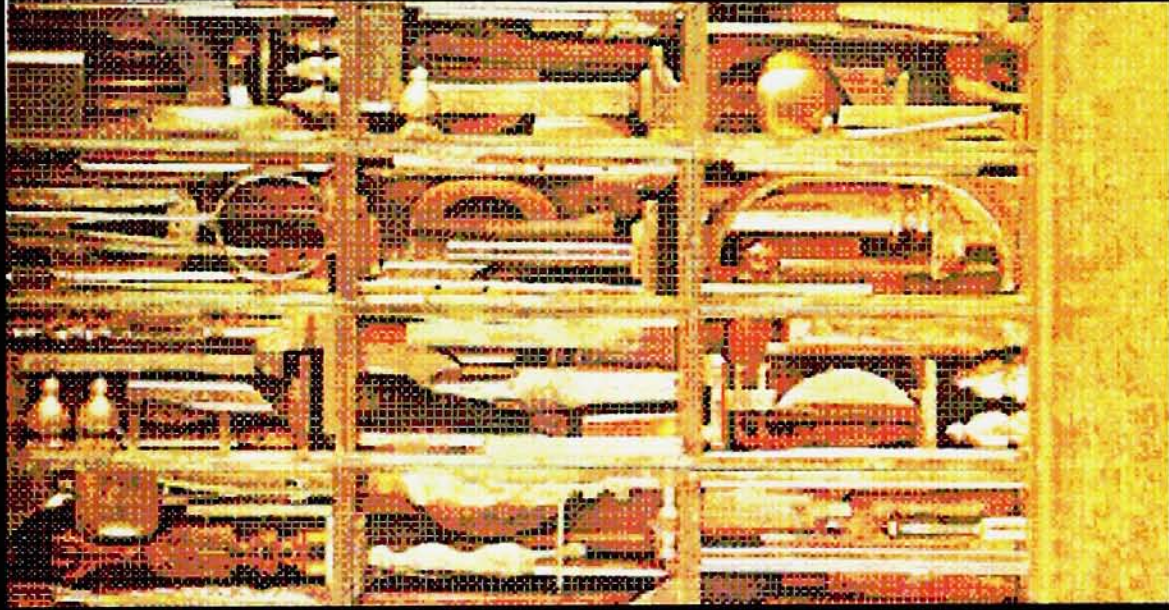
Frieda Kahlo
1907 - 1954

Brancusi
1876 - 1957



Cheryl Leo-Gwin
1942 -

Dali
1904 - 1989



Gold Dawn 1962

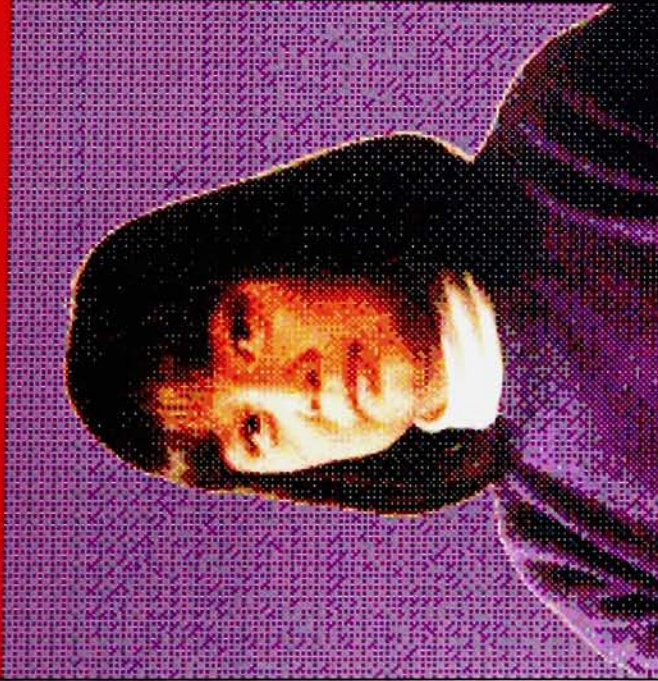


Cheryll
Leo-Gwin



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Brief Exhibition Record



Cheryll Leo-Gwin is a practicing artist from Redmond, Washington. She earned an MFA in metals from the University of Washington in 1977 and taught at the college level for several years before going into industry and then on her own as a freelance artist. Cheryll's work bridges the gap between fine art and craft in that it is both. Her architectural size airbrushed enamels are breaking new ground for the medium.

Solo Exhibitions:

- 1990 Art Center Gallery, Seattle Pacific University, Seattle WA
- 1987 Corvallis Center for the Arts, Corvallis, OR
- 1984 King County Arts Commission Gallery

Invitational Shows:

- 1991 100 True Stories, Galleria Potato Head, Seattle, WA
Collaborations, Tacoma Art Museum, Tacoma, WA
Celebrations and Ceremonies, Security Pacific Bank Gallery, Seattle, WA
- 1990 A Look Ahead, Pacific Enameling Symposium, Seattle, WA
Color and Image, Gallery Association of New York, NYC
Enamels '90, Liberty Gallery, Louisville, KY

Group Shows:

- 1990 Bumbershoot, Seattle, WA
Artsplash, Redmond, WA
- 1989 National Enamelists, Taft Museum of Art, Cincinnati, OH
- 1987 Kirkland Creative Crafts League, Kirkland WA
- 1986 Crafts '86, Tacoma Art Museum, Tacoma, WA



Wing Luke Museum Mural
Enamel on steel 4'x12'

Appendix

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