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New Media, New Museum Practices?
Museums Respond to the Challenges of Digital Art

Marisa Morigi
Jürgen Heinrichs, Ph.D., Advisor

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Introduction

In March of 2000, the Whitney Museum opened its 70th Biennial survey of American art, the first ever to include Internet-based artworks. The Biennial was posed to be a milestone for digital artists, an event that could finally legitimize the new artistic medium and pave the way to acceptance by the mainstream arts community. The team of curators chose the work of nine Net artists to represent the diversity and broad range of approaches to Internet art. Some sites consisted almost exclusively of text, while others were collages of images and sound. The works were exhibited using three different presentation strategies. There was a giant screen in the main gallery that allowed visitors to interact with the works in a public setting, a group of computer terminals available in the gallery for visitors to interact on their own with the Web sites, and links to each URL on the Whitney's homepage that people could access at home.

Despite the curators' honest attempts to integrate Net art into the Biennial, the show was widely criticized for its poor display and limited opportunities for individual interaction with Net art. Users experienced a myriad of technological difficulties when trying to view the Internet art at the museum, from having to reboot the computers to security lock issues. Some visitors simply checked their email and made no attempts to view any of the Internet art. At times, a range of technical problems prompted the closure of the gallery with the computer terminals.¹ The challenges inherent in presenting works of new media in a public space have thwarted acceptance of this new medium and confounded museums, which are still grappling with the issue.

¹ Michael Geisert, *In the Driver's Seat: Internet Art*, Memos from the World, <http://www.arts4all.com/newsletter/mfw.asp?mfwid=44>, 22 November 2003.

To what extent has new media art challenged and altered traditional museum practices in the areas of curating, collection management, exhibition design, educational programs and preservation efforts? More than three years have passed since the Whitney's 2000 Biennial. Have museums risen to the challenge posed by new media art? New media art, usually defined as art that uses technology in some way, either to create it or as a tool to reach a final artistic product, has continued to expand. Digital art, Net art, computer art, and other forms of electronic art all fall under the definition of new media. Many art museums in Europe, the United States, and other countries have accepted works of new media into their collections. The ephemeral, intangible, and variable nature of new media art makes it very difficult to own, exhibit, store, interpret, and preserve works according to established museum standards. Have museums been able to create new policies or adapt old practices in order to work with new media art? Or have museums simply been applying long-standing methods of exhibition, interpretation, and preservation to the works of new media? New media art is pushing museums to question not only their standard exhibition, collection, and conservation practices, but commonly held beliefs about art itself. Museums must develop creative and innovative methods to solve some of the dilemmas inherent in this evolving art form.

I. New Media Art: History and Definition

Though it is only recently that the world has fully embraced the electronic age, it has been a long time in the making. The history of new media can be traced back to the development of the photographic process in the 19th century. In 1839, Louis Daguerre introduced a revolutionary new process of creating an image called the *daguerreotype* in Paris. At first, mostly buildings and landscapes were photographed but as the technique improved, people clamored to have their portraits taken. The media frenzy had begun. Never before had people been able to see a reproduction of reality in such an immediate format. The impact on society was palpable and direct. In 1833 Charles Babbage began to design “the Analytical Engine,” an early form of a computer that used punch cards to enter data and instructions. The information was saved in the engine’s memory. The “Analytical Engine” was also capable of doing mathematical equations. Though this machine had great potential, it was never fully completed and it would be awhile before the computer had any impact on society. Despite the fact that the computer did not hit the market until much later, it is important to note that the development of modern media (the photograph), and the development of the computer began at approximately the same time.² According to Lev Manovich, these two inventions began the movement towards computerized machines and as a result, modernized society. Malevich states the importance of these two developments in terms of media, “Both media and computing machines were absolutely necessary for the functioning of modern mass societies. The ability to disseminate the same texts, images, and sounds to millions of citizens—thus assuring the same ideological beliefs—was as essential as the ability to keep track of their

² Lev Manovich, The Language of New Media. (Cambridge, MA: MIT Press, 2002), 21-22.

birth records, employment records, medical records, and police records.”³ The printing press, photography, film, radio, television, and other forms of media made disseminating the same information to millions of people a possibility. The development of computers made record keeping and storage possible, essentially creating modern society. Developments in media technologies advanced rapidly into the present and now impact every aspect of our society, including the production of art.

New media art is an all-encompassing term used to describe any art created with a digital form of technology such as computer art, Internet art, digital audience interactive pieces, digital video, sound art, digital photographs, and paintings, drawings, and sculptures first laid out on a computer. According to Christiane Paul, adjunct curator of new media arts at the Whitney Museum, “The employment of digital technologies as a medium implies that the work is produced, stored, and presented in a digital format and makes use of the inherent possibilities of that medium.” Digital art can be interactive, navigable, participatory, adaptable, and customizable to the user, all characteristics that differentiate it from other mediums. Digital art can manifest itself in many different forms, from an interactive installation piece, to a work available solely on the Internet.⁴

New media art and the theories it is based on did not develop in an art historical vacuum. Much of the art of the 20th century is characterized by the artist’s desire to question traditional artistic mediums. Braque and Picasso started introducing everyday items like rope and newspaper into their works in the early 1900s in order to free themselves from the boundaries of the canvas. In 1917, Marcel Duchamp unveiled one of the most controversial of his “ready-mades,” a urinal signed R. Mutt, and defied the

³ Manovich, *Language*, 22.

⁴ Christiane Paul, “Renderings of Digital Art,” *Leonardo* 35, no. 5 (2002), 472.

accepted concept of what is considered art by introducing everyday, common objects as art in and of themselves. Many modern art movements since then have focused on more radical and unconventional artistic methods and mediums, including abstract art, dadaism, pop art, minimalism, conceptual art, process art, performance art, earth and site works, installation art, and most recently, new media art. Many new media artists are not trying to produce an end product but rather they view themselves as facilitators of an evolutionary process in which there is not a final work that can be physically sold, collected, owned, or preserved.⁵ A quote by Hans Magnus Enzensberger sums up the ideals of the new media artists, "The new media are oriented toward action, not contemplation; toward the present, not tradition. Their attitude to time is completely opposed to that of bourgeois culture, which aspires to possession."⁶ New media art, especially Internet art, is based upon ideals of accessibility, interactivity, sharing, and collaboration. Because of these characteristics and others like variability, reproducibility, and ephemeral ness, new media art has been compared to earlier artistic movements. Some have compared new media art to Fluxus, the 1960s avant-garde movement, because both have time-based components and include an element of unpredictability. In some ways new media art is like video art because it can be displayed on screens and is time based. Conceptual art is an obvious comparison as new media art also rejects the idea of art as a unique and valuable object worth collecting.⁷ There is no final work to collect, preserve, or own. Museums are shifting their role from presenters of "art as artifact" to

⁵ Michael Rush. New Media in Late 20th Century Art. (London: Thames and Hudson, 1999), 7-8.

⁶ "The Constituents of a Theory of the Media," in John Thornton Caldwell, Electronic Media and Technoculture, Rutgers University Press, quote reprinted in "From Computer Art to Digital Art to New Media," Lucy Petrovich, Dept of Media Arts, (University of Arizona, 2000), 1.

⁷ Susan Morris, "Museums and New Media Art," The Rockefeller Foundation, 2001, 10.
http://www.rockfound.org/Documents/528/Museums_and_New_Media_Art.pdf.

distributors and preservers of “art as information.”⁸ The museum community must rethink how to own and control art that was not specifically made for the purpose of ownership. The swift expansion of technology to all edges of the globe has had a profound effect upon the art world and new media artists have embraced all the possibilities electronic media offers.⁹

⁸ Allison Cohen, “The Art of the Net.” Legal Times (June 17, 2002), 2.

⁹ Rush, New Media, 7-8.

II. History of Net Art

The form of new media that poses the greatest challenge to museums is Internet art. Net art refers to art made specifically for viewing and distribution over the Internet. It can be programmable code or digital media files of video, audio, and text. The biggest difference between Net art and traditional art is that Net art is interactive. Its entire goal is to invite participation from viewers. Net art is not a static physical object. It cannot be stored on a hard drive much less in a physical storage facility. It is a constantly evolving art form and is therefore very vulnerable to technological change.¹⁰

Artists began using the term “Net.Art” to describe Internet based art back in 1995, the year a Net art community began to take shape. Internet artists wanted to take characteristics specific to the Internet, like immediacy and immateriality, and apply them directly to their work. They were interested in ideas of universal accessibility and borderless communication. The Internet gave artists the ability to network and discuss amongst each other without being under the authority of any overriding art world institution. Some of the first internet mailing lists developed during the years between 1994 and 1998 including Rhizome (www.rhizome.org), one of the first sites dedicated to new media art, Syndicate (www.v2.nl/syndicate), a list about Eastern European politics and culture, and Nettime (www.nettime.org), a site that gained popularity with the techno culture intelligentsia.¹¹

The Internet remained a relatively uncluttered space until the mid 1990s. But in 1994 and 1995 Net art and online artist communities multiplied and flourished. Three

¹⁰ Cohen, “The Art of the Net.”

¹¹ Rachel Greene, “Web Work, A History of Internet Art,” *Artforum International* 38, no. 9 (May 2000), 163.

important and influential sites went up in those years, Åda'web, Irational.org, and Jodi.org. Åda'web, organized by the curator Benjamin Weil, now the curator of media arts at the San Francisco Museum of Modern Art, brought together artists not accustomed to working in new media to experiment with online tools and technology. Åda'web was eventually passed on to the Walker Art Center in Minneapolis, MN, which now maintains it on its website at adaweb.walker.org. Heath Bunting, a British systems analyst interested in low tech, simple Internet works that could still be considered subversive, created Irational.org. In his first work, called Kings Cross Phone-In, he posted the phone numbers of 36 public phones in and around the King's Cross train station in London on a web page and invited viewers who saw the page to call these phones randomly at anytime and on any day. The goal of Kings Cross Phone-In was to cause a mild interference that would disrupt the daily routine of commuters through the train station. The work reconfigured public space both acoustically and socially as people noticed the ringing, answered the phone, and communicated with strangers across the globe.¹²

The third major website, Jodi.org, now enjoys something of a cult status to those actively involved in the world of media arts. The site began as a collaboration between two computer programmers, Dirk Paesmans and Joan Hemmskerk. Jodi.org exposed the computer programming of a web page that is usually hidden to the viewer. The duo based Jodi.org on the premises of computer hacking, so if a visitor entered something into the site's interactive boxes, whatever they entered would simply get scrambled up and

¹² Greene, "Web work," 164.

thrown out again all over the viewer's screen, as if some computer glitch had occurred.

The site can still be accessed at www.jodi.org.¹³

During 1997 and 1998, Net art as an artistic movement continued to expand, and artists diversified and upgraded their projects available on the Internet. Mark Napier created *Digital Landfill*, a trash dump that shreds data and web pages, available at www.potatoland.org/landfill/. The Guggenheim commissioned Shu Lea Cheang, a female Net artist, to create the Guggenheim's first website www.brandon.guggenheim.org in 1997. The site, which evolved over the course of the year, was based upon the life of Brandon Teena, the subject of the movie *Boys Don't Cry*, a biological female who lived her life as a male, and was raped and killed as a result. By 1999, Net artists Wolfgang Staehle, Tamas Banovich, Marie Ringler, and Rachel Baker among others began to receive a plethora of speaking invitations to conferences dealing with issues involving the Internet. The Dia Center for the Arts, considered a forerunner in promoting new media arts, had already commissioned artists to create works for its website by this point. The Walker Art Center was another early participant in the new media scene, presenting web works on its website and commissioning new works. In the year 2000, Net art was included in the Whitney Biennial for the first time ever. As Net art has found its way into contemporary institutions and the rest of the art world at large, it has lost some of its original anti-establishment feel.¹⁴

¹³ Ibid., 165.

¹⁴ Ibid., 190.

III. New Media in Museums

As with earlier artistic movements like photography and more recently video art, many museums initially resisted confirming the value and worth of new media art, feeling safer in holding on to long-standing traditions of collecting established art genres. In general, museums tend to be conservative in nature. As non-profit organizations with broad and diverse audiences upon whom the museum's livelihood depends, they must make decisions based upon many different factors and considerations. But now that digital art has entered the mainstream, museums have begun to warm up to the technological revolution and are now racing to collect in this area. In Karlsruhe, Germany, an institution devoted exclusively to media arts opened in 1997 at the Zentrum für Kunst und Medientechnologie (ZKM or Center for Art and Media Technology). Other centers for media arts exist at MIT in Cambridge, MA, the Media Z lounge at Manhattan's New Museum of Contemporary Art, the InterCommunication Center in Tokyo, and Ars Electronica in Linz, Austria. European art centers in Germany and Austria were among the first to commission digital works, but American museums are catching up. New artistic formats are gaining popularity and credibility among collectors and institutions alike. The Whitney was the first museum to buy a work of web art in 1994; Douglas Davis's *The world's first collaborative sentence*. The first museum to actually commission a digital work of art was the Dia Center for the Arts which had the artist Tony Oursler, the performer Constance de Jong, and the composer Stephen Vitiello create *Fantastic Prayers* in 1995.¹⁵ Other modern art institutions like the Guggenheim,

¹⁵ Ossian Ward, net.art@museums, The Art Newspaper, <http://www.theartnewspaper.com/news/article.asp?idart=5391>, 22 November 2003.

the San Francisco Museum of Modern Art, the Museum of Modern Art in New York, and the Walker Art Center have all commissioned and purchased works of digital art.¹⁶

Many consider the year 2001 to mark the coming of age for new media art in American museums. In the spring of 2001, the San Francisco Museum of Modern Art (SFMOMA) launched *010101: Art in Technological Times* on its website. The intention was to showcase five original Web commissions that explored the impact of technology on the art scene. An expanded, corresponding real-world component of the exhibition opened in the museum galleries a few months later. The exhibition also featured artists working in more tangible mediums but their work still reflected the theme of the show, the new digital culture. Also in 2001, the Museum of Modern Art (MoMA) in New York introduced new media artist Tony Oursler's *TimeStream* on their website, and the Whitney Museum of American Art showcased *BitStreams* and *Data Dynamics*, both exhibitions of digital and new media art. The museums mounted these exhibits not as a one-time homage to digital art, but as a way of showcasing their commitment to collecting and exhibiting new media art. That same year, the Smithsonian American Art Museum put on view on its website three online art projects that had won the museum's first ever New Media/New Century award. Other art museums around the country were undertaking similar forays into digital and new media projects.¹⁷ 2001 was also the year the Guggenheim held *Preserving the Immaterial: A Conference on Variable Media*, to address issues of new media preservation and conservation. A number of museum collaborations, co-ventures, and consortia were announced as well, with the purpose of sharing technology, equipment, and services, or creating portals to on-line art resources.

¹⁶ Carly Berwick, "The New New-Media Blitz." *ArtNews* 100, 4 (April 2001): 116.

¹⁷ Susan Delson, "Wiring into a Changing Climate: Museums and Digital Art," *Museum News*, March/April (2002), 51.

It seemed as if the art world had fully accepted this new medium and were committed to bringing it into the public eye. With this increase in acquisitions of digital art lies the inevitable reality of figuring out how museums will manage the preservation and interpretation of these works.¹⁸

¹⁸ Cohen, "The Art of the Net," 1.

IV. Challenges Inherent in Digital Art

“The characteristics of certain kinds of artistic production, particularly interactive media art structured for a temporal event rather than a permanent presentation, constitute a challenge to the museum to experiment with new exhibition methods in order to deal with an ‘electronic avant-garde.’”¹⁹ The intangible, ephemeral, and reproducible characteristics of new and variable media art pose endless challenges to the staff of museums that have embraced the medium. How can an intangible work of digital art be bought, sold, and owned? How should the work be displayed and where can it be exhibited? How can curators interpret these complicated works for the public? How can these works be preserved and what exactly is there to preserve? A work of Net art now owned by the Guggenheim Museum, *Net Flag*, by Mark Napier, is a case in point and illustrates the challenges involved in collecting new media. The flag is formatted to run on the Internet and is based upon the premise of viewer interaction and manipulation of the flag. Visitors to the website can fuse geometric elements and colors from a sampling of international flags to create a flag that will serve as the symbol of the Internet’s limitless boundaries. Saving the modifications made by each visitor and allowing these changes to be seen by subsequent visitors documents the evolution of the flag over the course of the project. The Guggenheim purchased *Net Flag* in order to add the work to its permanent collection. But what exactly did the museum purchase and how can they ensure ownership and copyright? How can an artwork based upon technology that will be obsolete in a few years be considered permanent? How can the Guggenheim manage to preserve this work? Where should the work be displayed, in the museum, or on a

¹⁹ Dorothea von Hantelmann, “Just Do It—Performative/Ästhetiken in der zeitgenössischen Kunst,” in *ONTOM* (Leipzig: Galerie für zeitgenössische Kunst, 1998), reprinted in “Old Art and New Media: The Contemporary Museum,” Ursula Frohne, *Afterimage* 27, no. 2 (1999), 9.

website? The entire foundation of the work lies in its continuously transformed state controlled by the viewer. Should the work always remain interactive, and if it should, how can that be accomplished? How can the original intent of the artist be preserved throughout the conservation process? All of the traditional methods of acquisition, exhibition, and preservation that museums usually rely upon are thrown open to question when considering new media.

Electronic art has much more in common with artistic movements like performance, conceptual, site-specific installation art, and experimental art than it does with traditional artistic mediums from a conservator's point of view. These types of art are difficult to physically capture and traditional preservation techniques used on material artifacts will not work when preserving works of this nature. New media art falls into much the same category as these earlier ephemeral art forms. It is well-known that a physical artifact, if stuffed into storage, will continue to exist, albeit somewhat deteriorated over time. Electronic media has a much shorter timeline and will quickly become inaccessible unless cared for diligently. The most obvious challenge is the rapid obsolescence of the physical storage formats of electronic works such as CDs, floppy disks, DVDs, and other electronic media. Most electronic art is based upon inter-relation with other information (such as web pages with links) or viewer interaction and manipulation of a work. As of now, no one has identified a method of preserving a web page and all of its links without losing its context. The third issue that always arises when discussing electronic media is the translation problem. Translating electronic works to updated media will invariably cause problems. For example what will happen when cathode-ray tube (CRT) screens are rendered obsolete? Attempting to display an

electronic artwork made on a CRT screen on a flat screen display unit may result in the production of an inferior reproduction in the eyes of the artist.²⁰

In addition to the dilemma of preserving new media art, there are also issues that arise concerning the ownership and copyright. If a museum purchases a work of Net art, they want to be sure the work will not be reproduced in other formats or displayed at other venues. This entails creating complicated licensing contracts describing the nature of the agreement between artist and museum. Many works of new media, if displayed in a gallery, take up a great deal of room and therefore cannot be displayed for long as most museums are pressed for exhibition space. There is also an ongoing debate about whether or not new media should even be shown in a gallery setting. Some critics believe the web is the only place to view Internet art, as that was the original context and the artist's primary intention. New media installations are often very complicated and require an enormous amount of time and money to install and maintain. Then museums must also grapple with the technological glitches that are bound to happen when electronic art is put on display. Archiving and storing new media can be prohibitively expensive, especially since procedures for preserving these works of art are not yet fully established. Where will museums find funding to support the acquisition, display, and preservation of this type of art? Museums are working on strategies to remedy many of these issues and some of these working solutions will be discussed later in this paper.

²⁰ Howard Besser. "Longevity of Electronic Art." International Cultural Heritage Informatics Meeting, 2001. <http://sunsite.berkeley.edu/Longevity/>, 5 November 2002.

V. Why Should Museums Collect New Media?

So why should museums collect new media art if there are so many problems involved with its care and preservation? The most obvious answer is based upon the fact that most of the world has been swept up in the ongoing technological revolution. Museums cannot ignore this movement and still be considered viable, modern institutions. The technological revolution in effect right now has been compared to earlier media related revolutions like the invention of the printing press in the fourteenth century and the development of photography in the nineteenth century, each of which had an enormous impact on culture and society. This new shift to using computers to handle all our production, distribution, and communication has arguably had a much greater impact on the world than those developments and our society has just begun to realize its full effect. The printing press only impacted the distribution of printed materials and photography only affected the development of still images. The computer revolution effects all areas and all forms of communication, including creation, distribution, dissemination, and storage of text, still images, moving images, sound, and other types of information.²¹

It is the mission of most contemporary art museums to collect and preserve the art of the moment. By overlooking or ignoring new media art as a viable and collectible art form, a museum with this mission could easily be considered irresponsible. The goal of contemporary art museums is to stay abreast of current art practices and to be at the forefront of new artistic mediums.²² Christiane Paul states, "When it comes to documenting and preserving this surprisingly ephemeral art, museums are among the few

²¹ Manovich, *Language*, 19,

²² Morris, "Museums," 11.

institutions with an explicit mission to do something about it.”²³ If museums, as organizations dedicated to the interpretation and preservation of art do not recognize this new art form, who will ensure its place in art history?

Susan Morris did a study of new media art in museums for the Rockefeller Foundation in 2001 called *Museums and New Media*, which focused on the commissioning of new media art in museums. From interviews with curators, directors, new media artists, and new media professionals she has summarized the reasons behind why museums should and do patronize new media arts. According to research gathered in her study, one of the main reasons to collect new media art as expressed by the interviewees was to establish the museum as a forerunner in new media while it is still in its earliest stages. By collecting or commissioning a new work, a museum can help shape the field and also avoid past mistakes that resulted from overly cautious collecting. Glenn Lowry, director of MoMA states, “In the sixties and seventies, and even the eighties, we resisted some of the directions contemporary art was moving. We missed Warhol in the 60’s. We avoided collecting the art stars of the ‘80s. But we came to realize that we had been foolish, so we played catch up. And what I don’t want to do is play catch up here.”²⁴ Collecting new media art helps support the arts community and allows new media art to stake a place in the mainstream art world. Curators commissioning new media art felt it was important for museums to recognize the new field specifically because of the difficulties involved in owning, preserving, and understanding this art. Without the support of art institutions, it would be difficult for

²³ “Net Gains: A Roundtable on New Media Art,” *Artforum International*, March (2001) 159.

²⁴ Morris, “Museums,” 11.

new media to exist as a viable art form. In order to sustain their livelihood, museums must in essence, “give back,” to the arts community from which they take.

Curators are also attracted by the opportunity to work directly with the artists to develop exhibition and preservation strategies in ways not possible with earlier artistic mediums. Collecting new media allows museums to expand upon their current functions of collection, preservation, research, and display. The new media arts movement is posed to play a larger role in the ever-expanding information age in which we live today. By being involved in the new media field, museums are expanding their mission and their traditional role and placing themselves in a key position in the current information age. As the genre of new media extends across the larger arts community, it will inevitably bring in different audiences, more money, more resources, more artworks, and give added prominence to museums. Collecting new media can be considered an investment in the future of the museum.²⁵

Some critics believe the opposite and will argue that the museum is not a place for new media art, especially Net art, because display in a gallery does not allow the art to function in the manner in which it was originally created. The importance of the Internet to new media artists was that it allowed for unlimited accessibility for their art without the overriding authority of an institution. Jon Ippolito of the Guggenheim Museum in New York, brings up an important and ironic point about this desire of new media artists to reject the traditional museum. He states in his essay “The Museum of the Future: A Contradiction in Terms?” that “Most importantly, my research has led me to the ironic conclusion that the most extreme departures from the material object, digital or

²⁵ Ibid., 11.

otherwise, are ultimately the ones whose future depends on the very institution they were designed to render obsolete.”²⁶ Artists are interested in creating art that does not need to be shown in a museum or a gallery, but in the meantime they are creating art with technology that will be obsolete in a few years. Therefore, they must rely on museums to come up with ways to exhibit and preserve works of digital art if they want their work to continue to exist. Some critics will say that the inherent nature of Net art is to be ephemeral and that is not meant to be collected. But the problem with this type of thinking is that if this art is not collected, museums will only be able to collect and showcase more traditional art forms, allowing unconventional and radical works of new media art to slip through the cracks of art history. If museums let this happen, they are not fulfilling their duty to the community.²⁷

Before museums began to take an interest in digital art, it existed in an exclusive online world supposedly accessible to all on the Internet but really not known to many beyond a small community of involved artists. It has taken recognition by a more traditional but ultimately more accessible art authority, the museum, to push digital arts into the mainstream. Non-profit institutions confer legitimacy and provide protection to new media art, which eventually helps to create a market for the art.²⁸

²⁶ Ippolito, Jon. “The Museum of the Future: A Contradiction in Terms?” *Arbyte* June-July 1998. http://www.three.org/variablemedia/vm_concept.html, 26, October 2002.

²⁷ Ippolito, “Museum of the Future.”

²⁸ Jack Miles and Douglas McLennan, *Digital Art Goes Critical*, *The Arts Journal*, <http://www.artsjournal.com/artswatch/20010418-2299.shtml>, 8 August 2003.

VI. Making New Media Art Profitable

New media art does not lend itself well to the art market. Pricing and selling the art has proven to be a difficult and ambiguous task. As with other contemporary art forms that tend to be ephemeral in nature or hard to assert ownership over, new media art cannot be assessed by traditional methods of valuing art. Authenticity, rarity, condition, provenance and other accepted means of appraising art do not apply to new media. Though the works of some well known multi-media artists such as Nam June Paik, Matthew Barney, or Bill Viola can garner hefty price tags, the genre of Internet art is not as established. The initial price of a work of Internet art may still be affordable for a well-established contemporary art museum but it is the long-term expenses that worry museum professionals. A museum might pay only \$1,000 to purchase or commission a work at its inception, but the amount of money put into preserving and storing that work until infinity is almost impossible to calculate because of the nature of the electronic media. The cost of maintaining the technology a work runs on, or upgrading the work each time the original technology becomes obsolete could turn out to be prohibitive. It is also quite likely that as the field of new media art expands, especially Internet art, the buying prices will increase dramatically with the demand. Where are museums getting funding to buy and commission works of new media? New media projects are often funded through businesses, corporations, and foundations.²⁹ Many times the companies are involved with technology in some way like MCI WorldCom, French Telecom, and StorageApps Inc., all of which have provided funding for new media projects at museums. The Intel Corporation, a technology company, sponsored *010101: Art in Technological Times*, at SFMoMA. They also served as advisers on technical and

²⁹ Morris, "Museums," 31.

interpretive issues in the exhibit and on the website. Though this type of sponsorship is not always attached to new media, it is possible that with exhibitions involving expensive, technical equipment, this relationship will become more common.³⁰

The art market is attempting to make new media profitable by looking into licensing works and selling them as multiple copies to more than one collector or institution. New media artists are of course interested in exploring options that will help make their work more cost-effective for them, otherwise, they may not be able to continue working in this medium. One licensing model that has been discussed by galleries interested in selling new media art is to sell the art as one would sell music. Multiple copies of the original piece can be reproduced and sold to a number of different patrons. Each will own a copy of the work, but they will not own the actual work of art. The artist would collect something akin to royalties each time the work is sold. The same type of licensing concept is applied in the theater world. Playwrights license their plays to theater companies that perform the work. If this method of distribution and profit takes off, new media art will be considered more of a software product than a singular physical object. If museums are the only clients buying new media art, it is likely that most new media artists will not be able to continue working with new media, as the demand will not be strong enough. Museums do not have enough funding or authority to be able to support an entire artistic movement without galleries and private collectors being involved.³¹

³⁰ Graham, Beryl, "Curating New Media Art: SFMoMA and 010101," CRUMB (Curatorial Resource for Upstart Media Bliss), University of Sunderland, UK, Arts and Humanities Research Board 2002, 20.

³¹ Morris, "Museums," 32.

VII. The Role of the New Media Curator

In recent years, there has been an increase in pressure for museums to make themselves more accountable to the public they serve. Because of this, many museums have updated their mission statements and instituted new policies and programming designed specifically to attract new audiences. Museums today are striving to make their art as accessible as possible to as many people as possible. These issues of accessibility and accountability are obvious influences on how a museum decides to handle new media art. They want to display and interpret the works in a manner fitting to the art but also in a way that promotes public understanding and appreciation of the art.

So what are museums that have made the decision to collect and display new media doing differently to facilitate the process of presenting new media art to the public? Because the collecting and displaying of new media in museums is still in its early stages, no standard procedures have been developed. Curators exhibiting and collecting new media are learning by trial and error. Much of the following information was garnered from the aforementioned study done by Susan Morris through the Rockefeller Foundation in 2001, *Museums and New Media Art*, and a study done by Beryl Graham in 2002 titled *Curating New Media Art: SFMoMA and 010101*, which examined every aspect of the museum in relation to the development of the exhibit *010101: Art in Technological Times*. Though there have been a myriad of publications, conferences, and discussions about new media theory, there is a definite lack of information about curating, displaying, and interpreting new media art in museums.

Administratively, new media is still in a state of flux within most museums. Curators of new media do not necessarily work in a new media department and are more

likely to be positioned in other departments like Contemporary Art, Film/Video/Media Arts, or even Design and Architecture departments. Most museums have not established a new media department yet, partially due to the newness of the medium, and partially due to the medium's interdisciplinary nature. This openness has allowed staff in different departments of the museum to participate in the new media dialogue. Curators of new media art come from many different backgrounds and were not necessarily schooled and trained in new media art.³² Some have shifted from curating older types of media such as video and photography, some come from computer backgrounds, others are artists working in the format, and some were previously involved with new media outside the structure of the museum. The lack of professional delineations has caused a blurring of departments, which has been working for some museums, though others have ideas for new positions and departments they would like to create.³³ Former director of SFMoMA, David Ross, states "Artists who choose video or choose media art are purposely choosing to blur the lines. They resist being characterized and boxed. If you're going to be an effective curatorial body, you have to mirror the blur. We acquire from different departments, and sometimes different departments acquire things together."³⁴ The Whitney Museum of Art already has an adjunct curator of new media, Christiane Paul. SFMoMA has a curator of media arts, Benjamin Weil. The Walker Art Center has a curator of new media, Steve Dietz. The Guggenheim Museum has a senior curator of film and media arts, John Handardt, and an assistant curator of media arts, Jon Ippolito.

The collecting and exhibiting of new media has required curators to adopt new roles and adapt older, established curatorial duties. Though traditionally, a museum's

³² Ibid., 5.

³³ Ibid., 16.

³⁴ Ibid., 25

mission has been to collect, preserve, and interpret works of art, many museums have expanded upon this mission to include commissioning works of art. Contemporary art museums have been commissioning art for many years but the practice has become more common with the rise of new media art. The Whitney has been commissioning new art since the inception of its Biennial 70 years ago. About a dozen of the works in SFMoMA's show, *010101: Art in Technological Times* were commissioned. By commissioning a work of art, a museum is able to experiment with new mediums and take risks with works they might not otherwise have collected.³⁵ This shift toward commissioning more of the art an institution collects has influenced the curator's role. When handling commissions, curators are obviously much more involved in the creation of the work. With more traditional art forms, a curator functioned almost like an editor. The curator would display selected works of an artist or artists in order to reveal a specific viewpoint or angle. A curator's choices often involved collecting and conservation issues as well as the views of the institution he/she worked under.³⁶ But with commissions, curators are no longer just the caretakers of the art, they become active participants in the production of the art. Instead of simply choosing art to be included in an exhibition from an artist's already created body of work, the curator works with the artist, essentially becoming the co-creator. Critics are divided on whether or not this type of relationship is beneficial. Museums can stay at the cutting edge of avant-garde art with commissions, but curators and institutions are shaping the art by commissioning it. Museums are not the only organizations involved in commissioning and curating new media art. Since new media art has such a presence on the web, many

³⁵ Ibid., 7.

³⁶ Weil, Benjamin, *Untitled (Adaweb)*, Walker Art Center, http://www.walkerart.org/gallery9/dasc/adaweb/g9_ada_weil.html, 29, October, 2003.

artists are curating their own websites and new media organizations such as Rhizome.org also curate and display new media art.³⁷

Issues of over involvement in the creation of the art have already arisen within the curator-new media artist process. How involved in the process should the curator be when a work is commissioned by a museum? In Morris's research presented in *Museums and New Media Art*, she found that curators differ on whether their role should be hands on, or hands off. Jon Ippolito of the Guggenheim Museum describes himself as a hands on curator. "I like to be close to the process. Ultimately I'm accountable and I want to make sure the artists put their best foot forward. I also want to make sure that I don't doom the enterprise of online art by putting a lousy piece in a prominent location."³⁸

Mark Napier, a Net artist, responds to the involvement of Jon Ippolito since he has worked with him on a few projects for the Guggenheim. Napier states, "He (Jon Ippolito) is very involved in the dialogue, in terms of what the work means. I do think for me that the work has been shaped by that conversation."³⁹ Whether or not this type of close curator-artist relationship is a good thing still remains to be seen. Essentially, the curator is acting as an artist as well. The curator is not working with art that has already been created, he or she is technically creating works that help convey a message that the curator or the institutional authority believes is important to relay to museum audiences.

Other curators take a more remote approach to working with commissions of new art. Jeana Foley, at the Smithsonian American Museum of Art, and Benjamin Weil at SFMoMA take this stance. Both these museums have commissioned new media art but have decided to take a more distant stance. The museums made the decision to

³⁷ Morris, "Museums," 14.

³⁸ Ibid., 14.

³⁹ Ibid., 15.

commission a new media work, invited artists to submit proposals, then picked from among the entries. This methodology more closely mirrors standard curatorial practice where the artist is the creator and the curator simply chooses art but does not instruct or manage the process.⁴⁰

By commissioning works of new media art, the museum is not only influencing the specific commissioned piece of art but the entire development of the art movement as well since museums control the art that is viewed by the public. Many artists believe commissions blunt the edge of the avant-garde by providing guidelines that need to be followed when the artist creates a work. Patrick Lichty, a new media artist states, “When you get involved in a commissioned work, there’s really no way that you can get away from the external influence of the commissioning body. They shape it, you know who they are and where the money’s coming from. A 501c3 has certain goals that they want to meet. Everything that I’ve been involved with has been tailored to fit their goals.”⁴¹ There are critics who will argue both sides of the issue but the influence of the institution cannot be denied when discussing commissioned works. Either way, it is important for museums to support new media art so that the genre may continue to flourish.

⁴⁰ Ibid., 15.

⁴¹ Ibid., 22.

VIII. Displaying New Media: In the Gallery or on Your Computer?

How are museums answering the questions that arise when presenting and displaying new media art in exhibitions, particularly Internet art? The main debate that takes place in the discussion of this topic is whether the art should be shown in a gallery or on a computer screen. Many critics argue new media art, especially Net art, should not be seen in a gallery, as that is not its original context. Internet art should be viewed solely online where its interactive features can be enjoyed on a personal level. Most museums have chosen to utilize a combination of both strategies and have placed works in the physical galleries as well as online. Since there are no established standards for the display of new media art in museums, most are handling the issue on a case-by-case basis. When MoMA wanted to exhibit Tony Oursler's *TimeStream*, which was originally intended for the web, the artist created a special installation in the gallery so a boring and unadventurous kiosk did not have to be used. It was a compromise to allow at home visitors to view the work on the website but still have it available to visitors at the actual bricks and mortar museum.⁴²

SFMoMA decided to use a different approach when exhibiting the Net art in *010101: Art in Technological Times*. The exhibit included a gallery component but the actual Net art was displayed only on the website. The website for the exhibit was designed to simulate the architectural presence of the physical museum designed by Mario Botta. Visitors would maneuver through virtual halls, doorways, and galleries to view the Net art.⁴³ The final decision to include the Internet artworks only on the website was actually made very late in the exhibition process. Some curators wanted to show the

⁴² Ibid., 12.

⁴³ Jessica Foote, "Net Art: A New Voice in Art, Challenging Perceptions of the Virtual and Physical," <http://babel.massart.edu/~jfoote/netartpaper.html>, 23 November 2003.

Internet art in the galleries, and others did not. Some believed visitors to the museum should have the same opportunity even if the conditions were less than ideal. Other curators said that the Internet art pieces were really configured for private viewing and would not work in the gallery.⁴⁴

The Whitney Museum displayed Net art in the context of the museum in *Data Dynamics*. The curator of the show, Christiane Paul, realized the irony of putting Net art in a museum setting since the original intention of Net art was to subvert the traditional role of the museum. But she also believes that a valid work of art needs to be seen in a museum environment. As Cook and Graham point out in their article "Curating New Media: Net and Not Net," "Museums take seriously their remit to provide access to new forms of art, but most people don't like to sit at computers when they are in the reflective mood that a gallery space was designed to evoke."⁴⁵ Digital delivery of art will not replace the tactile and physical experience of encountering a work in a gallery space. It is unlikely that viewing art at home will replace a trip to the museum. Art is often meant to be seen in a social context, and only a museum can provide that context.⁴⁶

Museum audiences come to the museum to discover new things and observe something they are not able to see elsewhere. With new media art, most people can view the work at home on their computers. What can museums offer to make the viewing experience better for the visitor? To quote Maxwell L. Anderson, the former director of the Whitney Museum in New York, "The challenge for museums is to prove that people

⁴⁴ Graham, "Curating New Media Art," 31.

⁴⁵ Beryl Graham and Sarah Cook, "Curating New Media: Net and Not Net," *Art Monthly* no. 261 (November 2002), 44.

⁴⁶ Olu Oguibe, list serve post to "Museums of Tomorrow, an internet conference," Georgia O'Keeffe Museum, http://www.okeeffemuseum.org/cgi-local/ultimatebb.cgi?ubb=get_topic&f=2&t+000015, 10 November 2003.

in physical spaces still have a lot of artistic variety to experience in the digital era.”⁴⁷ Simply because a work is digital does not mean that it is always best viewed on a home computer. Museums can still offer the artwork within the context of other works, a collective viewing experience, a larger space to view the artwork, elaborate installations, technology more advanced than many enjoy at home, and interpretive tours given by trained guides. Museums play a certain role in the lives of visitors. A visit to a museum is to remove oneself from everyday life and come into a place built for refuge and contemplation. This can only happen in a gallery space and this is why many museums still feel it is important to find a way to display new media art in galleries even though it presents a challenge.⁴⁸ Though humans may spend an increasing amount of time with computers and other technological devices, we still live, eat, sleep, and do everything else in the real world. There may come a point when people will appreciate being able to escape from their computer screens to view media art.

Aaron Betsky, one of the curators of *010101* at SFMoMA believes it is not only the museum that must rethink its methods, but the artists as well. “. . . we need to look to artists to understand how their work can function in such a context, rather than simply worry about how the museum can ‘re-purpose’ itself to accommodate forms of expression that might not work in a museum. Some things, like websites, might not belong in the physical medium, though they can live in digital extension of such an institution.” The consensus among museum professionals working with new media is that despite new media’s beginnings, which attempted to undermine the traditional hierarchy of institutionalized art organizations, museums still have a responsibility to

⁴⁷ “Net Gains,” 20.

⁴⁸ *Ibid.*, 124.

document and preserve this art in more ways than just online. To not do so would be careless. Christiane Paul sums up the issue nicely by saying, “My hope, however, would be that Net art doesn’t flow only over, under, and around but also through the institution. The flexibility of the medium (given that there is “access”) allows this art to exist in multiple contexts, and I think it should exist in public spaces from the shopping mall to the museum, which, in this case, is just another (and I would say important) form of contextualization.”⁴⁹

⁴⁹ Ibid., 159.

IX. New Media Art Centers

The debate over whether or not a museum is a suitable venue for exhibiting new media art has prompted the creation of “new media art centers.” There are a number of new media art centers operating in the United States and internationally either in virtual form on the Web, or in actual bricks and mortar. One of the most prominent is the Eyebeam Atelier in New York, a not-for-profit media arts organization founded by John S. Johnson, which is set to open a new facility in 2006. It currently has two facilities, an exhibition gallery, classroom, and studio space in Chelsea, and offices in Brooklyn. In 2003 Eyebeam presented an exhibition called *INSTALL.EXE*, produced by the two collaborators who created Jodi.org back in the 1990s. *INSTALL.EXE* deals with the complexity of modern technology and the problems users have in dealing with it, such as computer crashes, error messages, and viruses. This exhibit was the first time the pair had exhibited anything in the “real world,” and shows Net artists are willing to manipulate their work to adapt it to a physical environment.⁵⁰ According to their website, “Eyebeam Atelier is dedicated to exposing broad and diverse audiences to new technologies and the media arts while simultaneously establishing and articulating new media as a significant medium.”⁵¹ The Eyebeam Atelier, though not formerly a museum, can be considered an institution devoted to new media arts. The goal is more than just producing and exhibiting new work, but also to support and facilitate the new art form, something museums interested in new media want to do as well. It is interesting to note that Eyebeam does not have any of their collections online, and instead emphasizes

⁵⁰ *INSTALL.EXE* by JODI, Eyebeam Gallery, http://www.eyebeam.org/divisions/curatorial_jodi.html, 5 November, 2003.

⁵¹ *Profile*, Eyebeam Gallery, <http://www.eyebeam.org/about/profile.html>, 5 November, 2003.

visiting the physical gallery space to see the works. The Eyebeam Atelier provides educational programming, access to cultural resources, presents exhibitions, and enables the creation of art of new media by offering artists resources like the Artist-in-Residence program. Eyebeam is just one of the most prominent examples of these new types of media centers that are sprouting up worldwide. In Germany, the ZKM (Center for Art and Technology) is devoted exclusively to media arts. Media art centers exist at the Media Z Lounge at the New Museum of Contemporary Art in New York, MIT in Cambridge, Japan's InterCommunication Center, and Ars Electronica in Linz, Austria.

X. Exhibit Installation Challenges

New media exhibitions often require complicated and extensive installations of technological equipment. Christiane Paul states, “Whenever you’re using real-time technology, things tend to get incredibly complex. Apart from the challenges of live streaming, just think about how often your computer crashes, or you lose your Net connection.” Technology themed shows are very costly and maintenance intensive, requiring complicated installations and daunting technology requirements. Museums are still learning how to deal with these matters in the best way possible.⁵²

Beryl Graham’s study of the SFMoMA show, *010101: Art in Technological Times*, gives a comprehensive overview of the realities of organizing and installing an exhibit of new media art. She found that the technology and installation requirements of the *010101* show changed the dynamics of the exhibition team. The Information Systems and Services department obviously had to play a much larger role in this exhibition than in most others. They had to install and connect many of the servers displaying the artwork to the museum’s overall technology system. Being involved in the actual exhibition process was very new for the ISS department and resulted in communication problems between artists, curators, and the tech staff about what was the role of each group in the installation process.⁵³

The exhibition team also found it hard to coordinate the technical needs of many of the artworks because some commissions for the exhibit were late, and some artists did not send detailed installation instructions. Therefore, the installation process required a

⁵² Delson, “Wiring,” 52.

⁵³ Graham, “Curating New Media Art,” 16.

lot more coordination and correspondence with the artists on the part of the staff than was generally the case. Some artists sent in detailed multi-paged instructions describing the layout and measurements of their work, making installation an easy task for the technicians. Others sent their own technicians to install the works for them, and some artists installed the work themselves. But when the artists did not provide enough information, a lot of staff time was spent managing and coordinating the installation. The biggest installation challenge for the exhibition team of *010101* was planning out the gallery space so that there was not light and noise leakage between the works of art. Works had to be placed according to their structural needs rather than by art form or curatorial department. The design team had to take into account light needs, space, and plug-ins much more so than in a show of traditional artworks.⁵⁴ Though the new media works were challenging, the works that caused the most installation problems were not necessarily the new media works, but the large physical installations and anything that the audience was allowed to touch.⁵⁵ As with any exhibit that has complicated installations or pieces that the audience is allowed to interact with, ongoing maintenance became a much larger task. Both appropriate and inappropriate audience behavior, incorrect staff procedures, and general wear and tear caused the breakdown of moving parts on a regular basis. Ongoing maintenance of *010101* was constant and much more intense than with other shows, mainly due to audience interaction pieces.⁵⁶

The installation and maintenance problems of the SFMoMA show were complicated by the fact that the designers and installers had to deal with a team of

⁵⁴ Ibid., 34-36.

⁵⁵ Ibid., 18.

⁵⁶ Ibid., 47.

curators instead of a single head curator. The curators of *010101* at SFMoMA included Aaron Betsky, Curator of Architecture and Design, Janet Bishop, Curator of Painting and Sculpture, John Weber, Curator of Education and Public Programs, and Benjamin Weil, Curator of Media Arts. This team reflected the interdisciplinary nature of new media art and the blurring of departments that occurs with new media in museums. Though working in a large team of curators is unusual, it has been done before, specifically at the Whitney Biennial. Using this many curators caused problems with scheduling meetings, choosing works, and making exhibit related decisions. There was much more discussion and collaboration concerning every aspect of the show, not just the selection of the artworks. An obvious result of this was an increase in the amount of time it took to develop and install the show, as well as an increase in the amount of work for the staff of the museum involved with the show.⁵⁷

⁵⁷ Ibid., 18.

XI. Websites

Most museums consider it standard protocol to add a page about a new exhibition to their websites. If the exhibit is of paintings, sculptures, or other forms of physical art, the website will usually present highlights from the show with some exhibition text and interpretation. But when an exhibition is of new media, the website plays a much larger role in the process. SFMoMA had to devote much more staff time to developing the website for the *010101* show. The site was more extensive than usual since it dealt with Internet art. In addition to the Internet art from the show, the website included interpretive material about the artists and their works, texts, and listings of SFMoMA events. It also had less conventional elements like resource links to the Internet artists' other works and new media related sites, discussion lists, and site streaming of artists talks. Because of the extended website, the curators of the show, the exhibition designers, and the web site designers had to coordinate much more than they normally would have with a standard exhibit. SFMoMA actually created a new temporary post to handle the coordination of images, texts, and materials for the website.⁵⁸

The website for *010101* was theoretically supposed to mimic the experience of being in the actual museum and walking through the galleries. The idea was for the website to provide the audience with the same viewing experience and educational opportunities as a visit to the museum. Accessibility was the main issue, in order to parallel the long history of accessibility within museum galleries. Because the site was more extensive, it required viewers to download software programs that took some time.

⁵⁸ Ibid., 15-16.

There was criticism that the site was hard to navigate and too complicated. Because of these issues, the site was modified and simplified after the opening of *010101*.⁵⁹

Displaying works of art in an exhibit on a website makes it very difficult for the museum to determine who the audience is that they are reaching. The number of people that actually view a work might be higher than the physical number of people that view a certain work in the museum, but what does the museum know about those viewers? How will the museum know if these viewers understand the work? Education becomes crucial when dealing with new media because most audiences, if trained at all in art interpretation, are only trained to look at conventional art. They might not necessarily understand an art form that is technologically complicated and in addition, deals with complex social and political issues. A museum that places a work on its website can take for granted that the audience viewing that work will most likely be larger and more international than the audience at the physical museum. Using the web as a venue for art allows museums to counteract criticisms of exclusivity and elitism. Media art can create new audiences for museums and will likely bring in visitors who will never physically visit a museum. The web site of a museum does not necessarily have to act as a way to lure visitors to the actual museum. A visit to the museum's website to view its collection of new media art could be considered a visit to the museum in and of itself. The museum is accomplishing its mission of reaching broader audiences and if the new media art is interpreted and presented in a fitting manner, they will also be reaching their goal of educating new audiences. By putting the new media works in context and supplying

⁵⁹ Ibid., 39-40.

background materials and ample text, museums can encourage a dialogue to form around new media art.⁶⁰

⁶⁰ Morris, "Museums," 33.

XII. Education, Interpretation, and Outreach

Attempting to exhibit new media to the public has obvious ramifications on the educational programs museums offer. Audiences are not trained to view and understand new media art in the same way that they might look at conventional art. This is partially due to the newness of the medium, and partially because most works of new media deal with complex issues and themes that can be hard for a new viewer to grasp. Education is one of the main reasons why Net art should not be displayed solely online. The interaction that occurs with students, teachers, museum educators, and visitors in the galleries is crucial. Education is especially important when considering contemporary art because discussion is essential to understanding the underlying themes and ideals. These interpretation related issues created more work for the educational staff of SFMoMA working on *010101* and complicated the job of the docent tour guide. Docents for the show reported that they had to do more research on the artists since most were new talent unknown to them. They also mentioned that sometimes the information about how the art was created was too technical to relay to an audience. A common complaint was that it was much more difficult to get audiences engaged in the art because they felt very removed from it. One docent was quoted as saying, "I found it was a harder exhibit to get the audience engaged and get their attention. It seemed very cold to me and I felt like it was cool to the audience."⁶¹ The small dark rooms in the exhibit were an additional problem that compounded the difficulty of giving tours. Each docent interviewed by Beryl Graham in her study mentioned logistical problems such as getting large groups into small dark rooms and time constraints that did not allow the viewing of long video

⁶¹ Nancy Price quoted in Graham, "Curating New Media Art," 48.

pieces. Docents described tactics they adapted to facilitate the process such as allowing a group to enter a room and watch a video, then coming out and discussing the work in the larger gallery space.⁶² Interpretive materials posted in the galleries included signage, wall text, individual wall text for each artwork, instructional signs (something only needed with interactive pieces), Think Texts (computer screens which presented open interpretations aside from the artist or curator), and “Web Stations,” which were the interpretational sections of the *010101* website.⁶³ Despite the amount of educational materials available to visitors, the security officers mentioned an increase in questions from visitors and they had to intervene frequently because people were not sure what they could and could not touch. Because of this increase in questions, security and visitor services employees had to be trained more extensively about the show, which was an unusual burden.⁶⁴

⁶² Graham, “Curating New Media Art,” 49.

⁶³ *Ibid.*, 41.

⁶⁴ *Ibid.*, 49-50.

XIII. The Dilemma of Ownership and Copyright

As previously mentioned, the challenges posed by new media affect much more than museum exhibition practices. It is not only curators, educators, and installers who have had to adapt their approach to their duties but also the collection management staff. Ownership, copyright, and preservation of new media art cannot be handled in the same manner as other art forms. New methods for solving issues of ownership, copyright, and preservation of new media art are still evolving.

When discussing ownership of a work of Net art, the discussion will inevitably fall to copyright as the only way to ensure title and control access to a work. The federal Copyright Act covers “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” Copyright law was created to allow artists to control access to their work and also gain some financial benefits when it is shown or published. But only a few Net artists are being paid for their works at this point. What they are most concerned with is access and distribution of the works to the largest number of people. Many times, a museum will “pay” for a work by agreeing to display, maintain, and preserve the work for the artist. To present an example, the Guggenheim Museum in New York usually tries to enter into an agreement to commission a work of Net art, which will then be acquisitioned by the museum. The artist assigns copyright to the museum or grants exclusive rights to the Guggenheim to show the work for a certain amount of time.⁶⁵ In

⁶⁵ Cohen, “The Art,” 2.

2002, the Guggenheim bought two works of Net art, *Net Flag* by Mark Napier, and *Unfolding Object* by John F. Simon Jr. for about \$10,000 to \$15,000 each. What exactly does a museum get when they acquire a work of new or variable media art? Usually a signed document and the turning over of the physical object to the museum transfers the ownership. In the case of the Guggenheim's purchases, the museum got the works' computer code and a certificate stating the exclusive rights to exhibit the pieces.⁶⁶ In the case of installation works, museums usually receive the instructions on how to recreate the piece in addition to the rights. It is necessary to ensure exclusive rights so that the artist is not able to exhibit the work elsewhere or license the rights to another museum. The Guggenheim's contract for new media art defines the artwork by describing its content and underlying technology. The Guggenheim and the artist agree to translate the work into a new medium if the old medium becomes obsolete. The museum's rights to the work cover the work in its original format, but also in all its future incarnations, ensuring that the museum has something unique and original, and the exclusive right to preserve and recreate the work.⁶⁷

⁶⁶ Matthew Mirapaul, "Getting Tangible Dollars for an Intangible Creation," *New York Times*, 18 February 2002, E1.

⁶⁷ Cohen, "The Art," 2.

XIV. Preserving the Immaterial

Once the museum has formerly acquired a work of Net art or new media, how can they manage to preserve it? In addition to the rapid obsolescence of electronic media, many works of Net art are interactive and change with each viewer's input. A painting may require occasional cleaning, but software-based art could need an entire overhaul every few years to remain operational and up-to-date. Because hardware and software is being continually updated, museums have to confront issues about which aspects of a work are most important to preserve. As Matthew Drutt, a Guggenheim curator and head of its online Virtual Museum states, "the conceptual parameters of the work are ultimately more important than the physical manifestations."⁶⁸

The Variable Media Initiative (referred to hereafter as VMI) is an unconventional new preservation strategy that emerged from efforts to preserve works of art made in ephemeral mediums such as video, digital, audio, installation, process, performance, Internet, and conceptual art. The project is under the auspices of the Solomon R. Guggenheim Museum in New York, in partnership with the Daniel Langlois Foundation for Art, Science, and Technology in Montreal. Jon Ippolito, the Guggenheim's associate curator of media arts, and Alain Depocas, head of the Langlois Foundation's Center for Research and Documentation are spearheading the effort along with a team of conservators, curators, technicians, and artists.⁶⁹ Communication with the artist is central to the VMI's program. The project is based on interacting with the original artists to define their art outside of its current medium so that the works may be translated to new

⁶⁸ Berwick, "New Media Blitz," 115.

⁶⁹ Sylvia Hochfield, "Sticks and Stones and Lemon Cough Drops," *ARTnews* September (2002), 117.

mediums or reformatted to ensure preservation when the original art is rendered obsolete. The ultimate goal is for the art to live on and still achieve the same artistic results the artist originally intended. The VMI team is formulating guidelines and creating an artist questionnaire that will facilitate the preservation process and ensure that the artist's wishes are honored. The Guggenheim held a conference in March 2001 called *Preserving the Immaterial*, where project staff, curators, artists, consultants, and conservators engaged in a discussion of the preservation of new media.

Jon Ippolito describes variable media as a type of work that can be recreated in different formats without compromising the original integrity of the piece.⁷⁰ The VMI defines variable media art by the behaviors it exhibits rather than media dependent terms like video, film, or Net art.⁷¹ The idea is to define an artwork's fixed and variable components to figure out which aspects of the work must remain the same over time, and which could change if necessary. The detailed artist questionnaire helps artists to define the parameters of their work in the original version and any subsequent re-creations. The more flexible an artist is in defining what methods can be used on their work, the more likely it is that the work will live on in a recognizable form. The VMI has fleshed out four distinct methods of preservation from which the artists can choose. The four methods are *storage*; simply leaving the work as is, *emulation*; completely recreating the piece using entirely different methods that will produce the same results, *migration*; upgrading the equipment of the piece or migrating the data from the older version to a

⁷⁰ Ippolito, Jon. "The Variable Media Initiative at the Guggenheim." D-Lib Magazine vol 7, no. 5 (May 2001). <http://www.dlib.org/dlib/may01/05inbrief.html>, 7 October 2002.

⁷¹ Variable Media Initiative website.

http://www.guggenheim.org/variablemedia/variable_media_initiative.html, 4 November 2002.

new version, and *reinterpretation*; reinterpreting the work each time it must be recreated by asking what the contemporary medium should be.⁷²

Other institutions have different ideas about how to handle the problem of preserving new media art. The Berkeley Museum of Art is also active in collecting new media art. The Berkeley Museum's digital media director, Richard Rinehart, believes that trying to own something "unique" goes against the premise of Net art and may also run counter to preservation efforts. Rinehart suggests using data redundancy. Artists sell the same work to many museums and collectors for exhibition, preservation, and recreation. The works' value would not lie in exclusive ownership, but in allowing each institution to interpret the work and distinguish themselves with scholarly pursuits and commentary.⁷³

The Walker Art Center takes a different approach from both the Guggenheim Museum and the Berkeley Museum of Art. Steve Dietz, the curator of new media initiatives at the Walker Art Center, explains that since the artist was not interested in creating a unique object to be owned by a museum, he is not interested in acquiring and owning the work in a unique way. The Walker Art Center typically receives nonexclusive license from a Net artist to exhibit the work and in exchange, the museum agrees to maintain it. The artist may also license the work to other museums as well.⁷⁴ As with exhibition practices, since there are no formal guidelines to follow, museums are approaching preservation in unique ways based upon their own experiences.

⁷² Variable Media Initiative website

⁷³ Cohen, "The Art," 3.

⁷⁴ *Ibid.*, 3.

XV. Museums Actively Involved with New Media

Museums working with new media have chosen to approach the genre in different ways based on the museum's location, needs, audience, budget, staff, and a myriad of other factors that come into play. Following is a brief summary of what some of the museums most involved with new media are doing to collect and manage this new art form.

The **Dia Center for the Arts** began working with Web projects in 1994 when Michael Govan became the director. Delving into the Web allowed the Dia Center to bring art directly to the public and also provided the opportunity to commission significant projects for artists interested in working in the medium. Lynne Cook, Curator, and Sara Tucker, Director of Digital Media, act together to choose artists to work with new media commissions. So far, they have mostly favored artists from fine art backgrounds but have also selected artists working in other artistic disciplines such as dance and architecture. They specifically picked artists that do not necessarily have training in digital arts to try and obtain a more original and unconventional approach to the art. As of 2001, the Dia Center had commissioned 14 Web works and three artists' Web projects that were combined with gallery exhibitions. The web projects are only displayed online but now that the Dia Center in Beacon New York has opened, there might be a possibility to display the new media works in the galleries. The Dia Center looks after the maintenance of the online works but the individual artists still hold copyright to their work.

At the **Solomon R. Guggenheim Museum** in New York, new media art is divided up into two curatorial departments, the Media Department, and the Contemporary

Art Department. The Media Department mainly deals with artists working directly in new media, while the Contemporary Department deals with more traditional media. When the Guggenheim decides to commission a work, it automatically becomes part of the permanent collection. Artists are usually asked to give up copyright to their work, though an agreement can sometimes be negotiated. The Guggenheim is very involved in collecting new media and has commissioned a number of works. According to Jon Ippolito, the acquisition budget devoted to new media is supposedly in the six figures. Out of the budget for commissioning new media, fifteen percent is reserved in an endowment for the Variable Media Initiative and will be used in the future to pay for the costs of recreating these works in different formats.

The Museum of Modern Art in New York launched a new online art program in 2001. Each year, two to three artists are invited to create projects for MoMA's website. A committee of MoMA curators from different departments choose the artists. These projects are then added to MoMA's already established archive of online projects dating back to 1995. Tony Oursler's *TimeStream* was the first selection of the new online program in 2001. The museum sets up a two year licensing agreement for online works of art meaning that during that time, the museum has exclusive rights to the work. No policy has been set for beyond the two-year limit at this point.

The San Francisco Museum of Modern Art has a collection of web site projects stored on CD-ROM, though this makes them susceptible to the obsolescence of CD-ROM technology. Benjamin Weil, the curator of new media, is devoted to displaying the work of new media artists. The museum owns portions of three Web sites, *Ada*'web, Atlas, and Funnel, each features works of new media art. The museum has hosted the

Webby Prize, which is the international award for achievement in technology and creativity. When a work is commissioned, the museum has a one-year exclusive contract. When the contract is up, the museum can still show the work but the artist can also sell the work. Their budget for commissions usually ranges from \$25,000 to \$75,000 and most of the funding has been provided by Richard and Pamela Kramlich, the founders of the New Art Trust, a foundation for collecting and maintaining new media art.

The Smithsonian American Art Museum's first foray into new media art was the New Media/New Century Award presented in 2001 to new media artists Cindy Bernard, Russet Lederman, and Patrick Lichty. Their works are presented on the Web, on *Helios*, which is the museum's online American photography center. The Smithsonian holds exclusive rights for one year during which the artists keep the copyright. After the year is up, the Smithsonian keeps the copy they have, which then falls under a non-exclusive license agreement. This means the museum can use images of the artwork for promotional and educational purposes but not for anything else. The budget in 2001 was \$4,000 per project funded by a grant from Dominion, a Virginia based energy company that also funded the *Helios* website.

New media art is central to the mission of the Walker Art Center in Minneapolis, Minnesota. The Walker Art Center is committed to film, video, visual arts, and performing arts, all of which share some similarities to new media art. In 1997, the Walker updated its website and created a virtual "Gallery 9" for the display of artists' web projects. The institution's building is currently eight stories so the name "Gallery 9" is a play on words, and represents the virtual ninth story of the museum. "Gallery 9" has commissioned more than 150 works of new media. The Walker also owes Åda'web,

which contains many artist projects, but new works are not added to it. The usual budget for commissions ranges from \$1,000 to \$15,000. Artists keep the rights to their works and the Walker has non-exclusive rights into eternity.

The **Whitney Museum of American Art** now employs an adjunct curator of New Media, Christiane Paul. Larry Rinder of the Contemporary Art Department curated the new media works that were included in the 2000 Whitney Biennial, the first Biennial to display new media art. The Whitney commissions works of new media art though the ones shown in the 2000 Biennial were not commissioned. There are at least four online commissions a year with a budget of \$5,000 to \$10,000 a piece. There were five works commissioned for the *Data Dynamics* exhibition ranging from \$9,000 to \$50,000. As with the other museums, the artists still own their works, but the museum has one-year exclusive rights, and after that, non-exclusive rights. With the Biennial show, the agreement between the artists and the museum can be compared to a loan arrangement of new media art. The works in that show had already been created. The Whitney basically paid the artists a licensing fee for the period of the show, created a link on their website to the artwork, and then dismantled the link when the show was over.⁷⁵

⁷⁵ Morris, "Museums," 23-27.

XVI. Collaborations and Consortia

The museums mentioned in the last section and others interested in collecting new media art are coming up with creative solutions to solve some of the problems inherent to new media art. Collaboration between institutions has become an appealing option. Museums are recognizing that both financially and logistically, they cannot resolve all the issues involved with the collection, exhibition, and preservation of new media on their own. Net art is based upon collaboration and accessibility, so it is natural that museums are working together to create sites and sources for accessing new media art in new and exciting ways. Comprehensive art portals on the web have become a way for museums to provide access to new media art resources worldwide.

The Walker Art Center has a Net art project clearinghouse called the Art Entertainment Network (<http://aen.walkerart.org/>) that was created in 2000. The Network is an online exhibition from the Walker's "Gallery 9" that acts as a portal for online art. The Arts Entertainment Network was created by Steve Dietz and has been called a one-stop destination for online art.⁷⁶

The Whitney Museum launched *Artport*, (www.artport.whitney.org) in March 2001. The *Artport* website is designed as a main portal to Internet art and digital arts worldwide as well as an online gallery for new and commissioned Net and digital art. Christiane Paul, the Whitney's adjunct curator of new media arts organized the site. The portal consists of four different areas. The main function of *Artport* is to serve as a database for Net art projects that have been created since the inception of Net art approximately nine years ago. Each month, one digital artist is invited to present their work and post links to their most important projects. In addition, *Artport* is a resource

⁷⁶ Morris, 34-35.

archive to link to virtual galleries and museums on the web, past Net art exhibitions, events, and publications. The site contains an exhibition space for current Net/digital art projects and exhibitions, as well as an archive for past Internet art projects. *Artport* also serves as an archive for works of Net and digital art in the Whitney's collection.⁷⁷

Maxwell L. Anderson, former director of the Whitney Museum, said of *Artport*, "The Whitney Museum is committed to collaborative efforts among the world's art institutions. We are proud to be creating a collaborative, authoritative resource on the world's digital arts community."⁷⁸

SFMOMA, the Goethe-Institut, ZKM (Center for Art and Media, Karlsruhe, Germany), and the Walker Art Center put together a joint venture called *Crossfade* (<http://www.sfmoma.org/crossfade/>). "*CrossFade* is not to have museum 'branding' but instead to be a place for art. *CrossFade* focuses on the Web as a performative space for sound as an artistic medium."⁷⁹ The site integrates works of sound and visual art, archives live events, and presents essays. *Crossfade* is accessible through each institution's website.

The Guggenheim Museum has a program called *Cyberatlas* (www.cyberatlas.guggenheim.org) that seeks to commission and collect a series of maps of cyberspace, specifically focused on sites related to visual arts and culture. The first two projects were *Electric Sky* by Jon Ippolito, and *Intelligent Life* by Laura Trippi, both maps that trace connections between various sites on art, theory, and popular culture.

⁷⁷ <http://whitney.org/artport/>

⁷⁸ Whitney Museum Launches Digital Arts Website and Portal, The Whitney Museum. <http://www.whitney.org/information/press/32.html>. 7 November 2003.

⁷⁹ Steve Dietz quoted in Morris, "Museums," 35.

The Walker Art Center, the Davis Museum and Cultural Center at Wellesley College, the San Jose Museum of Art, the Wexner Center for the Arts at Ohio State University, and Rhizome collaborated to create *Shock of the View: Museums, Artists, and Audiences in the Digital Age* (http://www.walkerart.org/salons/shockoftheview/sv_front.html), a general discussion list-serve opened in 1999 with related exhibits. The goal was to generate discussion among artists, curators, and educators about the relation of digital media to contemporary museum practice.⁸⁰

Museums are collaborating on new media in other ways in addition to online ventures. The New Art Trust, a foundation for collecting and maintaining new media art established in 1997 by Pamela and Richard Kramlich in San Francisco, now shares its resources with SFMoMA, MoMA New York, and the Tate Modern in London. The ultimate goal is to foster collaborations between the three museums as well as to finance shows and become involved in other areas of new media that present challenges like preservation and education.⁸¹ Many collaborations created to solve new media preservation issues exist in addition to the Variable Media Initiative partnership between the Guggenheim Museum and Daniel Langlois Foundation for Art, Science, and Technology in Montreal. At SFMoMA, Benjamin Weil, the curator of media arts, is working with London's Tate Gallery sculpture conservator for electronic and kinetic media along with a panel of artists to figure out how to save Net art and new media art from obsolescence.⁸²

⁸⁰ Morris, "Museums," 34-35.

⁸¹ Carol Vogel, "Inside Art: Collaborating," *New York Times*, 15 November, 2002, E33.

⁸² Berwick, "Screen Savers." Art News Online.

http://www.artnewsonline.com/currentarticle.cfm?art_id=1170, 16 September 2002.

Richard Rinehart has also developed an association called Conceptual and Intermedia Arts On-line (CIAO), which includes the Walker Art Center, the Franklin Furnace Archive, the Berkeley Art Museum, and the Pacific Film Archive. Rhizome.org, a non-profit organization, has developed Artbase to archive new media art on-line. CIAO, the VMI, Rhizome and others are collaborating to develop preservation strategies. A project called "Archiving the Avant-Garde" seeks to combine the efforts of these various organizations and develop them into community wide strategies useful to all museums.⁸³ Museums, as institutions dedicated to preserving and caring for objects of lasting cultural value, have suddenly found themselves responsible for preserving this transient and ephemeral medium. Collaborations can help museums to engage new audiences, stimulate new perspectives and understanding, create access to resources, and in general, help to accomplish tasks and projects that could not be done otherwise.

⁸³ Ibid.

XVII. Joint Acquisitions of New Media

Some museums have even decided to collaborate on acquisitions of new media, a newly developing method for successfully collecting new media art in a difficult art market. In addition to all the problems inherent in the properties of new media, museums devoted to collecting it also have to grapple with the rising costs of art works, cuts in acquisition budgets, and competition from private collectors and galleries for new acquisitions. Internet art may be somewhat affordable right now because the market is not fully developed, but chances are prices will increase drastically over the next decade or so. Collaborating on acquisitions is a way for museums to continue to collect important works while keeping within their budgets.

In 2002, three international modern art museums teamed up to purchase a very important piece of video art by Bill Viola. The Whitney Museum, the Tate in London, and the Pompidou Center in Paris have jointly purchased *Five Angels for the Millennium* for \$700,000. The three museums plan on sharing all the costs of purchase, storage, and display. The San Francisco Museum of Modern Art and the Walker Art Center entered into a similar agreement in 2000 to purchase Matthew Barney's *Cremaster 2: The Drones' Exposition*, a multi-media installation.⁸⁴ Barney stated of the partnership, "It's encouraging that two prestigious institutions can cooperate in this way. It sets a precedent that could benefit artists who are working at a scale that is challenging to collect."⁸⁵

⁸⁴ Carol Vogel, "Shedding Egos, Joining Forces," *New York Times*, 17 October 2002.

⁸⁵ *SFMOMA and Walker Art Center Acquire Matthew Barney's Cremaster 2*, Walker Art Center, <http://www.walkerart.org/generalinfo/press2000/press062/html>, 26 October 2002.

Joint ownership is nothing new in the museum world. In 1940, MoMA and the Phillips Collection jointly purchased Jacob Lawrence's *Migration Series*,⁸⁶ and in 1973, the Metropolitan Museum of Art and the Louvre jointly purchased a medieval ivory comb.⁸⁷ Other joint acquisitions have occurred since these though it is by no means standard practice. In the new electronic age, co-ownership can provide many benefits to museums looking to collect new media. The flexible nature of new media art has made sharing works between museums a viable option. Works made from new forms of media, such as video, digital, and Internet art, lend themselves to joint purchases much more than traditional artistic mediums. Many new media works require a large amount of room to exhibit, something museums often lack. They are also more difficult and more expensive to store and preserve due to the fact that the technology they were created on quickly becomes obsolete. In addition, art market prices are still rising steadily while acquisitions budgets stay the same or are cut. Many museums are not able to afford to buy new art created from technology related mediums and must compete against private collectors and galleries. Sir Nicholas Serota, the director of the Tate, said about the Viola purchase, "This is a response to the high market prices for works of art. Why shouldn't museums fight back and share?" Not being able to acquire new media works will eventually cause a gap of contemporary art in museum collections. Video art, Internet art, digital art, and other types of new media are fairly simple to share between institutions. There are less worries about shipping the new media works since the works are not fragile, original objects. Co-ownership will ensure a much larger audience for the artwork, will cut down on costs, will facilitate preservation, and will allow works to be on

⁸⁶ Jacob Lawrence, http://www.jacoblawrence.org/art01_body.html, 26 October 2002.

⁸⁷ David L. Shirey, "Met and Louvre Purchase Ivory," *New York Times*, 16 March 1973, 30.

display and out of storage for longer.⁸⁸ Joint acquisitions also make sense because Internet art is based upon ideas of collaboration and accessibility. It also seems as if the Internet art movement is moving in the direction of multiple ownership on its own, with non-exclusive licensing becoming common.

Though joint ownership might involve complicated contracts that need to be worked out in advance, the benefits still outweigh the negatives. In the case of the *Cremaster 2* installation owned by SFMoMA and the Walker Art Center, each museum had a chance to exhibit the work so that both museums' accession committees would have the opportunity to see it before deciding on the purchase. The director, curators, registrars, conservators, and rights and reproduction managers all had the chance to review the agreement. Both museums own equal share in the work. Because it is such a complicated installation with many components, they are divided up so that each museum holds one part for a period of three years, after which they will exchange. Each museum can display these component elements as they wish but if they want to install the entire work, it must be agreed upon a year in advance. Each museum owns the film component of the exhibit and can exhibit it at their discretion. Storage and preservation costs are shared, and loans to other institutions must be approved by both museums. All income generated from the work is shared as is the credit line.⁸⁹

Joint ownership of *Five Angels for the Millenium* by Bill Viola was even more complicated because it involved three institutions in three international countries with different legal systems. Maxwell L. Anderson, former director of the Whitney, stated,

⁸⁸ Vogel, "Shedding Egos."

⁸⁹ Email correspondence with Josh Shirkey, Administrative Assistant, Painting and Sculpture, SFMoMA, 12 May 2003.

“Increasingly, for the past several years, institutions around the world have been seeing themselves as colleagues rather than competitors. . . Our partnership allows this extraordinary work to be brought to the broadest possible international public. I believe strongly that a new spirit of interdependence has made this kind of arrangement viable as a model for all kinds of cooperation.”⁹⁰ Electronic media works are often easier to share because items being shipped are not irreplaceable, and many new media works are produced in editions.⁹¹ Working together to acquire works of new media may help museums solve some of the thorny issues involved with collecting this troublesome art form.

⁹⁰ New York's Whitney Museum, London's Tate Gallery and Paris' Pompidou Center Will Jointly Acquire Major Bill Viola Installation, Whitney Museum of American Art, <http://www.whitney.org/information/press/100.html>, 7 April 2003.

⁹¹ Email correspondence with Susan Liddell, Senior Curator, Tate London, 8 July 2003.

Conclusion

New media art has challenged the traditional structure of the museum and signals a dramatic change in the art and culture of our society. Up until a few years ago, the belief among museums was that although technology based arts – video, film, and audio– had been accepted into museums, they would certainly never displace “real” art – painting and sculpture – from their position at the top of the hierarchical art historical pyramid. But in the past few years, a significant change has occurred. Instead of taking place on the margins of the art movement, in small galleries and a few online sites, digital art has increasingly become a mainstay in museums. Despite initial uncertainty of how to understand and enjoy new media art, the public’s appetite and appreciation for it is growing. The techno-phobia that has characterized museums’ approach to new media up until recently cannot continue because there is no sign that the digital medium is going to fade away. Technology will continue to flourish and will expand its influence on the creation of all types of art. It is obvious that many contemporary art museums have realized this and are making attempts to expand their knowledge of and experience with digital art. Museums have already taken great strides towards establishing new media into the context of the museum. Many resources have been devoted to studying this fledgling art form and incredible headway has been made into appropriately understanding and working with new media. As museums continue to experiment with curating, interpreting, and conserving these works, they will foster and shape a dialogue around the medium to promote understanding amongst professionals in the field as well as the greater public. This challenging process will also be supported by future discoveries and improvements in the field of technology. Some museums have become

active participants in the electronic age and it is natural that others will follow. Though there is much more progress to be made, museums have begun to develop innovative and exciting new methods of collecting, displaying, and preserving this intricate, transient, and challenging new art form.

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