The Art of (Dis)Playing Video Games:
Theory Meets Praxis

By

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Abstract

Over the last two decades, public and academic discourse has concluded that video games are an art form. However, when video games are featured as exhibitions in public institutions of art – there is opposition. This essay explores the responses to this range of artistic activities by the art and game worlds. To this end I construct a typology that outlines three recognizable trends in the public exhibition of video games in art galleries and museums Blockbuster Exhibitions typically feature commercial games, while art galleries usually exhibit avant-garde Game Art or Art Games. Lastly, there is an emerging "new museum" that helps fund and foster "new arcade" games as well as independent production. I argue that video game exhibition strategies follow these trends because certain forms are better suited for certain types of video games. Analyzing the context of video game reception and gameplay could be as important as analyzing the content and the graphics.

Acknowledgements

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> "I will admit that discussing the art of video games conjures up comic images: tuxedo-clad and jewel-bedecked patrons admiring the latest *Streetfighter*, middle-aged academics pontificating on the impact of Cubism on *Tetris*, bleeps and zaps disrupting our silent contemplation at the Guggenheim. Such images tell us more about our contemporary notion of art – as arid and stuff, as the property of an educated and economic elite, as cut off from everyday experience – than they tell us about games."
>
> – Henry Jenkins in "Games the New Lively Art."

> "When art and the praxis of life are one, when the praxis is aesthetic and art is practical, art's purpose can no longer be discovered, because the existence of two distinct spheres (art and the praxis of life) … has come to an end."
>
> - Peter Bürger in *Theory of the Avant-Garde.*

Introduction

There could be resistance to public play practice among a non-gamer public who feel embarrassed to play in a gallery setting. Graham Kirkpatrick states that, "we see ourselves pressing a brightly coloured plastic button on an infantile toy … the image of the controller … [is] a symbol of toys and toy-ness."[1] This feeling of unease comes with the realization that they are in a public space, acting on the impulses of a child. On the other hand, an experienced gamer visits a video game exhibition might leave disappointed if they are subjected to a series of DVD recordings of gameplay. Game theorist Ian Bogost argues that many Game Artworks "resemble installation video than they do games."[2]

[1] Graeme Kirkpatrick, "Controller, Hand, Screen: Aesthetic Form in the Computer Game," *Games and Culture* 4 (2007): 136.
[2] Miranda, Carolina A. "Let the Games Begin," in *ARTnews* (2011): Accessed on August 10, 2011: http://www.artnews.com/issues/article.asp?art_id=3248&current=True.

Digital games are not the first forms of interactive art in galleries, yet the hesitation to touch persists. In the nineteenth century, the dominant academic discourse and practice of displaying artworks favoured looking over touching. Erkki Huhtamo argues that the museum institution is dominated by ideas that govern how we perceive public domain and private property, the notions of access and education, surveillance and protection, and the social hierarchies implicit into a person's relationship to certain objects. Popular culture, early video game arcades, and avant-garde art hint at a growing phenomenon that would "burst "into the cultural mainstream during the twentieth century[3]. This essay offers a glimpse at a whole range of different types of video games, all of which will be later defined, including commercial video games, Game Art, Art Games and independently produced video games. By critically examining the response to this range of artistic activities by the art and game worlds I aim to bring to light the influence a play environment can have on the reception of a particular game.

To this end I construct a typology that outlines three recognizable trends as video games have entered into the rarified spaces of the art gallery and museum. "Section I: Blockbusters: Exhibiting the Canon of Video Games," argues that the economic benefits to be gained by the institution and the commercial game industry might outweigh the cultural benefits. The second section, "Game Art and Art Games in Galleries," discusses the works of artists and designers who appropriate the software or hardware of video games for

[3] Huhtamo, 77.

artistic ends. The third section, “New Museum and The New Arcade” highlights local imperatives that facilitate the independent production and distribution of games. Empirical evidence suggests that each form demands its own exhibition strategy; therefore certain approaches are better suited for certain forms. Since games studies is a “live field,” these formats are not models nor are they rigid categorizations. There may be examples of works or exhibitions that fall somewhere in between; nevertheless, this preliminary grouping exists to support a closer understanding of the rise of interest in gaming by art institutions. Another distinction I make is that between a museum and an art gallery. In this essay, a museum can have broader cultural interests while an art gallery’s main focus is dedicated to displaying traditional or contemporary arts. While there are a number of excellent online exhibitions, blogs, forums and channels that distribute commercial games, Game Art, Art Games, and independent games, this essay will only discuss physical exhibitions. The critical examination of significant “off-line” exhibitions can perhaps serve as a barometer to measure how we as a society regard digital games, as well as the artists and designers who work with them.

In this major research paper, I will address several themes. I will discuss some theories regarding tactility and game gaze, the avant-garde, museum theory and the independent production of culture. Another theme that will persist throughout this major research paper is one of materiality and the objecthood of video game technology. The aim here is to use the typology I defined earlier to

frame my discussion which looks at some significant exhibitions and works that have been commissioned or exhibited by an art institution.

Video games are an art form. The question, "are video games art?" has been debated within popular and academic discourse for over two decades. However, we now find the discussion shifting from speculation towards identification. Many designers, artists, and theorists have weighed in on the art of video games. Some theorists posit that video games have yet to reach their full potential as an art form while others argue that examples of culturally significant games already exist. In a paper from 2006, Brett Martin states, "significant video games have been created even though none can be considered art."[4] Philosopher Grant Tavinor concurs, stating in his 2009 book, *The Art of Videogames*, "if we look to videogames for sophisticated meaning or moral seriousness of the kind associated with great literature, we will more often than not be disappointed."[5] Alternatively, there are others who argue that there exist a number of games that are worth categorizing as "contemporary art." For instance, in a 2009 TED talk, game designer Kellee Santiago argues that Eddo Stern's *WACO RESURRECTION* (2004), Jonathan Blow's *Braid* (2008), and Thatgamecompany's *Flower* (2009) are three titles that are art. Like any significant traditional or contemporary artwork, these games are thought-provoking, culturally relevant, and innovative. In a 2010 article titled, "Virtual

[4] Brett Martin, "Should Videogames be Viewed as Art?" in *Videogames and* Art, eds. Andy Clarke and Grethe Mitchell (Chicago: Intellect Books, 2007), 209.
[5] Grant Tavinor, *The Art of Videogames* (MA: Wiley-Blackwell Publishing, 2007), 180.

Bodies, or Cyborgs are People Too," Jonathan Boulter asks the reader to consider the *spectacularized banality* of excessively detailed games. For Boulter, "a leaf floating gently to the ground in *Ninja Gaiden* (1988 – 2012) resonates with … majesty." [6] Something so average is made beautiful in a game which often leaves the real world dull by comparison. The reception of video games in museums and art galleries has been mixed. In *Art News*, Carolina Miranda writes,

> [D]espite the art world's decade-long embrace of the format, the discussion about the crossover between video games and art can become fraught, especially on the gamer side of the divide.[7]

The following sections will address some of the concerns raised by game theorists. In an attempt to dispel the feeling that "the contemporary art-world sees the video game as something to be deconstructed rather than an art form worth exploring in its own right." [8]

Section I: Blockbusters: Exhibiting the Canon of Video Games

What is a Blockbuster?

In the film industry, the term blockbuster describes a film that is either very expensive to make or a film that gains unprecedented ticket sales. The central concept, according to film scholar Marco Cucco, is based on the premise that high production costs will potentially garner increased financial success.

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[6] Jonathan Boulter, "Virtual Bodies, or Cyborgs Are People Too," in *Digital Game Play: Essays on the Nexus of Game and* Gamer, ed. Nate Garrelis (North Carolina: Mcfarland and Company Inc.), 64.
[7] Carolina Miranda.
[8] Ibid.

Many strategic measures are made to maximize sales and every detail - from the subject matter, to the release dates and locations - is calculated in such a way to nearly guarantee success.[9] Under the same pressure to financially thrive, art institutions employ similar tactics to ensure economic viability. The blockbuster exhibition format was originally conceived as a way to attract as large an audience as possible. This meant that art institutions had to start reaching out to a public who might never have stepped into an exhibit before. In her book, *Contemporary Cultures of Display,* art historian Emma Barker discusses how the blockbuster format came to be:

> [A]t a time when American art museums were under attack for being elitist, he introduced a new element of populism by mounting a series of spectacular exhibitions. In the process, the civic responsibility of the museum – its mission to reach and educate a large a public as possible – was reinvented in terms of boosting attendance figures through such temporary attractions.[10]

This format has stayed true to this template and they tend to follow a similar formula to ensure an exhibition worthy of its name. The characteristics most blockbusters share include subject matters that are less provocative or controversial in nature; publicity is a major factor, as these events needs ticket sales to cover the associated costs; and they are usually temporary and made to travel to other institutions. Additionally, the mandate to educate could also be seen as confirming popular knowledge. The staging of an exhibition of this

[9] Marco Cucco, "The Promise is Great: The Blockbuster and the Hollywood Economy," *Media, Culture & Society* 31 (2009): 220-229.
[10] Emma Barker, *Contemporary Cultures of Display* (Connecticut: Yale University Press, 1999), 128.

magnitude often requires the collaboration of a few museums and corporate sponsorship; so as to not to alienate or antagonize any of the sponsors or donors museums tend to fare on the "safe" side by avoiding "critical" exhibitions. Displaying from the canons of art or cultural history becomes a staple.

The blockbuster can be traced back to as early as the 1970s when the British Museum mounted *The Treasures of the Tutankhamun* in 1972. This exhibition and others like it focused on displaying artefacts from ancient civilizations or important foreign collections. There was usually an emphasis on the exoticism, power and wealth of other cultures. Which in retrospect have raised many questions about how these early exhibits helped shape perceptions of the "other" in opposition to Western culture. Contemporary museums are more aware of these issues; however, similar themes persist. (The Art Gallery of Ontario's 2011 winter blockbuster *Maharaja: The Splendour of India's Royal Court* comes to mind). Blockbuster films are "tent poles" of Hollywood because they are often able to support the economy of an entire studio. Similarly, the earnings from a blockbuster exhibit can go for funding other programs that serve more specialized audiences.

Hot Circuits: A Video Arcade and Game On

Large-scale exhibitions of video games are an extension of the classic blockbuster format in the information era. Simon J. Knell writes how since the mid-1980s "museum directors have understood that the key to their success lies in

how well they manage change within their organisations."[11] One of the biggest changes since the 1980s has been in the development of new media technologies and the rise of the Internet. The museum in the information era must compete with many alternative entertainment sources. In an attempt to serve the public and to make money, many institutions embrace popular culture, like film, fashion and video games. Furthermore, most museums do not want to be perceived as elitist and so blockbuster exhibitions allow institutions to cater to popular tastes.

In 1989, the Museum of Moving Images in New York mounted an exhibit called *Hot Circuits: A Video Arcade*. The interactive exhibition featured the "founding" games*, Spacewar!, Computer Space*, and *Pong.* Also included were *Space Invaders* (1978), *Galaxian* (1979), *Pac-Man* (1980), *Q8Bert* (1982), an early driving game called *Out Run* (1986), and *NARC* (1988) to name a few. With the help of video game reviewer Roger Sharp, this list contains many of the games that are now considered canonical, classic arcade games.

Heavily relying on word of mouth, curator Rochelle Slovin and her team went searching all across the United States. Their searches lead them to pawn shops, warehouses, and many yard sales. Locating late 1960's and early 1970's arcade games, in their original cabinets, was quite difficult. However, even finding relatively newer units from the late 1970s to early 1980s was equally as challenging. They eventually located all of the pristine, "museum-quality," arcade

[11]Simon J. Knell, "The Shape of Things to Come: Museums in the Technological Landscape," in *Museums in a Digital Age,* ed. Ross Parry (New York: Routledge, 2010), 445.

machines that they needed in time for the exhibition. At that time, unfortunately, there simply was not enough academic archival interest or work being done to preserve early arcade games. Furthermore, the arcade machine collecting market was also small at that time. Information Science Ph.D. students at Loughborough University in the United Kingdom, Joanna Barwick, James Dearnley, and Adrienne Muir, provide insight into the issues that current institutions face in ensuring the longevity of all forms of digital game technology. Though there is interest to preserve and collect digital games, it could be more difficult today. The Computer History Museum in Mountain View, California and the Museum of Moving Images in New York have large collections of digital games. Recognizing the connection between digital games and the history of play, The National Center for History of Electronic Games was just launched by the New York's Strong National Museum of Play. One of the main challenges involved in preserving digital media is finding adequate ways to maintain functionality of the many different gaming platforms now available. Since the arcade game has come many different console games, handheld games, and other types gaming platforms. According to Barwick et al., game preservation is not necessarily technical hardware preservation. The technology that runs a game is often no longer required and therefore "emulation [becomes] the heart of software preservation." [12] Emulation simulates the original hardware and software environment on a

[12] Joanna Barwick et al., "Playing Games With Cultural Heritage: A Comparative Case Study Analysis of the Current Status of Digital Game Preservation." *Games and Culture* 6 (2011): 381.

current computer, a strategy in digital preservation that combats the planned obsolescence of video game technology.

Before *Hot Circuits*, arcade cabinets were not considered aesthetic objects. As commercial workhorses, game cabinets would often be emptied and retrofitted to suite the latest release. Maximizing profit in a commercial setting meant that the cabinets were crammed side-by-side with no room in between to gaze upon the colourful designs. To showcase the aesthetics of the arcade machine in *Hot Circuits*, each game was offset by a forty-five-degree angle and placed far enough apart to allow for it to be appreciated from all angles. Slovin notes that the expansive display method as well as the didactic wall panels placed in between each cabinet "produced an effect of both distance and intimacy, a mix between the raucous dynamics of the arcade and the objectifying nature of a museum."[13]

From 1990 – 1993, *Hot Circuits* was mounted at several different venues across the United States, Slovin writes about how some centers unwittingly exhibited the games in commercial arcade-like settings. When the balance between arcade and museum was disrupted visitors would not respectfully interact with the machines - chewed gum was found stuck on the underside of some of them.[14]

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[13] Knell, 145.
[14] Slovin.

It is important to note how *Hot Circuits* travelled to ten different science centres and made no stops to any art galleries or museums. This hints at the perception of video games at that time. Rather than seeing early arcade games as an evolution in digital art, they were perceived as innovative pieces of computer technology. In spring of 2002, the Barbican Art Gallery in London, in association with the National Museum of Scotland exhibited: *Game On: The Culture and History of Video Games*. Lucien King (co-producer of the *Grand Theft Auto* series) along with Mark Jones, then Director of the National Museum of Scotland, and curator Conrad Bodman collaborated on the most expensive exhibition the National Museum of Scotland had ever planned.[15] The show followed the evolution of computer games from *Spacewar!* to later arcade games like *Galaxian* but it also featured ten years of gaming console evolution and the phenomenon of home gaming – this section covered the evolution of the original Atari system to the Nintendo up to the Xbox and the hand-held GameBoy. *Game On* traveled to fifteen international museums. From 2003 to June 2011 it stopped at the Galerias Monterrey in Mexico. In 2010, an upgraded version of the exhibition entitled, *Game On 2.0*, exhibited at the Queen Victoria Museum and Art Gallery in Launceston, Tasmania.

Although *Game On* was one of the first video game exhibitions within an institution of art, it had little effect on the perception of commercial video games

[15]Lucien King, Introdction to *Game On: The History and Culture of Videogames,* (New York: Universe Publishing, 2002), 11.

as a legitimate art form. The word 'blockbuster' has negative connotations and in everyday usage it is used in a derogatory way. Cucco states:

> [R]eferring to a worthless film that restates something that has already been seen. That is not completely off the mark, even though there is risk of underestimating the strategic complexity of the production and distribution of these movies … their target is the mass public, with few artistic-expressive expectations … The narrative construction is usually simple, not highly innovative or revolutionary in content and apolitical.[16]

The blockbuster exhibition faces similar criticism in the art world, with often polarizing viewpoints. Some, like Barker, see it as "a scholarly endeavour which serves to educate and entertain the public, bringing prestige and profit to the host institution in the process." While others claim that these exhibitions "have a very narrow range of subjects and, contrary to the justifications put forward for staging them, seldom shed any new light."[17] Presenting art as entertainment, she argues, can gloss over the many complexities in the works of art. Little is done to address or elucidate these nuances to the uninitiated viewer, Barker argues that the blockbuster show can be seen as an aspect of the commercialized culture of spectacle.[18]

As indicated in the title, *Hot Circuits: A Video Arcade* was first and foremost an arcade. The price of admission included a handful of tokens with an option to purchase more within the actual exhibition space. *Game On* was comprehensive; however art critic Emily Carr thought that it lacked depth, failing

[16] Cucco, 218.
[17] Barker, 127.
[18] Barker's study focuses primarily on the blockbuster presentation of traditional Western art in museums.

to portray the global impact of games and game culture. In her review, Carr wrote that these subjects and more are covered in the publication accompanying the exhibit. The book titled, *Game On: The History and Culture of Video Games*, covers critical topics like video game violence and issues of gender equality. Carr was more concerned with the problematic playable displays. In her review she states,

> visitors wandered through the exhibition, looking at games, playing and watching each other play. Many of the displays featured console games, designed for home use. People played while standing in front of screens for a few minutes at a time, testing out the controls and following brief instructions. In other words, they played domestic games, in something like an arcade situation.[19]

Arcade games are designed to be played in public for short periods of time and unfortunately many of the console games featured did not translate well in the public setting. Carr clarifies that this is not a criticism against *Game On* but rather a comment on the problematic public display of commercial games that require many hours of deep play.

Upcoming Video Game Blockbusters

The interest in commercial video game blockbuster exhibitions is still prevalent in contemporary museums to this day. Two of the most anticipated blockbuster shows this spring and summer are *The Art of Video Games* at the

[19] Diane Carr, "Game On: The Culture and History of Videogames (May-September 2002, London; October 2002-Feruary 2003, Edinburgh)." *Visual Communication* 2 (2003): 166.

Smithsonian in Washington, D.C., from March 16, 2012 – September 30, 2012 and The Australian Center for Moving Images in Melbourne will be exhibiting *Game Masters* from June 28 – October 28, 2012. As either a clever marketing ploy or a genuine effort to include the gaming community, Smithsonian curator Chris Melissinos, created a website that gave the public a chance to vote for eighty games from a pool of two-hundred and forty choices in various categories, divided by era, game type, and platform. Voting took place from February 2011 to April 2011. Only five games, not part of the vote, will be available for visitors to play. The list includes *Pac-Man* (1980), *Super Mario Brothers* (1985), *The Secret of Monkey Island* (1990), *Myst* (1995), and *Flower* (2009). In accompaniment to the exhibit, there are a number of public events like a film screening, some talks with game designers, and a book. The first video game exhibition for the Smithsonian, *The Art of Video Games* is already slated to travel to ten different art museums in the United States and will continue to circulate until 2016.

The ACMI played host to the Barbican Gallery's *Game On* exhibition in 2008 and *Game Masters* is the ACMI's own original blockbuster. Presented in three sections, this exhibit will feature over one-hundred and twenty five playable games. "Arcade Heroes" focuses on early arcade games, "Game Changers" explores leading contemporary games from *World of Warcraft,* (2004), *Shadow of the Colossus* (2005), *Sim City* (1989), and many more. The third section, "Indies" promises to show how independently produced games lead the way in innovative game play and aesthetics. In this aspect, *Game Masters* takes on a territory not

regularly explored by blockbuster exhibitions. Though *Flower,* an independently produced game, is included in the Smithsonian exhibit, "Indies" is a section solely dedicated to displaying independent games.

Tactility and Game Gaze

In "Twin-Touch-Test-Redux: Media Archaeological Approach to Art, Interactivity, and Tacitility," Ekki Huhtamo argues that touch runs counter to the customs that emphasise the "untouchability" of the art object. Furthermore, it challenges one to compare art with a number of mundane everyday activities where physicality is expected.[20] Tactility and interactivity have a long history in art, one that predates new media. Huhtamo points out that

> the practice of touching technological artifacts for self-expression, communication, entertainment, or erotic sensation is still a recent phenomenon. Videogames, purportedly one of the dominant forms of tactile media already now and even more clearly in the near future, only have a history of some thirty-five years.[21]

Writing extensively on interactivity, and interaction, it is significant to note how Huhtamo places video games under the category of tactile media. Tactility connotes tangibility, perception through touch, connection through touch. However, Huhtamo frames tactilism in art as an exploration of the surface – but more importantly tactilism is concerned with what is beyond the surface.

[20] Erkki Huhtamo, "Twin-Touch-Test-Redux: Media Archaeological Approach to Art, Interactivity, and Tactility," in *MediaArtHistories,* ed. Oliver Grau (Massachusetts: MIT Press, 2007), 71.
[21] Ibid 94.

Coincidentally, the game gaze also lies somewhere beyond the rendered image on the screen. In 2006, game theorist Barry Atkins wrote, "What Are We Really Looking At? The Future Orientation of Game Play." The game gaze is enacted when "the player sees through and beyond the screen and into the future."[22] When Atkins wrote this essay, game studies was considered fairly young and to this day it still in its "early stages." However, he saw a need to potentially split up game studies from video game studies. This distinction would separate the study of game play from the study of game graphics. He argues that the prioritization of games as a visual experience is mainly a game advertising tactic to create awareness of product differentiation. The dilemma for commercial game manufacturers is that mainstream audiences demand visual novelty while expecting some semblance of familiarity in gameplay. This is why game franchises have become a staple to the commercial game industry. In a hit-driven environment, there is little room for experimenting with innovative game mechanics. Though the visual experience is an important aspect to consider within video game studies, it should not override the consideration of video games as playable objects. Atkins' article defines the game gaze and the importance of considering this gaze when analyzing video games. "The game gaze," Atkins writes, "is always firmly fixed in a future-orientation and not on the realized or rendered image."[23] As opposed to passively viewing a film or painting, video

[22] Barry Atkins, "What Are We Really Looking At? The Future-Orientation of Video Game Play," *Games and Culture* 2 (2006): 137.
[23] Ibid, 130.

game players are constantly looking through the screen in a moment of anticipation. In this discussion of the visual aesthetics of games, Atkins also examines artist's appropriation of video games arguing

> [I]n this space between the way games have begun to enter the gallery as (visual) art and the ways in which the practice of play demands a different aesthetic understanding, we can locate a potential misapprehension of games as something other than played experiences where the aesthetic is generated in a maelstrom of anticipation, speculation, and action. [24]

From this perspective non-playable game art is presumed to be visual art which enacts a cinematic or painterly passive gaze.

The exhibitions discussed above are concerned primarily with commercial or mainstream game culture. The blockbuster format relies on reaching mass audiences and so it is fitting that these shows tend to favour easily recognizable titles. Alternatively, new media artists critique the commercial game industry and consumer culture in general through Game Art and Art Games. New media artists appropriate the technological materials that make gameplay possible while others abuse, reuse, steal, and hack video game code. The next section considers Game Art and Art Games by tracing this new media art practice to its roots in the avant-garde.

Section II: Game Art in Galleries

Defining Game Art and Art Games

[24] Ibid, 137.

Two terms have emerged to differentiate the practice of artists who work *with* games (Game Art – appropriating game-like strategies or game technology for artistic purposes) and those who *make* games (Art Games - designing playable games that are not necessarily made for an art audience). Game Art knowingly fits within the networks of contemporary art and Corrado Morgana explains that the work is often made to be exhibited in a gallery setting.[25] Often framed as a subsection of new media art practice, digital Game Art draws from a wellspring of pre-digital art historical practices. Which, according to Andy Clarke and Grethe Mitchell in *Videogames and Art*, can include influences ranging from traditional game art, conceptual art, pop art, abstract art, Dadaist and Fluxus activity.[26] In *The Medium of the Videogame* (2001), Mark J.P. Wolf compares early game graphics to trends in art found in 1960's abstract art.[27] Building from this assumption, Jason Wilson argues that Atari's *Pong* (1972) and the work of Barnett Newman and Nam June Paik not only evoke a similar starkly minimalist visual sensibility, they address a fundamental problem in modernity. Through materials that are

[25] Andy Clarke and Grethe Mitchell also present the term 'videogame art' in their book, *Videogames and Art.* In this book, "Videogame Art" is defined as digital works that refer "specifically and knowingly to videogame culture, iconography, and technology." This definition specifically describes digital works from artists who appropriate video game culture. Clarke and Mitchell also set videogame art apart from other discussions of playable art or interactive installation art. The term "Game Art," on the other hand could be misconstrued for an already existing art practice that appropriates traditional non-digital games. For the sake of clarity, I will use "Game Art," however, the term "Videogame Art," can also be applied. Regardless, "Videogame Art" and "Game Art" always reside at the intersections of new media art practice and video game culture.
[26] Andy Clarke and Grethe Mitchell, *Introduction to Videogames and Art*. (Chicago: Intellect Books, 2007.)
[27] Mark J.P. Wolf. *The Medium of the Videogame* (Texas: University of Texas Press, 2001).

specific to the cultural contexts of their production, Bushnell, Newman, and Paik address the problem of "Attention." These works attempt to "engender a deeper relationship, or intimacy, between a playing body, mediating spaces or technologies and a pictorial surface."[28] Due to technical limitations, the minimalist style of early games happened to coincide with the abstract art movement. Unlike the minimalist artists of that time, the abstraction of early video game graphics was not a deliberate choice made by game designers.

Game Art Mods

In 1995, director Peter Weibel revealed *Arsdoom* (1995) one of the first large-scale Game Art Mod (modification) installations at the *Welcome to the Wired World – Mythos Information* at *Ars Electronica* in Linz, Austria. For this playable Game Art Mod, artists Orhan Kipcak, Curd Duca, and Reini Urban recreated the Brucknerhaus conference center as an edited level in *Doom II*. For the first time, museum visitors both present and remote could maneuver through the simulated version of the Brucknerhaus. Armed with virtual paint brushes, water hoses, or other weaponry players could choose which artworks would stay and which would be virtually destroyed. The importance of this art mod is

[28] Jason Wilson, "Participation TV: Early Games, Video Art, Abstraction and the Problem of Attention." *Convergence: The International Journal of Research into New Media Technologies* 10 (2004): 83.

emphasized by Jon Cates who states that this installation "opened a dialogue between digital and new media art and gaming cultures."[29]

In the years following *Arsdoom,* other art institutions also commissioned media artists to recreate their spaces. In 1997, The Contemporary Center of Vilnius and in 1999, the Modern Museum of Art in Stockholm invited Tobias Bernstrup and Palle Torsson to create custom levels for a series of mods titled *Museum Meltdown* (1997-1999). The first installation from 1997 was only available to play within that gallery space, thereby making it site-specific; however, the second version in 1999 was toured to a number of different galleries. The graphic quality of this work was noticeably enhanced because the artists appropriated the graphically advanced *Half Life* game engine. The details in this work are more realistic and the feeling of destroying precious works of art has more emphasis. In 2000, The Australian Centre for Moving Images commissioned software developer, composer, and media theorist Julian Oliver's team from Selectparks to digitally render their museum. *Acmipark* (2000) was an online multi-player game that was displayed in the museum and was briefly available to download from the ACMI website. Using the same game engine that supports the *Grand Theft Auto* franchise, one could notice another step forward in terms of

[29]*Doom* was recognized in 1997 by the ZKM Center for Art and Media in Karisruhe, Germany. *Media-Art-History* exhibition recognized the original game as an important contribution to media arts. Rather than showing works derived from *Doom's* game engine, Jon Cates, "Running and Gunning in the Gallery: Art Mods, Art Institutions and the Artists that Destroy Them," in *From Diversion to Subversion: Games, Play, and Twentieth-Century Art,* ed. David J. Getsy. (Pennsylvania: Penn State University Press, 2011): 161.

graphic realism. In this game, unweaponed players not only traverse the halls of the ACMI but also the surrounding neighborhood. The Central Business District where the ACMI is usually located is replaced by a lush natural landscape where players can explore fantastical elements like teleports and subterranean caves.

Arsdoom, *Museum Meltdown* and *Acmipark* were made possible by developments in commercial gaming technology whereby anyone (gamers or artists) with basic knowledge and interest in computers could edit levels and create game modifications. The difference between the two earlier works and the latter works is far more than mere graphical integrity. *Arsdoom* and *Museum Meltdown* portray the art gallery as a place full of tumult and terror, however, *Acmipark* is deliberately idyllic.

Video Games and the Two Avant-Gardes

At "The Art History of Games" symposium held in 2010 at the High Museum of Art, media theorist Jay David Bolter and Brian Shrank co-presented a paper that elucidates this persistent duality seen throughout Game Art practice. Digital games have always exemplified the cutting edge in technology and entertainment and the term "avant-garde" is sometimes used to describe its most innovative qualities. Like the term "blockbuster," a working definition of the avant-garde also has its origins in the military. Its literal meaning *the advanced guard* was originally used to describe the foremost part of an army advancing into battle. It is now generally understood to describe any aspect of art or culture that

pushes the boundaries of the status quo. Bolter argues that avant-garde art can be divided into two categories – political (questioning the very role of art in society) and formal (seeking innovation through new methods, techniques, or materials).[30] Politically driven avant-gardists attempt to disrupt the boundaries between art and life while formal avant-gardists are concerned with testing out new materials, mediums and methods. Arguably, political avant-gardists are less interested in exploring new mediums than with changing the relations between humans and art. (Dadaist and Fluxus artists are politically avant-garde.)[31] The formal avant-garde is concerned with discovering the essence of the medium they are working with. (In painting, Pablo Picasso or Jackson Pollock are formally avant-garde.)

Taking this lens, Brian Shrank looks at how video games can either be politically or formally avant-garde. In this regard, the themes of the Game Art Mods previously discussed can also be bifurcated into these two categories. *Arsdoom* and *Museum Meltdown* are concerned with addressing issues that lie outside the constraints of the game by reversing the traditional dynamics between the museum and the artist. This Game Art Mod subjects the museum to the artists' critique, extending the Dadaist/Fluxus anti-institutional attitude. The latter example is content with pushing the boundaries of the video game medium itself. *Acmipark,* a formally avant-garde game is less concerned with commenting on the

[30] Bolter recognizes that this is a simplification of the notion of avant-garde and there are many instances of works that may cross both categories, however, it is a way to frame his discussion of video games and the two avant-gardes. Jay David Bolter and Brian Shrank. "Videogames and the Two Avant-Gardes." Paper presented at the Art History of Games Symposium, High Museum of Arts, Atlanta, Georgia, February 4 – 6, 2010.
[31] They did pioneer new art forms, like performance, photomontage, video, etc.

institution or any larger cultural issues. Instead, it provides a safe zone in the gallery space and online for people not yet familiar with multiplayer online games. By leaving out violence or typical quest-like challenges, this online game lets up to sixty players at a time explore and interact in new ways.[32]

Exposing works whose themes went beyond "'revamping' existing structures,"[33] was an important factor for co-curators Tilman Baumgartel, Hans D. Christ, and Iris Dressler. Considered to be one of the first large-scale offline exhibitions of playable and non-playable Game Art, *games: Computerspiele von KünstlerInnen* (games: Computer games by artists) showed from October 11 to November 30, 2003 at the Computerspiele Musem in Berlin, Germany. The survey of artists' approaches ranged from political to ironic comments on computer games and society. This space opened up the works to dialogue and critique.

In addition to the art exhibit which featured over twenty new media artists working with video games at that time, the Computerspiele hosted a LAN (local area network) party, a workshop, film screening and lecture series. The intention of hosting a LAN party in the gallery was to show the social side of gaming. Curator Baumgartel talks about how this highly unusual proposition was reported on by some curious Internet fan magazines. Unanticipated but wholeheartedly

[32] In this game there are teleports; chat functions; "Bounce Pads" that enable players to spring into the air and see over buildings; and collaborative sound and light features that allow players to interact with each other.

[33] Baumgartel, et al. "Games: Computerspiele von KünstlerInnen (games: Computer games by artists)" in *New Media in the White Cube and Beyond,* ed., Christiane Paul (Berkeley: University of California Press, 2008), 234.

welcomed, this outreach effectively caught the attention of audiences outside of the art world.[34] Children got involved in etching and soldering motherboards at a "Game Boy Workshop" where they also had the chance to develop and program original game ideas. The film screening and lecture series addressed the "interrelationships Hollywood, computer game animation and the simulation technologies of science and the military."[35]

Being that this was one of the first Game Art and Art Games exhibition, the curators of *games* had no precedent to refer to. Despite this, the unique subject matter coupled with the highly regarded supplemental programming earned *games* two prestigious awards that year. The show won the Innovation award of the German foundation Fonds Soziokultur and the prize for "special Exhibition of 2003" by the German section of the International Association of Art Critics.

Velvet-Strike (2002) by Brody Condon, Joan Leandre and Anne-Marie Schleiner is a collection of add-ons for the popular tactical first-person shooter game *Counter-Strike* (1999 – 2004).[36] This politically avant-garde multiplayer Game Art Mod positions a team of counter-terrorists against a team of terrorists where the goal is usually to destroy the other team. After September 11, *Counter-Strike* took on a whole new layer of interpretation beyond mere entertainment. Out of a fascination with the game after those events, artists Condon, Leandre,

[34] Ibid, 246.
[35] Ibid 248
[36] *Counter-Strike* began as a modification of the *Half-Life* game engine but it quickly gained in popularity and eventually was made into an individual game. Though *Counter-Strike* is itself a mod, it is still customizable.

and Schleiner sought ways to create possibilities for protest in a game that over-simplifies the concepts of terrorism and war. The series of "spray paints" feature what the artists call "counter-military graffiti." Instead of shooting a gun, one can spray anti-war slogans and logos onto surfaces within the game. This artistic intervention is not against video game violence per se, it is a comment on American representations of war in the media.[37] Ideally, players can download the "spray paints" from the artists' website and act out live performances within the game world.

Though the following works are not playable, I argue that they are formal avant-garde explorations of the video game medium. Concerned with the materiality of gaming technology, these works employ physical hacking strategies to create something new from sometimes very old or widely recognized games. Cory Arcangel's now famous 8-bit empyreal imagery, *Super Mario Clouds* (2002) was presented at *games* like a "user manual." The how-to guide for modifying your own game cartridge was originally featured on Arcangel's personal website. In a recent lecture at Columbia University, the artist explains that within each cartridge lie a program chip and a graphics chip. The program chip essentially tells the graphic chip what to move on the screen. By soldering modified chips back into the cartridges one can either create a program hack (a mod that affects gameplay) or a graphics hack (a mod that changes the look of a game while

[37] Anne Marie Schleiner "Velvet-Strike: Counter-Military Graffiti for CS," accessed February 21, 2012. http://www.opensorcery.net/velvet-strike/about.html.

keeping the original gameplay).[38] More playful than critical, Arcangel's preoccupation with past technologies is informed by his involvement with the Beige collective. As a founder, Arcangel and other computer programmers and hackers take obsolete technology, like 8-bit computer game systems, and reprogram them to make art and music. In the summer of 2011, The Whitney Museum of American Art in New York featured Arcangel's most recent video game hacks as the centerpiece works for his monumental solo show. *Various Self-Playing Bowling Games (AKA Beat the Champ)* (2011) is a series of large-scale projections that juxtapose fourteen different bowling games, from the 1970s to present-day.

Though not as widely discussed as Arcangel, artist and programmer Eddo Stern was one of among the early new media artists to directly manipulate and modify computer consoles. Concerned with representations of war in video games, Stern's work is considerably more sombre than Arcangel's. In 2004, Stern's first solo exhibition at the Art Gallery of Ontario was part of the ongoing *Present Tense* programming, a series that focuses on contemporary arts. The series titled, *GodsEye* (2002 – ongoing) featured non-playable, modified computer-case sculptures. Curiously, Stern attaches absurd extensions to the previously banal desktop computers by extending the rectangular console through

[38] Jon Cates, "Running and Gunning in the Gallery: Art Mods, Art Institutions, and the Artists that Destroy them," in *From Diversion to Subversion*, ed., David J. Getsy (Pennsylvania: Penn State Press, 2011), 165.

kinetic or static attachments. Artforum critic Martha Schwendener spoke highly of this series:

> Stern elevates video games above the status of gallery novelty act, making viable sculpture out of bulky mainframes and combining the (still) surprisingly stilted imagery of PlayStation bestsellers with music that is evocative and laughably low-tech.[39]

Far from a typical, functional office set-up, the sculptures sit unpretentiously on the floor. One must stoop down to see what is playing on the monitors, suggesting how the artist wants to draw attention away from what computer users typically fixate their eyes upon.

Arcangel and Stern bring attention to the much undertheorized controller.[40] Although it is the central mechanism in the aesthetics of video game play, according to Graeme Kirkpatrick, it is rarely discussed within game studies.[41] Kirkpatrick asks us to consider why the controller has had such little attention:

> Why, then, do we find such a lack of reflection on controllers as compared with other aspects of the computer game interface (story, graphics, etc.) in the popular and scholarly literature that surrounds the medium? It is in the silencing of the controller that we construct the boundary between ordinary experience and the illusion we enter when we relate screen imagery and other game feedback 'as if' they constituted an environment or immersive world for play.[42]

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[39] Martha Schwendener, "Fort Paladin: America's Army (2003) – Art Forum Review." Accessed March 15, 2012. www.eddostern.com/fort_paladin.html.

[40] Stern's sculptures modify computer consoles and keyboards, however, in this context the keyboard performs the same functions as a game controller.

[41] Kirkpatrick, 127.

[42] Colin Herd, "Technological Expressionism," *Aesthetic Magazine*, June 1, 2011, accessed November 10, 2011, www.aestheticmagazine.com/art.htm.

Essentially, the hands connect people to the actions that appear on the flattened pictorial surface and it is at this point that we see unprecedented actions. The controller transforms the viewer from a passive participant to an active agent. It brings us into the immersive world while being the obstacle towards total immersion - once we acknowledge the controller in our hands, the illusion is broken. Arcangel's piece, *Beat The Champ,* features a hacked program chip inserted in the game controllers. This results in a perpetual losing streak for the on-screen bowlers. Christiane Paul, an early media art advocate and adjunct curator of New Media Arts at the Whitney, describes the experience as frustrating process that denies players the pleasure of gaming:

> Everything that the game promises in terms of reward or a rewarding experience is denied to the viewer. The connection between our physical activity and what it should result in within the game is disrupted.[43]

Atkin's theory of the "future-orientation" of the game gaze can be extended to the "future-orientation" of game console marketing. *Aesthetica* magazine points out that "it's this awareness of and sensitivity to historical perspectives that sets Arcangel's practice apart."[44] By longing for the next technological development and actively participating in forgetting the immediate past, it is possible to believe that the next best thing in gaming is out there. While Arcangel and others are skeptical of the promises made by the game industry, the artist asks us to recognize "obsolete" technology as important cultural objects worth

[43] Atkins, 136.
[44] Kirkpatrick, 127.

remembering. In this "meta-game," the artifacts are given new meaning in a society that has little regard for these objects as historically relevant.

Stern's console sculpture, *Fort Paladin (America's Army),* (2003), takes a computer case and surrounds it with a castle-like façade evoking medieval imagery, a theme that is evident throughout the *GodsEye* series. A keyboard takes the place of drawbridge and behind it sits a monitor that shows footage from an online game used famously as a recruitment tool by the American Army. The keyboard is controlled by custom-built software and a series of pistons that press down at speeds that sound like a rapid-firing machine gun. Arcangel's program hack and Stern's custom software emphasize the monotony of playing a mainstream game, echoing game theorist Atkin's argument that heightened realism does not necessarily translate to better gameplay.

Wolf, Markuu Eskelinen, and Ragnhild Tronstad, Corrado Morgana, and Celia Pearce are among many theorists who align Game Art with Dadaist, Fluxus and Situationist art activity. Duchamp's readymade sculptures- *Bicycle Wheel* (1913), a bicycle wheel attached to a stool and *La Fontaine* (1917), an upside-down urinal - neutered the consumer products of their functionality by transforming them into aesthetic objects.[45] Arguably influenced by the Dadaists, new media artists similarly appropriate game controllers, cartridges, and computer consoles for artistic ends thus making them into aesthetic objects as well. Controller, cartridge and console hacking is less common than using the

[45] Celia Pearce, "Games AS Art: The Aesthetics of Play." *Visible Language:* 40 (2004): 66-90.

modification tools made available by game manufacturers. In a 2003 paper titled, "Where Have All the Console Artists Gone?" Paul Catanese argues that there are a number of factors that make game console modification more difficult for artists. The laws protecting or prohibiting console subversion is in limbo. Intended to stop game pirating, copyright protections and intellectual property rights are infused within many gaming console technologies. Moreover, console hacking requires programming and technical knowledge that perhaps only a handful of new media artists have.[46]

Bolter and Shrank present the avant-garde as two separate sections within artistic practice. However, there are examples of works that fall somewhere in between formal and political avant-garde expression. Mary Flanagan, a digital media artist, educator, and designer authored the influential book titled *Critical Play: Radical Game Design*. In it, Flanagan examines the pre-digital world of play and argues that games always reflect and reinforce the social mores of the time. If we acknowledge the cultural significance of playing games, contemporary digital game makers suddenly have a big responsibility. The central question is: how can game makers purposely design games to create social or political change? It could be as simple as changing the scale of a game's controller, as with Flanagan's piece *[giantJoystick]* (2006). Commissioned by the HTTP Gallery in London, this large-scale, functioning classic Atari controller turns a formally solitary experience into a multi-player, social activity. *[giantJoystick]* requires

[46] Paul Catanese, "Where Have All the Videogame Console Artists Gone?" Level Up Conference Proceedings, Utrecht: University of Utrecht, November, 2003.

two, three, or even four players cooperatively working together to move the joystick and press the giant red button.

Cates clarifies that Game Art "cannot be considered in a fixed chronologically arranged genealogy of recent media art histories."[47] In other words, *Arsdoom* came before *Museum Meltdown* but the latter game was not necessarily inspired by the former one. In the 1990s, many people happened to play and modify first-person shooters and new media artists also picked up on this phenomenon. Similarly, Stern's keyboard modifications did not inform Arcangel's controller hacks or Flanagan's scaled-up controller. Game Art and Art Mods coexist in an ongoing discourse at the intersection of video games and art. The similarities or differences are only drawn out in retrospect.

Art Games

Art Games are independent or commercial games that are decidedly different from what mainstream gamers might expect. An Art Game's aim is often to challenge the mind as well as the hand-and-eye. Falling within the category of formal avant-garde activity, Art Games experiment with the possibilities of the medium. These games tend to tackle serious subjects like: challenging cultural stereotypes and offering meaningful social or historical critiques, however, they are not always sombre in their delivery. In "Arcade Classics Spawn Art? Current

[47] Cates, 165

Trends in the Art Game Genre," Tiffany Holmes offers a survey of many different trends and themes within Art Games:

> [Playing an Art Game] sometimes requires a tolerance for critical theory mixed with intelligent humor – it is this combination of heavy content with clever punning that makes the game format an excellent structure to critique power relationships between technology and society and between men and women.[48]

Natalie Bookchin's game adaptation of a short story written by Jorge Luis Borges is often described as a "tale told in ten games." *The Intruder* (1999) presents a sequence of ten short games - mostly classic adaptations of *Pong* and *Space Invaders* – where each game reveals another part of the story. In the original story by Borges, the female is "the intruder" who is enmeshed in a psycho-sexual love triangle. She is killed by one of the men, which perpetuates Borges' dark theme of sexual domination over women. The game ends where the story ends. Players are confronted with scenes that shed light on the perpetuation of masculine ideologies in commercially produced digital games. Furthermore, this game represents Bookchin's personal experience of feeling like an "intruder" when working in the male-dominated video game industry.

Commissioned by the J. Paul Getty Research Institute and installed at the Getty Museum in Los Angeles, Holmes designed a piece called *a_maze@getty.edu* (2001). This non-playable installation explores power dynamics by combining a faux-game interface with real-time video tracking tools. The artist is specifically addressing her own distrust of the prevalence of

[48] Tiffany Holmes, "Arcade Classics Spawn Art? Current Trends in the Art Game Genre," *Melbourne Digital Arts and Culture* (2003): 51.

surveillance technologies through this piece. Using actual surveillance footage from the gallery, the stills are automatically loaded as bricks in a retro-styled *Breakout* game. The role of the art institution is not only to preserve or display video games, in this case, it facilitates and funds avant-garde game production. The next section will consider the idea of a new museum where the institution is not only a repository for culture but rather a space that can connect society. Later on, we will discuss what it means to independently produce video games and the local and global initiatives that support this activity.

Section III: New Museums and the New Arcade

Serving as a centre for experimentation and innovation, Manual Castells states that the new museum could play the same role in the cultural field as hospitals currently play in innovative medical research. In the following passage, Castells describes the promise of a new museum stating that

> In this context, museums can become communication protocols between different identities, by communicating art, science and human experience; and they can set themselves up as connectors of different temporalities, translating them into a common synchrony while maintaining a historical perspective. Lastly, they can connect up the global and local dimensions of identity, space and local society.[49]

Of course, this cannot be achieved by all museums, though Castells points to three good examples. Namely, the Guggenheim Museum in Bilbao, Spain, the New Tate Gallery in London, and the San Jose Tech Museum in California. In

[49]Manual Castells, "Museums in the Information Era: Cultural Connectors of Time and Space," in *Museums in a Digital Age,* ed., Ross Parry (New York: Routledge, 2010), 434.

their own ways, these large-scale, high-budget institutions build bridges between technology and society at large.

On a much more local level are a number of initiatives within video game culture that fosters innovation and experimentation in game design. Media researcher, creator, and curator Cindy Poremba was kind enough to talk to me about the New Arcade - a series of events, or perhaps better described as an ideology that uses the gallery as a hub for public interaction with games as art. New arcade games are commissioned and tailor-made for play in gallery settings. In addition to making short, punchy games, the artists and designers extend the feel of the game into the exhibition space. Creating immersive environments is part of the design process. In November 2010, as part of Montreal's *HTMLLES* festival, Poremba co-curated an event with Emelie Grenier for the *Digital Ludology* space. In association with Studio XX,[50] the co-curators chose three commissioned works that were created at a workshop for artists who were new to the game-making process. The featured games were Allison Moore's *Paper Cut*, a role-playing game that investigates the ethics and economics of Silviculture - which is the practice of controlling, growing, and sustaining the needs of forests. Myriam Bizier's *Offshore* depicts the real-time rotation of wind turbines picked up by winds off of the Magdalene Islands via the Internet. The centerpiece to the exhibit was Stephanie Lagueux and Jonathan L'Ecuyer's *Pillow Talk*. A two-

[50] Montreal feminist collective that brings together artists, academics, professionals and students who want to work creatively and critically with digital technology.

player interactive game and installation demonstrates the inherent challenges in creating work as a couple and essentially tests the players' ability to communicate.

Montreal-based experimental art/game collective Kokoromi has been promoting video games as an experimental art form since 2005. Cindy Poremba and her co-founders - designer and programmer Damien Di Fede, game developer Phil Fish, and game designer Heather Kelley - have spearheaded many worldwide video game events. In fact, the term "new arcade" was coined at a Kokoromi organized event. In the past, there have been performances, arcades, experimental gameplay sessions and sound experiments. Often hosted at experimental hybrid art galleries, the venues and the games both challenge mainstream traditional arts. In November 2008, Kokoromi proposed a 3D game design challenge called GAMMA 3D. The game had to use anaglyphic stereoscopy (a visual technique that offsets the colours red and cyan to create a 3D effect when looked upon with special eye wear.) Testing whether or not stereoscopy could be used to enhance gameplay was the primary reason for the theme for their annual challenge. Kokoromi's experiment *super HYPERCUBE* (2008), was among the fourteen games chosen for the final exhibit. This game looks like a top-down view of Tetris. *HYPERCUBE* requires players to rotate and configure a cluster of cubes and the goal is to make them fit into a cut-out on a wall. Jim McGinley's stereoscopic game, *The Depths to Which I Sink* (2008) was also featured at this exhibition and it was originally created for TOJam (Toronto Independent Game

Development Jam). TOJam brings together game coders, artists, musicians and designers for a merciless three-day, twenty-four hour game making binge. The goal, complete a stupendous, playable game before the deadline. The results are not judged at the end of the three days but it gives developers an opportunity to start a new project with the hopes to continue with it after.

Another local variant, on a scale similar to but different from the events in Montreal was held on February 3, 2012 at Interaccess Gallery in Toronto. *D-Pad: Directions in Play/Art/Design* was produced in association with the Hand Eye Society and the Canadian Game Studies Association. *D-Pad* brought together works from many disciplines, including art, indie games, performances, and music. This one-night only event drew a very large and mostly young crowd, from the art and game worlds. Performances began at 9:30 PM and the room was packed, elbow to elbow by 9 PM. Art openings tend to draw a crowd but not to this magnitude, in terms of numbers, this show was successful. *D-Pad* curator, Skot Deeming also known as mrghosty, is an independent events promoter who performs live video manipulations set to chipmusic. On the floor in front of the DJ set-up are two *Dance Dance Revolution* mats, each mat is hooked up to mrghosty's laptop and the projected video clip behind him changes with each dance step. The performances featuring bossfyte, mandelbrut, oxyvulu and mrghosty, were in my opinion, the strongest aspect to this event that promised to bring together the arts and indie games.

The indie games featured were selected from TOJam events and they were each innovative in their own ways. Indie developer, Damian Sommer's co-op game, *A Friendship in 4 Colors* requires players to work together to win. Player one must time their moves carefully, as any unplanned action could kill player two unexpectedly. Devine Lu Linvega and Renaud Bedard's *Rain+Bow* was the most challenging game of the evening. Do not let the happy Japanese pop culture façade fool you. The "enemy" character relentlessly shoots bullets and debris until you die, in fact, this game might be impossible. As a player and a bystander I never saw past the fifteen second mark - it is supposedly ninety-seconds long. "Bullet-hell shooters" like this one are a very popular in Japan. The Dames Making Games collective also had its' own section of games. This collective evolved from a six-week game development program that was sponsored by The Hand Eye Society and TIFF Nexus. That workshop introduced women to game making tools. Since this first workshop in August of 2011, Dames Making Games has continued to support women who are new to making games as well as those who are already involved in the game industry. Their priorities are to create a social network for women in games, increase skill development, and to provide online support and outreach. This opens the door for women who are curious to try their hand at game making. Because this group is dedicated to introducing women to the tools of game making, the featured games emphasized the act of game making rather than featuring works that revolutionize gameplay.

The art works featured at *D-Pad* exemplified all that has already been done with video game art and unfortunately did not stand out next to the compelling indie games. Kenton Sheely's work *Cities in Flux* (2010) resembled 1990s art mods, in this interactive piece, players manipulate a modified *GTA* city scape. Modding was once the only way artists could manipulate or intervene with video games, but with the technologies available today, modding seems like an anachronistic move for a new media artist. The only non-interactive piece was a remake of Andy Warhol's *Empire* on a Nintendo GameBoy. This work did not mesh well with the displays of playable media because many confused visitors attempted to play with it. The non-negotiable GameBoy and the repurposed dance mat were the only recognizable commercial technologies at this event. Digital games are more than hardware and software, as Katie Salen and Eric Zimmerman state:

> The physical medium of the computer is an element that makes up the system of the game, but it does not represent the entire game. The computer hardware and software are merely the materials of which the game are composed.[51]

The majority of the games were being played on emulators and somehow, this quote poignantly illustrates how video games and gameplay are the fixtures for these types of events. This de-emphasizes the importance of the controller and console that the previous exhibitions wanted to highlight. *Digital Ludology* was concerned with staging an exhibition that focused on the environment as well as

[51] Salen and Zimmerman, *Rules of Play* (Cambridge: The MIT Press, 2003), 86.

the games, however, *D-Pad,* emphasised the social experience of playing games while celebrating local game designers.

Independently Produced Video Games

Indie in this context is defined as a method of game production that provides an alternative to the mainstream industry. This discussion will address indie as a community rather than the phenomenon where large companies sometimes outsource parts of the development labour to smaller organizations. Indie game development can be compared to independent film production where independence could mean either financial, creative, or even a style. The fixture that unites the independent production of games is the predominant notion that the development process should take place outside of a large-scale corporation. The indie game scene is a highly active community. It involves game developers, players, and bloggers who use the term "independent" or "indie" to describe the process of creating, distributing, marketing, and playing original games. There are a number of festivals for developers and gamers to come together, the most recognizable ones are the Independent Games Festival (IGF) and Indiecade; online communities like Kongregate promote, support and distribute indie games on the Internet; and a number of blogs and magazines provide reviews and general discussion. In 2002, game designer Eric Zimmerman wrote an article for a publication that accompanied the *Game On* exhibition. Entitled, "Do Independent Games Exist?" Zimmerman argues from both the positive and negative

perspectives. The concerns are about the size of the games industry, the technology, the culture, etc. He states that they are two related arguments or perhaps two halves of the same argument. Ultimately, the onus is placed on game players, critics, and developers:

> Be disgruntled. Be dissatisfied. Demand more. Get angry with the state of things. Start a revoltion. Do you need a place to begin? How about this: solve the unsolved problem of independent games.[52]

In the last seven years there have been many radical changes within the commercial game industry which has opened up new channels for distributing indie games. Consumers can access independently produced games through Steam, Xbox Live Arcade, or even through app stores on smart phones. Poremba states that development tools have gotten a lot better within recent years and game engines are a lot more unified then they were in the past. Game modding was once the easiest point of access to manipulate levels or create custom content, however, Poremba says that this is less common. The ease of better tools means that more people can create their own games and modding is related towards fan culture as opposed to the art world today. She also argues that the average game designer is more talented while the indie gaming culture has become glamourized through the prominence of festivals and developer's conferences. Highly skilled designers are driven to open their own studios rather than working for one of the larger game corporations. The climate for indie games has definitely changed over

[52] Eric Zimmerman, "Do Independent Games Exist?" *Game On: The History and Culture of Games*, ed., Lucien King (New York: Universe Publishing, 2002), 128.

the past ten years due to these technological and cultural transformations. Though indie games are often artistic, Poremba clarifies that a difference remains between Art Games and indie games. As much as it is mode of production, indie games are also a brand, or perhaps a brand alternative to the mainstream. Aside from the small-scale development process, there is a shared sense of a spirit of indie.

The indie ideal suggests that these games are or at least should be more innovative, experimental or more formally avant-garde. However, this is not necessarily the case - games that are categorically indie share similar aesthetics. There are several contributing factors that make up the indie aesthetic and it might come down to working within certain limitations, rather than making deliberate choices. Chase Bowen Martin and Mark Deuze argue that realism in graphics and audio are devalued because of limits set by smaller file sizes. Online distribution means that file sizes have to be kept small and so developers tend to prioritize game mechanics over realism because the games are generally shorter as well. [53] An indie game will look, feel and play differently from anything offered from a major game retailer. One of the aims in indie development today is to become more inclusive towards different ethnic cultures and genders

Alternatively, Belgian new media artists Auriea Harvey and Michael Samyn, turned to game development as a way to escape the art world. Tale of Tales is based on many of the same beliefs of the indie ideal, their "not games"

[53] Deuze, Mark and Chase Bowen Martin. "The Independent Production of Culture: A DigitalGames Case Study," in *Games and Culture* 4 (2009): 281.

are designed for people who are no longer enchanted by commercial products. In 2006 at the mediaterra festival of Art and Technology, the duo presented their "Realtime Art Manifesto" that states that what they do and what others should consider doing is to stop making games. Their manifesto asks designers and artists to begin to embrace the medium as something that has enormous potential. The guidelines from the manifesto are as follows:

1. Realtime 3D is a medium for artistic expression.
2. Be an Author.
3. Create a total experience.
4. Embed the user in the environment.
5. Reject dehumanisation: tell stories.
6. Interactivity wants to be free.
7. Don't make modern art.
8. Reject conceptualism.
9. Embrace technology.
10. Develop a punk economy.[54]

Their guidelines resist art as much as they reject the principles of commercial game design. I want to elaborate on the seventh and eighth tenets as these are the most pointed against Game Art. They state specifically, "make art-games, not game art. Game art is just modern art." Secondly, in a bid to 'reject conceptualism' one must "use the language of your medium to communicate all there is to know. The user should never be required to read a description or a manual."[55] Though their projects are often highly creative and artistic, they experiment with the video game as a medium rather than an object that must be taken apart to be understood. People who seek engaging forms of narrative or

[54] Auriea Harvey and Michael Samyn. "Realtime Art Manifesto." Accessed March 10, 2011. http://tale-of-tales.com/tales/RAM.html
[55] Ibid.

innovative gameplay will appreciate the experiential nature of a Tale of Tales piece. Though this duo resides in the liminal space of art and games, their practice can be located on the fringes of the greater game world. *Fatale* (2010) was a finalist for the IndieCade Festival 2010 which is an international, multi-day conference and exhibition that takes place annually in Culver City, California. *Fatale* was featured among thirty-two other finalists and is described by the quote below:

> *FATALE* is an interactive vignette in real-time 3D inspired by the Biblical story of Salome and the play about her by Oscar Wilde. Developed by Tale of Tales, the creators of IndieCade 2009 finalist The Path, and 2008 finalist the Graveyard, FATALE is a living tableau that allows you to freely explore many poetic, historical and literary references to the ancient legend, while bringing it relevance to a contemporary audience. [56]

No stranger to the IndieCade audience, this depiction of *Fatale* is an accurate portrayal of the game mechanics of a "not game," and they are. The distribution for this game is primarily online through Steam, but public awareness is made through events like IndieCade. Like most indie ventures, there is very little money to make the games let alone enough left over at the end of the day to promote them. Unlike most other indie offerings, Tale of Tales' work focuses on realistic 3D graphics and expansive narratives. In an interview with GameScenes, designers Harvey and Samyn reveal that for them, the history of video games starts with *Tomb Raider* (1996-2012) and *Doom.* The artists hope that 3D game graphics can be used to progress the medium beyond "games." In other words,

[56] http://www.indiecade.com/2010/finalist_games_post2010/

game mechanics and graphics will be used to do more than traversing through levels to complete various objectives set by game designers. [57]

Are Game Designers Artists?

In 2007, game developer Katharine Neil conducted a study that attempts to show how game developers perceive themselves and their work. Did they think what they were doing was art? Furthermore, are game designers artists? First, she wanted to clarify that, contrary to popular mythology, game developers seldom see any of the multi-billion dollars a year made from commercial games. In the 1980s and 1990s this might have been true, but she states,

> [T]he common wisdom in game land is that the days of Ferrari driving game designers and millionaire cocaine-snorting game coders (typified by the legendary rise of powerful, elite studies such as id Software and the notorious excess of the doomed Ion Storm Dallas in the 1990s) are long gone.[58]

In a poem commissioned for the *Hot Circuits: A Video Arcade*, Poet Charles Bernstein describes the splendour and sacrifice of being a game developer in the late 1980s:

> [Y]oung man in chalk-striped suit, vice-prez for software development of Data Futurians Inc. of Electronic Valley, California; pulling down 50 thou in his third year after dropping out of college. (Though the downside sequel has him at 30, working till 2 every morning, divorced, personal life not accessible

[57] http://www.gamescenes.org/2010/07/interview-tales-of-tales-the-aesthetics-of-art-games.html

[58] Katharine Neil, "My Game in you gallery? Game Developers as Artists," in *SwanQuake: The User Manual,* ed., Bruno Martelli. (London: Liquid Press/i-DAT, 2007), 3.

> at this time, waiting for new data to be loaded, trouble reading the disk drive.[59]

Neil argues that game developers have the passion of a "suffering artist" without the creative autonomy. This drives developers towards the indie community. Indie culture suggests an ideal in game development often where the organization is small and the solo developer is dedicated to refining his craft. Independent game developers are sometimes portrayed as being driven by a need to perfect the art of game making. According to

Martin and Deuze,

> [T]here are two predominant ways of coming into professional indie game development. One method is as an amateur. Having no experience in the game industry, someone will start a game or a game company if they have the idea and inspiration and will create and produce their game individually or among a small team of varying degrees of professionalism. The second is through experience working in some degree in the greater games industry and then choosing to form an independent studio out of dissatisfaction with the current company culture or industry content. [60]

What this quote above points to, is that some become indie developers out of passion, while others, enter into it because of an inherent disdain for the commercial industry. Why do game developers have a need to creatively express themselves through games? What makes coding a game any different than writing any other piece of software?

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[59] Charles Bernstein, "Play it Again, Pac-Man," wrote as the catalogue essay for the American Museum of the Moving Image exhibition *Hot Circuits: A Video Arcade* (1989). Published in Charles Bernstein, *A Poetics* (Cambridge: Harvard University Press, 1992),36.

[60] Deuze and Martin, 287.

In "Digital Media and Art: Always Already Complicit?" Bolter argues that social computing (Facebook, YouTube, World of Warcraft) is the politically avant-garde dream come to life. The popularity of such websites resulted in new forms of social interaction, identity formation, and disruptive or playful social phenomena like flash mobs. "Social computing" Bolter states, "is art as life practice, or perhaps (what amounts to the same thing) it is the parody of arts as life practice."[61] However, I argue that this disruption happened many years before the invention of social computing. In the late 1970s, Game designer Warren Robinett was inspired to write a graphical game based on the text game *Adventure*. At this time, game developers had to design everything from scratch and there was no online forum or other support to help solve simple design problems. After dedicating hundreds of hours to making the game, Robinett had no promise of getting credit for his work. The policy at Atari meant that all designers had to remain anonymous. Robinett knew he had designed something unique and so he wanted a way to get his name on his product. This lead him to create a secret room that is really hard to get into, in this room contains his name in big bold letters. The best part of this incredible story is that he did not tell anyone until a few hundred games got manufactured and shipped world-wide. After completing the game, Robinett states:

> I finished *Adventure*. No royalty, no bonus, no pat on the back, not even a pizza. All in all, I was pretty satisfied with the little surprise

[61] David Jay Bolter, "Digital Media and Art: Always Complicit?" *Criticism* 49 (2007): 117.

> I left hidden in the final game code I handed over to be manufactured. Then I quit.[62]

Some players eventually discovered the secret room and it became a meta-level to the game. One did not fully complete the game until the secret room was discovered. Robinett points out that the meta-game he was playing was with the Atari management.[63]

This manifestation of rebellion against the corporate games industry does not fall under any traditional definition of art. Nor can these conditions be recreated for a gallery setting. I mention it because it might actually be the realization of the avant-garde goal to disturb the distinctions between art and everyday life. When Duchamp placed the signature "R. Mutt" on the side of the up-side down urinal, the mass-made object suddenly had a distinguishing feature. The artist had taken ownership over the formerly anonymous commercial product. Similarly, once Robinett placed his name on the game that he created from scratch, it was his way of taking ownership of the product, as well as calling out the industry for essentially erasing the individual identity of the game designer. This is unimaginable today because game designers and producers are often perceived to be just as important to the success of a game as a director is to a Hollywood film.

Conclusion

[62] Warren Robinett, Foreword to *The Videogame Theory Reader*, ed., Mark J.P. Wolf and Bernard Perron (New York: Routledge Publishing 2003), xv.
[63] Ibid, xvii.

The relationship between digital games and the art world of museums and galleries is complex and multivalent. The three trends that I identified offer a particularly focused look at the artistic activity at the intersections of the game world and the art world. Blockbuster exhibitions focus on appealing to mass audiences and so these exhibitions tend to focus on what is popular and mainstream. In antithesis and perhaps even objection to this practice is digital Game Art and Art Games. This sometimes means breaking apart the components of video games by deeply exploring code or manipulating the materials of gaming technology itself. Politically avant-garde games question the very role of art in society, while formally avant-garde games push the boundaries of the medium. Tavinor states,

> Given the recent non-art uses that modern museums have taken on, I think that videogames have made their way into museums not as art, but as popular culture, and furthermore that this is an act of *appropriation* on the part of the museums, rather than something that has arisen naturally out of gaming culture. (In my opinion, the last thing that videogames need, given their present vitality and creativity, is academic entombment in a museum.)[64]

The first part of this statement is quite correct; video games are often presented in art museums as popular culture. However, the latter half of the statement does not acknowledge the history of early Game Art Mod practice which involves new media artists who also happen to be dedicated gamers. Furthermore, museums are not repositories for the preservation and presentation of aesthetic objects. The new museum incubates exciting endeavors that transform the relationships between

[64] Tavinor, 190.

society and technology. Few of these types of museums exist today; however, there are a number of local initiatives that seek to create opportunities where game experimentation and innovation can happen. With so many different types of video games available and the inherent challenges that come with its display, it is impossible to cater to the different expectations of such diverse audiences. Any retrospective exhibition that promises to portray the game history in its entirety can only fall short of what is promised. The common factor among all video games is the screen and the controller. When one is locked into the state of flow, fully immersed within the safety of the magic circle, the screen, the controller and even one's own hands disappear. However, displaying video games within the rarefied context of the museum or art gallery will hopefully garner discussion about the role of games in our lives.

In the essay, "Between Art and Gameness: Critical Theory and Computer Game Aesthetics," Kirkpatrick suggests that perhaps contemporary computer games emerge "at the end of art in the traditional sense." [65] He carefully clarifies "this is not to say – foolishly – that the computer game supplants or replaces art, but it is to suggest – playfully – that it occupies some of the ground where art once stood."[66] Artwork has long been understood to have auratic properties, Walter Benjamin, most famously has attributed art objects with cultic properties inherited from ritual and sacred objects. Oddly, the institutionalization of

[65] Kirkpatrick "Between Art and Gameness: Critical Theory and Computer Game Aesthetics." *Thesis Eleven* 89 (2007):77,
[66] Ibid, 77.

commercial video games also creates the aura of a mystified art object. Depending on one's point of view, video game exhibitions either represent the final frontier in the commercialization of art. Or perhaps game aesthetics have taken up a fraction of the space where art once solemnly stood.

Rather than attempting to make sweeping statements to theorize video games and its aesthetics, this paper offers a focused examination at the intersections of video game and art culture. This typological exploration of video games is a culmination of twenty years of debate asking whether or not video games are a legitimate art form. It is my intention to draw attention to context, as well as content, when evaluating the legitimacy of video games as an artistic medium.

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