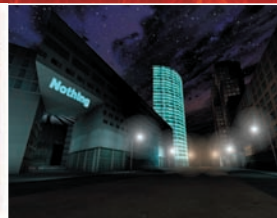# VIDEOGAMES
AND ART

EDITED BY ANDY CLARKE
AND GRETHE MITCHELL

Videogames and Art

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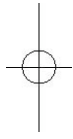# Videogames and Art

Edited by Andy Clarke and Grethe Mitchell

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INTRODUCTION

Grethe Mitchell and Andy Clarke

This book, *Videogames and Art*, is one of the first books to provide a complete overview of the field of videogame art – that is to say, art produced with or influenced by videogames. In selecting the essays and interviews to be included in this book, we have sought not only to give an indication of the current state of videogame art – and its major practitioners and genres – but also to place this work in a broader critical context. Its intention is to show that even though this area of digital art is comparatively young and exhibits a wide variety of different styles and techniques, it none the less forms a distinct and coherent artistic movement – united by shared aesthetic concerns – and is therefore worthy of being taken seriously as an art form.

As we have pointed out previously, in our paper for the Level Up games conference,[1] videogames are most people's first point of contact with computers. Videogames have also, through their immense popularity, become part of our shared cultural capital. As such, they are often recognizable even to those who have never played the original game and may also carry connotations beyond their original content, context and meaning. It is therefore inevitable that artists have used them firstly as inspiration and as a source of material, and then, over time, sought to create their own games and modifications to existing games.

Videogames have become a popular area of academic research and have spawned many books and conferences, so why then is a book needed specifically on videogames and art? The reason is that videogame criticism (whether from a background in ludology or narratology) has tended to concentrate on the mechanics of the videogame, rather than its aesthetics. As a result, the theoretical discussion has tended to revolve around how these factors contribute (positively or negatively) to the gameplay and/or the narrative of the game, rather than as qualities to be assessed and/or appreciated on their own terms. While this is a valid theoretical approach to take, implicit in this type of analysis is the assumption – whether made consciously or not – that what is being looked at is game *design*, rather than game *aesthetics*. In other words, it is game *craft* rather than game *art*. The intention of this

book is, on the other hand, to focus more fully on videogame art and to highlight the key concerns and voices emerging from this area of artistic practice so that they become more visible and start to occupy a more central position.

Videogame art is a constantly evolving and mutating field. This is inevitable as it is not built on one dominant application, programming language, medium, or aesthetic, nor does it consist of a single, homogeneous, community. But this also means that the work is very diverse and cannot therefore be easily or rigidly defined in terms of its themes, technology or techniques. Even so, the work shares a number of common characteristics, and although not every work will have or display all of them, we can use these to help to recognize videogame art and acknowledge it as a coherent genre of work (and a valid critical term to describe this type of work).

The first and most obvious of these identifying characteristics is the appropriation of videogame iconography. Space-Invaders.com, for example, take the characters from *Space Invaders* and other similar games and create graffiti in the same style by sticking bathroom tiles on the sides of buildings. Likewise, the *LHOOQ* series of works by Robert Nideffer (2000) takes screenshots and publicity images of Lara Croft from *Tomb Raider* and adds a goatee and moustache to her image in a conscious echo of the Duchamp artwork of the same name (which applied the same modification to an image of the *Mona Lisa*).

Although this type of appropriation often involves the use of game "icons" – Lara Croft, Mario, Pac-Man, the Space Invaders, etc. – this need not always be the case. Mauro Ceolin has, for example, produced paintings of "landscapes" from videogames in addition to his images of game characters. Another of his ongoing projects has been a series of portraits of people from the videogame industry – most of whom would be recognizable to game fans.

Miltos Manetas has likewise explored other aspects of videogame iconography, producing paintings, videos and prints based on videogame hardware and of people playing videogames. This shows how it is not just the characters of videogames that have become iconic, but also the hardware and the characteristic poses and expressions of the players. Mauro Ceolin has highlighted the iconic status of videogame hardware by even painting some of his images onto PlayStation consoles and mice.

Suzanne Treister takes a different approach to exploring videogame iconography in her early work (covered in her essay in this book). In it, she paints a series of images from imaginary videogames – imitating the distinctive visual style of these early computer-based videogames without appropriating any individual game icon. This brings us to the second characteristic that we can use to identify videogame art: even if it does not appropriate the iconography of videogames, it may adopt the iconic graphical style of the videogame.

This indicates how there is an identifiable videogame aesthetic, which is distinct from the content of the videogame itself. Examples include the pixellated look of *Space Invaders* and other very early videogames, the vector graphic style of slightly later ones such as *Asteroids* and *Battlezone*, the isometric view of *The Sims* and other "god games", and the glossy hyperreal look of the FPS (first-person shooter).

All of these graphical styles have, at times, been appropriated by artists in one way or another – indeed, the pixellated retro-game imagery has crossed into the mainstream media and become a design cliché. Even so, there are still artworks such as the *Screenshots* series by John Haddock (2000), which provide new and interesting perspectives on this idea. In them, he takes the isometric view of games such as *The Sims* and uses it to portray both real historical events (such as the killing of Lee Harvey Oswald) and fictional ones (such as the killing of Fredo in *The Godfather*).

It is interesting to note here that Haddock is still working with iconic people, events, scenes, and imagery, even though they do not come from videogames; he likewise treats real and fictional events equally. Although one must acknowledge that this work is only one in a series that Haddock has done presenting violent content in a naïve visual style (such as his *Cartoon Violence* and *Embedded* series, both works in progress), it none the less shows how videogame art fits into a postmodern aesthetic of sampling and appropriation with its conscious – and often ironic – remixing of cultural references. In a sense, videogame art is one of the most postmodern of art forms because it brings together such extremes of high culture (art) and low culture (the videogame).

But postmodernism is not the only tradition that videogame art can be related to. The use of iconic imagery and strong simple graphical styles in videogame art also brings to mind pop art. Videogame art is fascinated by its icons, and, like pop art, it revels at times in the ephemerality of its subject matter.

Videogame art is also art that retains a sense of humour. As a result, it must also be looked at in relation to broader themes of play, fun, and chance in art. It is easy to trivialize the in-game performances of artists such as Joseph DeLappe as just being "japes", but they have clear and conscious echoes of the interventions and happenings of movements such as Dadaism, Surrealism and Situationism. One can also relate DeLappe's *Artist's Mouse* series of drawings to the Surrealists' experiments with automatic writing.

There is also is a strong undercurrent of conceptual art running through videogame art. In a way, this is inevitable – the game element of the videogame is so strong, and so problematic for the artist and viewer alike, that it requires the substantial distancing effect that this sort of intellectualization provides. In order for the viewer to recognize and respond to the message that the artist is conveying though their work, they need to be taken out of the game so that they can see the game for what it is. If this doesn't happen, then they will naturally tend to enjoy a work of videogame art as a videogame, rather than as an artwork (as this requires the least effort).

For example, the Cory Archangel artwork *Super Mario Clouds* (2002) is a hacked version of the Nintendo NES *Super Mario* cartridge, which has erased everything but the clouds which normally just drift by in the background. By concentrating the viewer's attention on this one aspect of the game, which has no bearing on the gameplay, it forces them to think differently about what is missing.

This highlights another characteristic of videogame art – that it often uses and subverts the videogame technology itself. A diverse range of techniques are used, but there is a

consistent motivation: to take videogame technology and use it in ways that it was not designed to be used.

The most visible example of videogame technology being appropriated is FPS modification – this is due to the power and flexibility of these games and the ease with which they can be modified. In these FPS games, the world maps and the various graphic elements within the game (such as the "skins" applied to the characters) are separate files that can be modified to alter their appearance; the game engine itself can also be scripted and patched to modify its behaviour. Together these techniques can produce modifications which are sometimes so comprehensive that they make the game almost unrecognizable as, for example, in JODI's *Untitled Game* series (1996–2001).

It is important not to make the use of game technology a *sine qua non* of videogame art as this puts too narrow a definition on this genre of work and fetishizes the technology to an inappropriate degree. Nonetheless, it is necessary to take the technology into account when considering certain forms of videogame art, particularly those which take videogames as their subject matter. *Adam Killer* by Brody Condon (1999) is an example of this – it criticizes the violence of the videogame (and its pointlessness) and it is therefore significant that it appropriates videogame technology to do this – as this makes its message clearer and its criticism more barbed. In such cases, the form and content of the artwork (or the medium and message) are inextricably tied up with one another.

Even where it does not use the *technology* of the videogame, videogame art often still appropriates the *form* of the videogame. For instance, Jim Andrews' *Arteroids* (2003) does not use the same programming language as the original game, or have the same graphical content, but is recognizable as videogame art because it still has sufficient elements of the original game/gameplay of *Asteroids*.

The appropriation of gameplay is the fourth characteristic of some videogame art, but it is important to look critically at what gameplay is being appropriated, as this allows us to identify videogame art as a genre distinct from the broader category of work which we have termed "playable art". The distinction that we are making here is one between, on the one hand, videogame art and, on the other, the other forms of digital art which take the form of games or have game-like elements.

Although this may at first seem like a petty distinction to make, it is nevertheless important as it allows us to more easily identify differences on a number of other levels such as those of aesthetics, technology, and motivation. Videogame art refers specifically and knowingly to videogame culture, iconography, and technology. Playable art on the other hand, does not necessarily refer to the world of videogames and can be understood primarily within the context of art history and contemporary art practice. Videogame art takes the videogame as its necessary starting point, whereas for playable art, videogames are just another form of interactive media – noteworthy because they are an important element of popular culture and so highly interactive, but not especially prioritized beyond this.

We do not, however, want to ignore the field of playable art completely as the boundary between playable art and videogame art is not distinct, nor is it rigid. Playable art is clearly

a significant form of digital art practice, though its role is different to that of videogame art, as are its techniques and aims.

Because of the close relationship between videogame art and videogames themselves, one must inevitably also address – even if only in passing – the issue of whether commercial videogames themselves are art.

This is a contentious issue which provokes strong emotion from both those arguing for and against the idea. We, personally, do not subscribe to the view that commercial games *cannot* be art. We do feel, however, that there are very few of these games which can be regarded, *in their entirety*, as art – there may be interesting aesthetic elements within certain games, and artists working in certain fields of game design and production, but it is rare for one game to be successful in all artistic respects *and* be sufficiently commercial to be released.

It is easy to regard the early videogames as art (or as the work of an artist) as they were clearly the vision of a single person or a small team. One can read, for example, an interview with Toru Iwatani, the creator of *Pac-Man*, and hear him speak about every aspect of the game – from how he designed the characters to how he programmed the speed of the ghosts, to how he chose the title.[2] This contrasts with the mostly anonymous and team-based mode of production in the modern videogame.

Of course, art can be made in other commercial fields, such as the film industry, which share this team-based mode of production. A crucial difference, however, is that mainstream (Hollywood) cinema exists alongside other forms of practice – music video, art movies, experimental film and video, television, and documentary – and there is a clearly identifiable crossover of ideas, techniques, and personnel from one area to another. This appropriation and assimilation is something that mainstream cinema is forced to do to stay ahead and survive, and as a result, it stops it from becoming complacent, even though it occupies such a dominant position.

The situation is different, however, with videogames. The mainstream games industry is dominated by franchise titles, spin-offs, and genre titles to an even greater extent than mainstream cinema, and this reduces the need to be innovative. There is also no pressure from outside forcing change; the so-called independent games industry does not fulfil the same role as independent/art-house film, as its products are, for the most part, indistinguishable from those of the major players in the industry. Truly oppositional forms of videogame practice – such as game hacking and patching, videogame art, and fan art – are entirely divorced from the mainstream games industry and there is little, if any, crossover. The game *Counter-Strike* – which is actually a mod for *Half-Life* – is one of the few exceptions to this, but it still remains just a genre game (the interview with Julian Oliver and "Kipper", included in the second section of this book, goes into some of the problems faced by those seeking to produce truly independent games).

But this is not to say that all modern games – or modern-looking games – are uninteresting. It is merely to indicate that if we are looking for art in videogames, then it is not in the surface gloss of videogames. It is found, instead, in the way in which people – whether they

consciously define themselves as artists or not – use videogames as a medium. The aim of this collection is to explore and map out that territory.

Although each essay or interview featured in the book is self-contained, they have been arranged in a series of themed sections so as to provide a logical progression. Even so, the book can be read in any order without compromising understanding or enjoyment, and our intention is that it will, as a whole, provide a comprehensive and rounded overview of the various forms of videogame art, and indicate the ways in which videogames overlap with art.

The first section of the book will, together with this introduction, serve to orient the reader and introduce some of the key artists, concepts, genres of work and terminology in this field. It consists of a general overview and a series of more in-depth studies of certain areas; also included is the curatorial note from one of the first exhibitions of videogame–based art. The second section focuses on individual artists and art projects. It features interviews with – or essays by – many of the artists mentioned earlier in the book and allows them the opportunity to discuss in greater detail the techniques that they use and the motivation behind their work. The third and final section of the book explores the relationship between videogames and art. It looks at the aesthetics of these games and their formal similarities to other (traditional) forms of art, and also examines the official and fan-produced art that surrounds these games.

Going on to look at the sections in more detail, section one opens with an essay by Axel Stockburger, which introduces some of the major genres of work in the field of videogame art and places them within a broader theoretical framework. Rebecca Cannon's essay follows on from this and concentrates primarily on mod art – that is to say, art which is created through patches or modification of FPS games. In this overview, she also describes the work of a number of artists (such as Julian Oliver, Brody Condon, JODI and others) who have contributed interviews or essays featured later in the book.

Jim Andrews covers another significant field in his essay. In it, he deals with art which appropriates the videogame form and consciously uses it as a vessel into which to pour other meaning. It is easy to trivialize this sort of art as just being novelty games or parodies, but to do so is to miss the point. Parody mocks the original, but these artworks treat the original game with respect – appropriating its form and using it as a medium for other content, such as references to art, literature or popular culture (anti-war and anti-consumerist messages are also common).

Further on in the first section, the essay by Henry Lowood provides an in-depth history of the field of machinima – animated movies made using the real-time 3-D rendering capabilities of FPS games. This essay on machinima concentrates on the early history of this genre and on its origins in "speedrunning" (the creation of movies showing a skilled player completing a level of an FPS game in the quickest possible time). It then goes on to describe some of the more narrative work now being produced by the gaming community.

Lowood's essay, with its deliberate emphasis on non-artist-produced machinima, shows clearly how videogame art exists at the intersection of a number of different communities

which may be producing similar work, with identical tools, but with radically different aims. This is true of all forms of videogame art as it lies, by definition, at the intersection of videogames and art. The contrast is, however, clearest with FPS-based mod art.

This intersection of communities can be problematic for the artist, the curator and the audience of this work. For example, what makes an artwork art? Also, is it appropriate for curators and critics to consider fan art as art if the people producing this work do not regard themselves as artists and did not intend their work to be exhibited as such?

These issues are highlighted by the inclusion in this section of Anne-Marie Schleiner's curator's note for the 1999 exhibition "Cracking the Maze: Game Plug-ins and Patches as Hacker Art". Although there were earlier examples of videogame–based art – such as the work of Suzanne Treister covered in the next section – this was the first exhibition to show game modifications as art and, as a result, is somewhat of a landmark.

The curator's note is interesting as a historical document because it indicates the extent of the field of videogame art at that time. The exhibition itself consciously sought to include both work intended as art practice and that which was not. This was a brave decision, though one which may possibly no longer seem as appropriate given the greater number of artists working in this field and the extent to which they have coalesced through subsequent exhibitions into a more coherent movement.

We believe that videogame art presents interesting challenges to the community of artists, curators and critics. The technology and practices involved in this type of work demand a re-thinking – and perhaps a re-aligning – of the relationship between artist, fan, curator and critic (or at least a redefinition of these roles). This, in turn, highlights the need for curators who are experienced and knowledgeable in the field of videogame art and who are therefore able to provide the proper contextualization for this type of work. This is necessary because the videogame critic will often lack the artistic background, vocabulary, or knowledge necessary to place videogame art in its correct historical, aesthetic, or critical context (this is where we regard the contributors to this book as being exceptional). The art critic will likewise often not have the knowledge of videogames and videogame culture to fully understand or contextualize that aspect of the work (even if they are familiar with other forms of digital art).

The issue of contextualization is of crucial importance. In spite of its basis in such an available medium as videogames, videogame art is often difficult work for a general audience to approach, appreciate and understand. The audiences for videogames and for art (even digital art) have traditionally been separate and distinct. This means that most people will probably not come to a piece of videogame art with much, if any, prior knowledge or experience of this type of work (although we believe that this situation will improve due to the increasing "games-literacy" of the average viewer of these artworks – and, it has to be said, of the average curator – though there may currently still be some way to go in both regards). Conversely, the "game literate" viewer also can also present problems for the artist, as they will often want to engage too fully with the artwork as a game and will fail/refuse to appreciate it on its own terms as an artwork.

However, a knowledge of videogames can be vital for appreciating some videogame artworks. Familiarity with a specific game (or with videogames in general) is sometimes necessary in order to recognize what the artist's contribution is or to understand the meaning of the artwork. The physical requirements of gaming can also be important. For example, most FPS-based videogame art require the user to navigate within a 3-D space – skills which not everyone is currently familiar with (although this is likely to change over time and with succeeding generations). These points both possibly indicate why vintage videogames such as *Space Invaders*, *Asteroids*, *Pac-Man* are the ones that are appropriated most often: these are more universally recognized and their simpler gameplay makes them easier for the viewer of the artwork to interact with. They are also less problematic than modern videogame icons which often come with negative connotations due to the original content of the games (featuring killing and violence).

Although many artworks appropriate the form of old videogames, one genre of work is worthy of particular mention, and that is the political work – those that provide an explicit anti-establishment, anti-globalization, anti-racist or anti-war comment. Examples of this include *Space Invaders* by Andy Deck (1995), *Alien Invasion* by Tony Ward (2002) and many others. A common thread running through these works is that they are all adaptations of simple retro-games, such as *Space Invaders*, that provide a simple, responsive and easily understood interaction. This is not essential for this genre of work, but is generally a deliberate strategy as a number of artists have commented that they find the accessibility of the videogame form – and the way in which a direct political message can be conveyed in this form of game without reducing its accessibility – to be attractive.

But this is not to say that videogame art can or should speak only to a videogame audience, or that it only comments on videogames – the work is more subtle, sophisticated and nuanced than that, and the intention of the second section of this book is to give some indication of the strength and diversity of work in this field.

Section two of the book consists of a series of interviews with artists working in the field of videogame art and essays on or by individual artists. Being limited in space, this book can cover only a fraction of the artists working in this field. Even so, we have sought to cover many of the major artists (as well as some lesser-known or less well-established ones), and to provide a balance between the various forms of videogame art.

When discussing videogame art, it is important not to overemphasize the importance of FPS-based mod art, or to equate videogame art solely with mod art (even though it is the most prominent, widely exhibited and controversial example of it). As a result, we also include artists who work in other fields. The essay by Paul Catanese, for example, serves to touch upon the area of console hacking, which forms a relatively small but important area of videogame art. In it, he outlines the technical and aesthetic motivations behind his work, which involves playing video loops on a hacked Game Boy Advance.

The diversity of videogame art is also reflected in the work of many of the individual artists. Brody Condon, for example, has produced work that includes FPS-based mod art, *Sims-*

based modification, machinima, in-game performance and sculpture – and the work of many other videogame artists is equally diverse.

Joseph DeLappe is best known for his series of in-game performances, such as *Quake/Friends* (2002), in which he and a number of colleagues acted out an episode from the series *Friends* in an online game, but the interview with him in this section allows these performances to be placed in the context of his other work. This includes other performances/interventions (both before and after *Quake/Friends*) and a series based upon modified computer mice.

There are two distinct genres of videogame–influenced performance art: in-game performance and real-life performance (which could also be referred to, for the sake of symmetry, as out-of-game performance). In-game performance covers works such as *Quake/Friends* and the others described in the Joseph DeLappe interview, but also includes works such as *Gunship Ready* by Brody Condon (2001) which are less of a formal performance.

In terms of real-life game-influenced performance, the more interesting works have been those such as Hillary Mushkin and S. E. Barnet's *Mario's Furniture* (2003, described in the essay by M. A. Greenstein) which explore the themes and issues of videogames in a less direct way, rather than those which simply provide a real-life embodiment of a videogame character (most commonly, it seems, Lara Croft from *Tomb Raider*).

A number of the artists in this section explore themes of place and space. This is a common theme in videogame art, due in part – though not exclusively – to the supreme ability of FPS games to represent architectural spaces. Some works, such as Tobias Bernstrup's *Potsdamer Platz* (2001) have sought to replicate a real space within the virtual world. Others have replicated a specific gallery space, creating a self-reflexive installation. *Museum Meltdown* (Palle Torsson and Tobias Bernstrup 1995–1999), *acmipark* (Julian Oliver, Chad Chatterton, Andrea Blundell, Wayne Simmons 2003), and *Repeater* (Chris Cornish 2002) are all examples of this – each was designed for a specific venue and replicates that venue (albeit, in some cases, with deliberate modification). *SimGallery* (Katherine Isbister and Rainey Straus 2003) does this as well, though it uses *The Sims* rather than an FPS game to replicate the real gallery space.

As these – and other videogame artworks – create their own "site", it can be useful to open up our definition of "site-specificity". One could, for example, regard *Escape from Woomera* (Julian Oliver and others 2004) as a site-specific installation, but whereas a traditional/conventional site-specific work would take its inspiration from the Woomera detention centre and be exhibited there – at least initially – so as to create the resonance between artwork and venue, *Escape from Woomera* takes the detention centre and puts it *inside* the computer.

Doing this allows us to get away from the notion that a site-specific videogame artwork must seek to replicate the venue in question. It also allows us to open up the notion of installation art so that we can talk about an installation which is entirely within the computer. Digital art

installations have traditionally tended to involve things outside of the computer – sensors, projectors, props, kiosks, etc. The modification of FPS and other games allows us to create an installation entirely within the computer and for this installation to be unencumbered by issues such as the size and cost of the installation or difficulties in staging and transporting it; they also avoid the expense – both during production and exhibition – of using proprietary virtual reality hardware and software. It is therefore surprising how few artists have so far taken full advantage of this capability.

The *Expositur (Virtual Knowledge Space)* project by Fuchs and Eckermann (2001) stands as one of the rare examples of this type of work. It takes real objects from real museum collections and brings them together in a single virtual environment built using the *Unreal* engine. This creates, in effect, a virtual museum – virtual not only because it is a virtual space, but also because it creates a virtual collection from items which would be impossible to bring together normally.

A number of artists have sought not only to replicate real spaces, but also real events. Examples of this type of work include the 9/11-inspired *9/11 Survivor* by Jeff Cole, Mike Caloud, John Brennon (2003) and *Waco Resurrection* by Eddo Stern and others (2003), which is inspired by the FBI's assault in 1993 on the compound of the Branch Davidian religious cult.

Although these works have both made it clear that they only provide an artist's interpretation of events, and that their intention is not to be documentary, it is difficult not to regard them as such and this causes problems which are highlighted by Condon in his interview. The FPS comes with "baggage" because of the sensationalist way in which these games present and treat violence, and it is difficult for this not to "taint" the resulting artwork, detracting from the serious message that the artist is trying to convey.

There is also the issue of viewpoint. The FPS – by its very nature – forces identification and immersion, which in turn implies a subjective viewpoint. This explicit partiality, subjectivity and level of artistic interpretation should not be seen, however, to be inherently a problem with this work as it is also an important (and growing) trend in modern film documentary (as can be seen, variously, in the work of Michael Moore and Errol Morris, for example). Indeed, the negative response to *9/11 Survivor* shows how videogame artists working in this field may wish to exaggerate the level of subjectivity in the work so as to make their artistic aims clearer and avoid accusations that they have exploited and/or sensationalized real events (this is the approach taken in *Waco Resurrection*).

Of course, videogame art does not have to be as representational as this and some artists use videogames to explore the creation of abstract interactive graphics. In the case of JODI (Joan Heemskerk and Dirk Paesmans), this has been through a fundamental and low-level hacking and recoding of the games, rather than just level editing, and they outline their techniques and the motivations behind their work in an interview with Francis Hunger.

Other artists have produced abstract or semi-abstract work by creating patches which deliberately exploit glitches in the game (or introduce them) in order to produce smeared,

fragmented or distorted imagery, or the "hall-of-mirrors" effect (endlessly repeated copies). Works that use these techniques include *white_picnic_glitch* (Brody Condon 2001), and *QQQ* (nullpointer 2002). *white_picnic_glitch* is an interesting work, technically, in that it produces these effects in *The Sims*, rather than within a FPS. *Max_Miptex* (Chad Chatterton and Julian Oliver 2001) is also interesting as it achieves a similar effect by modifying the hardware that the FPS game runs on. Artists can also introduce glitches in the artificial intelligence controlling the bots in the game, introducing jerky, repetitive or irrational movement which draws attention to the fact that this behaviour is more artificial than intelligent. This is done in *white_picnic_glitch* and in *Chinatown* (Brody Condon, with Eric Cho and Sky Frostenson 2002).

Because of the unpredictability of these patch-based abstract effects and the possible instability of the game when hacked in this way, these artworks mainly exist as DVD. The work by JODI, on the other hand, is meant to be interacted with (though it frustrates this action as an aesthetic strategy). *Gameboy_ultra_F_UK* by Corby and Baily (2001) is similar, though in this case, it takes the form of a modified Game Boy emulator (a piece of software which runs on a PC and allows it to play Game Boy software) which degenerates over time on the basis of genetic algorithms, making the game more and more disrupted (both in terms of its graphics and its gameplay).

These artworks show how it is possible for a piece to comment intently upon the nature of games without actually being a game or – more accurately – by frustrating the user's expectations of what a game should be and how it should act. The work of Suzanne Treister does the same, albeit in the form of a series of paintings. In them, she uses the graphical conventions of the videogame, but uses them to present obtuse messages or instructions, rather than more conventional in-game text.

This work is also interesting as it is one of the first examples of videogame art. Because of the "landmark" status of the Cracking the Maze exhibition, one could easily assume that videogame art started in 1999, the date of that exhibition. This was not the case, and the essay by Suzanne Treister places videogame art in a more complete historical context, highlighting her digital and non-digital work from the early 1990s.

After her *Fictional Videogame Stills* series, Treister went on to produce a series of artworks in the form of packaging for fictional software products. These works are interesting from a historical point of view as they are a relatively rare example of sculptural work in the field of videogame art. Another example is *650 Polygon John Carmack* (2004) by Brody Condon. This takes the form of a perfect real-life replica of a virtual model (of one of the game's creators) hidden inside *Quake III*.

As sculptural or three-dimensional art, videogame–influenced "cosplay" (costume play) is far more common, though this is predominantly a fan activity. Even so, a number of artists have experimented with it – the most notable being Pope and Guthrie's *Home-made Heroes* artwork commissioned for the Game On exhibition at the Barbican Gallery in London (2002). We discuss fan art – and its relation to art practice – in greater detail later in this introduction.

The emphasis of this book is visual art, but it is also worth mentioning, in passing, the music of the videogame. Although most videogame soundtracks are quite bland, some in-game music and effects have reached the same iconic status as its imagery – the most notable example being the soundtrack to *Pac-Man*. As a result, a number of mainstream musicians including Aphex Twin, Hexstatic and many others have sampled these sounds to use in their music. This appropriation does not restrict itself to videogame music as spot effects such as coin insert sounds, death noises, etc. have all also been used. Other less well-known videogames have also been sampled – such as *Zero Wing* being used in *All Your Base are Belong to Us*.

In contrast to these musicians, who are primarily sampling game sounds and manipulating them on computer, there is a separate group who are hacking the game hardware (usually consoles or hand-held devices such as the Game Boy) and using these more directly as their musical instrument. The work of 8 Bit Construction Set (Cory Archangel, Paul B. Davis and others) is a good example of this. A third example of videogame music/sonic art is using FPS games to create interactive musical environments. An example of this is *Quilted Thought Organ* (2001–2003) by Delire (A.K.A. Julian Oliver). An additional genre of musical work generally known as "soundtoys" falls primarily into the category of playable art, rather than videogame art, as it tends not to engage fully and specifically with the videogame – exploring, instead, more general issues of interaction.

Julian Oliver has more recently been involved in the development of *Escape From Woomera*, a videogame artwork – funded by the Australian Government – which has proven controversial as it comments critically on the government's treatment of refugees and asylum-seekers. The next paper in the book is a broad-ranging extended interview with Oliver and "Kipper" (also involved in *Escape From Woomera*) in which they describe the difficulties in producing a political work such as this and outline the problems facing both videogame artists and independent games developers.

The final essay in this section, by Maia Engeli and Nina Czegledy, describes another issue-based videogame art project, in this case a grass-roots workshop which they ran in Albania using *Unreal Tournament* to explore the issue of "blood feuds" in that country. Blood feuds are the "tit-for-tat" hostilities between neighbours, common in that country, which can lead to murder and last for generations. The success of the *Medieval Unreality* project highlights the ease with which these inherently violent FPS videogames can be modified in order to offer an overt or explicit criticism of violence – either both in real life and in the videogames themselves. The essay describes how the repetitive nature of the FPS game – with its endless routine of being killed and respawning, and the only possible action in between being to kill – perfectly mirrors the unbreakable cycle of the blood feud.

Although the situation in Albania is special (because the blood feud is perpetuated, at least in part, by local custom), the FPS is equally suited to producing works about other violence. Indeed, it is so suited to this purpose that it could be said that this form of videogame art is the right art form for the times. The Columbine massacre, the threat of terrorism, and the conflicts in Afghanistan, Iraq and elsewhere have all provided videogame artists with a ready

source of inspiration, and they have matched this with a willingness to address these difficult issues and the appropriate tools to do it (even though it has, at times, been problematic for many viewers and critics of this art). Much of this work provides an intelligent commentary on the violence in contemporary society and in the media, and as a result, it is important not to dismiss it all out-of-hand simply because of its subject matter (or the inappropriate treatment by a minority of artists).

The White Room series of artworks by John Paul Bichard (2002) is another good example of work in this field. In it, he stages a series of scenes which show the aftermath of violent action. There are two interesting points about this work. The first is that although there are many videogame artworks which deal with violence, this is one of the few which presents violence in a truly realistic way. The violence in the FPS game is generally extreme and, as a result, is often cartoon-like; even in games like *Counter-Strike* where the violence is presented "realistically", you still get to respawn at the end of the round. The work by Bichard manages to remove these fantastical elements and present violence as almost mundane. The casual realism of the violence – and the oblique and restrained way in which it is presented – makes this a very intelligent and mature work. The other interesting point is that John Paul Bichard refers to these artworks as being an "in-game photo shoot", rather than "screenshots". This is interesting from a semiotic point of view in that it implies that the artist is, in some way, working *inside* that environment, rather than working with the computer and seeing an image on the computer screen. It also returns us to the idea that this is an installation that is being created, rather than an image.

The third section of the book discusses videogame art and aesthetics in relation to other forms of art. Much has been made in videogame criticism of the similarity of videogames to film, but these essays provide alternative "histories" and "narratives" within which to situate the videogame and its aesthetics.

Earlier in this introduction, we touched upon some of the similarities that videogame art has with western traditions in art, including pop art, conceptual art and surrealism. The essay by Brett Martin picks up on certain aspects of this comparison, making reference not only to the video installation work of artist Nam June Paik, but also to earlier forms of technology-led art – most notably photography. But rather than explore the formal similarities of these media to videogame art, Brett Martin concentrates more on the reaction of the public and the art establishment to these new forms of art, using the work of the photographer Oscar Rejlander as his primary example.

The essay by William Huber performs a complementary role to that by Brett Martin, as it explores in some depth the relationship between the aesthetics of the videogame and those of non-western traditions in art. The most well-known example of this crossover/parallel is the similarity between the orthogonal view of games such as *The Sims* and the "floating world" or *Ukiyo-e* style of traditional Japanese art, but Huber also explores less familiar Japanese styles such as the "Superflat" aesthetic.

The essay benefits from Huber's substantial knowledge both of Japanese art and obscure Japanese videogames, and is interesting because it shows that there is not just one

videogame aesthetic or one artistic tradition within which to situate videogames as a medium. It also highlights how the often-made parallel between videogames and film is incomplete if it restricts its comparison solely to the conventions of mainstream Hollywood cinema.

The orthogonal view of these "god games" is an interesting convention as it distances the viewer from the action. When we play *The Sims*, we are not "in" that world in the same way that we are when we play an FPS. Instead, we are constantly on the outside of that world, looking down at the little people inside it. This observation is one of the starting points for Tobey Crockett's essay in which she explores videogames in relation to the history, aesthetics and psychology of dolls and dollhouses.

Although we are limited in space in this book and can provide only an excerpt from her much longer Ph.D. paper, this contribution nevertheless provides a number of interesting and unique perspectives. The first of these is to place virtual environments – and by extension, videogames – in the context of the history of dollhouses. Although we now think of dollhouses as toys, they have a much richer history than this which makes the comparison with videogames particularly interesting. The act of playing with dolls has also been the subject of much analysis as a "transitional object" and Tobey Crockett highlights some of the ways in which this can lead to a greater understanding of the relationship that we have with to our in-game avatars and the worlds that they inhabit.

The next two essays offer contrasting perspectives on the art that surrounds the commercial videogame. The first of these, by Laurie Taylor, looks at concept art – that is to say, the artwork created by games companies for use in the design and marketing of a videogame. The second, by Gareth Schott and Andrew Burn, looks at fan art and provides interesting insights into the way in which games fans produce, use and consume "fan art" in general – that is to say, art created within and for that fan community, rather than by the games company. Because this art exists solely within this circle of fans, it is easy for it to be overlooked when discussing videogame art, but this essay goes some way towards redressing the balance, though its emphasis is rightly on the social aspects involved in the production of this art, rather than its aesthetics.

In many ways, concept art and fan art are two sides of the same coin: one is produced by the game company to sell the game to the fans, and the other is produced by the fans after they have bought it. In her essay, Laurie Taylor raises the interesting concept of holographic theory – that although there are inconsistencies between the various representations of the game world in concept art, none is less "real" than the others and each part can represent the whole – and this theory can also be used to explain how games fans can so easily "stitch" the art that they produce into the world of the game.

The issue of fan art raises many interesting questions in terms of the relationship between videogame art and the games industry. Videogame art does not exist in isolation, but is in a symbiotic relationship with commercial videogames. This is often referred to as a parasitic relationship, but we have deliberately avoided using that term. "Parasitic" implies that the relationship is in one direction and is harmful for the host – neither of which is the case here.

The videogame industry gains from cultivating the involvement of the games fan/hobbyist and the videogame artists. For instance, although early FPS games had the potential to produce machinima, this ability was not initially fully exploited by the creators of these games. Machinima emerged more from within the gaming community, as did many of the first (and best) tools for producing them. Machinima have now been taken up by mainstream games developers and live-rendered machinima have virtually replaced pre-rendered storytelling sequences in these games.

Yet this relationship with the games industry is a delicate one as videogame art relies heavily on the appropriation of game technology and iconography. In this respect, it is similar to fan art, which makes use of images or other intellectual property owned by the games company. Sometimes fan art is encouraged by the games industry, but increasingly, however, this type of activity is being actively discouraged by the copyright holders. It may only be a matter of time before videogame artists are similarly affected – particularly as their work is usually more critical than that of fans.

The final essay in the book "throws down the gauntlet" to the games industry, asking why commercial games lack originality, and offering a heartfelt plea for greater creativity in the videogames industry and for more incisive criticism from those who regard themselves as videogame critics. While such criticisms are not uncommon, these comments carry more weight as they come from Ernest Adams, a games industry insider with many years' experience in the field and an understanding of the production, marketing and economics of commercial videogame production.

It still remains to be seen, however, whether the crossover between art house and mainstream discussed earlier in relation to cinema can ever occur with videogames – or whether videogame art practice will always be a completely separate activity. They are, after all, driven by different aims and interests and have entirely separate distribution mechanisms. To a large extent, however, this separation from mainstream activity is irrelevant for the artists. Indeed, it may be healthy for it to remain, for the most part, an oppositional activity.

One can regard videogames such as *Eye Toy* as an example of this lack of crossover of ideas from art to videogames. Video tracking technology has been explored extensively in digital art over the course of several decades and *Eye Toy* seems like a simple, throwaway demo compared to this other, more mature and sophisticated work being produced in the art field. Sensor technology seems to have become another bandwagon for videogames to jump on to, with little engagement with the existing body of knowledge regarding its use. As a result, video tracking, sound sensing, motion sensors and touchpads are all being used to merely provide variations on tired genres such as fighting games and *bemani* (the rhythm matching games such as *Dance Dance Revolution*). This indicates how the separation between videogame art and mainstream videogames may ultimately be more of a loss for mainstream videogames, as they stand in danger of turning in ever-decreasing circles around the same (stale) content and the same (worn-out) genres – remaining dominant as objects of consumerist entertainment, yet becoming an increasingly meaningless medium.

In contrast, the outlook for videogame art is relatively optimistic.

FPS games are at the leading edge of computer graphics technology and by opening up the technology with scripting languages and level editors, the creators of these games are placing very powerful tools in the hands of the artist with comparatively little control over what is produced. In many ways, this form of videogame art fulfils the hype promised by early practitioners in virtual reality art such as Jaron Lanier and while purists may quibble over the physical and aesthetic differences between a screen-based virtual experience and a goggle-based one, there is no denying the fact that the quality and speed provided by the FPS games surpasses all but the most high-end VR equipment (and does so at a fraction of the cost).

The open source movement will clearly have an impact on this field, as it has on other forms of computing. The effect is likely to be particularly strong as videogames appeal to people who are young, technically skilled and have plenty of free time – an ideal demographic for an open source project. This community-led software development has already produced a number of significant developments, particularly in the area of FPS editing and machinima. Some of these projects have been truly open source; others are produced by clans and although not open source, share its loose and distributed mode of development.

Even though it was not built using a game engine, *The House of Osama bin Laden* (Langlands and Bell 2003) fits squarely into the growing trend in FPS art to replicate real spaces. Its inclusion on the 2004 Turner Prize shortlist is therefore a significant event for videogame art. The intention of the Turner Prize is to highlight new developments in visual arts and this shows that even if videogame art has not yet become mainstream, then at least art *resembling* videogame art is on the cusp of institutional acceptance. As such, it potentially opens the way for other, less well-supported, artists who will inevitably use more accessible materials – i.e. videogame engines – to produce more difficult, confrontational or experimental work.

What is particularly interesting about videogame art is the way in which we can see it evolving in front of our eyes. Although some genres of videogame art are becoming slightly stale, there is a constant flow of new ideas, technology and techniques to replace them. There is likewise a flow of new issues to explore through this form of art and this makes it an interesting area of art practice to work in, write about, view and curate.

Henry Lowood talks about speedrunning and the subsequent machinima as being "a progression from player to performer" while Rebecca Cannon asks rhetorically whether the game artists are gamer players who "just grew tired of killing and dying". If this is the case, then other gamers may well follow the same trajectory. The huge amount of fan-created *Sim* and FPS content indicates that if people are given tools for editing games, they will use them. It is only a matter of time before some people – even if it is just a minority – go from creating content for games they like to creating work which is intended as art.

Notes

1. Marinka, C. and Raessens, J. (eds), *Level Up: Proceedings of the 1st International Digital Games Research Conference*, University of Utrecht Press, 2003, pp. 338–349.
2. Lammers, S. (ed.), *Programmers at Work*, Tempus Books/Microsoft Press, 1986, pp. 262–270.

SECTION 1: OVERVIEWS

FROM APPROPRIATION TO APPROXIMATION

Axel Stockburger

Tracing the relationship between video and computer games and contemporary fine art practice.

Introduction

Recent years have seen a significant surge of museum and gallery exhibitions focusing on works in the context of computer and videogames. At the same time the discussion about the ontological status of computer games in relation to art, specifically whether they can be understood as an art form or not, is heating up.

Contemporary artists are increasingly influenced by computer and videogames, while game designers are turning towards the world of fine arts for inspiration.

It is the intention of this paper to examine the relationship between contemporary fine art practice and computer games. In order to understand how and why contemporary artist practice is moving towards games it is necessary to take a step back and take a look at the mutual attraction between the fields of games and art.

Modern Siblings

Johan Huizinga, the famous Dutch game scholar, posited play and games at the roots of all cultures and clarified that they permeate various sectors of society such as art, philosophy, law and politics. The notion of games as a core element of culture is also perceived by McLuhan. He states that "Games are popular art, collective, social reactions to the main drive or action of any culture".[1] He hints at the historic importance of games as a form of collective art at the heart of ancient non-literate societies, for the constant modelling of the universe through dramatization and enactment. Similarly, Callois describes tribal rites as forms of play with mimetic functions that are often related to full bodily involvement.

According to McLuhan, the shift towards literacy brought about a change of focus from a mimetic relation to the outer world to the inner world of the human psyche. Tribal and

participatory forms of art, which were homologous with games, evolved into literary substitutes and private dramatizations of the human psyche. Games in this context have to be described as a social art demanding bodily involvement and mutual participation. Adorno and Horkheimer identified the myth of the Odyssey and the personal struggle of the individual with this shift from the ancient world to an early phase of enlightenment. The cultural forms of art and games seem to depart on separate tangents at this point. Text and the emergence of the individual narrative gradually create forms of art directed towards individuals, and thus move it away from the participatory game.

What then is the relation between art and games?

At the first glance we can identify a number of similarities, both are generating spatio-temporal zones, which are perceived as different from everyday life. Furthermore, art, as well as games, are said to be on the one hand governed by rules and on the other hand related to notions of freedom. The latter has led Sutton-Smith to critique the romantic conflation of art and play. He reflects upon the romantic ideal of childhood as a realm of freedom and creativity that can be traced back to Schiller and writes: "Essentially what this 'romantic' relationship between children's play and art did was to obscure whatever the true relationship between play and art actually is and to contribute instead the notion that what is most important about them is the freedom, originality and autonomy they connote".[2]

Sutton-Smith is convinced that the direct identification of play with art is clouding the options of explaining the true nature of play. However, the interest in so-called primitive art and children's art as sources of innocent creativity has had a strong influence on modern art and therefore has to be treated as one important strain of proximity between the two forms.

Whereas child's play has been idealized as seemingly free from constraints, games are usually based on rules. The consensual acceptance of these rules by all players is necessary to enter the spatio-temporal microcosm of a game. Furthermore, the rules are precisely the means to create the difference that defines the threshold between everyday life and game. This adherence to the rules can be likened to a contract, which if broken by one of the participants holds the power to destroy the game.

Objects of art emerge from being perceived as different from profane objects and it can be argued that this process is similarly based on rules. As Boris Groys has shown in his famous examination of the concept of the new in art, we are only able to identify works of so-called "high" art based on processes that generate a difference between the profane world and the realm of art. For him the locus of differentiation throughout the history of modernity is the museum. In relation to the avant-gardes of the last century he states that "[t]he less an artwork differs visually from a profane object, the more necessary it becomes to draw a clear distinction between the art context and the profane, everyday, non-museum context of its occurrence".[3]

What is important here for our argument is that every profane object that is transported into the museum at some point in time is thereby valorized and transformed into a work of art. Consequently if games are passing this line they are becoming works of art. A number of

artists are indeed using "traditional" strategies of the appropriation of elements from the popular culture phenomenon of computer games and transforming these objects into pieces of art by placing them in the art context. Groys relates to Marcel Duchamp as one of the most important artists, who have directly addressed the process of transformation from non-art to art. The concept of the ready-made challenged the differentiation process itself and has thus also transformed the rules of art itself. Groys asserts that in recent years the artistic focus has gradually moved away from the transformational power of the object in the museum space to the creation and examination of the context surrounding the artwork. He writes: "In the modernist tradition, the art context was regarded as stable – it was the idealized context of the universal museum. Innovation consisted in putting a new form, a new thing, in this stable context. In our time, the context is seen as changing and unstable. So the strategy of contemporary art consists in creating a specific context which can make a certain form or thing look other, new and interesting – even if this form was already collected before."[4] In other words, in his view, contemporary artistic practice is particularly concerned with examining, creating and transforming the rules governing the emergence of art itself.

The game of chess is the central metaphor in Marcel Duchamp's work. For him: "[c]hess is undoubtedly one of the most private forms of artistic activity, since the artist's constructions, however beautiful, occur on the invisible plane of thought and could not be said to please a wide audience."[5] The simple rules of chess are able to generate a universe of "plastic" constructions. Part of the pleasure that can be derived from this process is its solipsistic nature. It creates a private aesthetic spatio-temporal realm. Here we have the perspective that playing a game might be part of an artistic practice in its own right with the player as the audience. It might be far-fetched to relate the playing of a computer game to Duchamp's notion of the creation of temporal aesthetic constructions on the "plane of thought", but the core element of individual aesthetic pleasure could be said to be similar. This is not to claim that every player of a videogame is an artist of some sort. However, the practice of playing a computer game most definitely can be regarded as an aesthetic and sometimes creative process, constricted by time that generally does not leave an artefact behind.

Game elements turn up in various shapes in Duchamp's work. There are the recurrent language games, the use of aleatorics or chance as an important part of artistic production, the constant play with gender identities, as well as the ever-present practice of chess. From the surrealist *cadavers exquis* to William Burroughs' cut-up method and John Cage's composition strategies to Karl Sim's artificial life installations the use of aleatoric elements has played an important role in artistic practice. Fluxus art strongly employed various game structures such as participation, chance and the examination and dramatization of rule-based behaviour. The playful approach to the representation of gender identities can be seen as another highly influential aspect of the game in modern art. Callois refers to this element of games that can be found in children's play as well as forms of drama as Mimicry. There are numerous examples of Mimicry in art; some of the most famous include Duchamp's female alter ego Rrose Sélavy as well as the work of Cindy Sherman.

Since computer games have only become important as a medium with the arcade games of the early 1980s the focus here will be on artists who have been influenced by and have used

computer games for their artistic practice. Most of these artists seem to come from the fields of Net and Media art.

Between Appropriation and Approximation
In the last ten years we have witnessed a significant cultural re-evaluation of video and computer games. Whereas these games were generally treated as children's toys during the 1980s, they have permeated the whole of society by the year 2000.

Academic research and contemporary artistic practice are accompanying a general establishment of the cultural importance of these games. Currently they are entering the museums from two directions. On the one hand they are more and more perceived to be cultural products worthy of exhibition in their own right and on the other hand they have become an integral part of contemporary fine art practice.

The exhibition Game On[6] was an interesting example for the shift of perception that has been taking place in the last decade. In the exhibition catalogue, Henry Jenkins and Kurt Squire promote the notion of computer games as the "art of contested spaces". They write: "[w]e should consider [...] viewing games as spatial art with its roots in architecture, landscape painting, sculpture, gardening or amusement-park design."[7] (Jenkins H. Squire K., p.65, 2002) This approach is especially worth noting if one considers the impact of installation art during the 1990s that was led by an examination of spatial configuration and audience participation in space. Whether one adheres to the notion of computer games as an art form or denies their potential for creating high art, it remains obvious that they have a number of characteristics, which are not entirely shared by fine art.

First of all they are a mass medium attempting to deliver compelling entertainment for a fixed prize on a PC or console. Furthermore they demand a high level of participation and engagement. To put it bluntly: As games they have to be played. In terms of production a lot of similarities with the medium of film can be observed. Computer games and films are usually produced by teams consisting of professionals with highly specialized roles. The emergence of hybrid entertainment products incorporating film, game, toys and even fashion manifestations has led to a strong connection between formerly separated entertainment sectors.

However, given that most computer games are not attempting to be perceived as works of art it might be more interesting to move on from the discussion of the computer game as a form of art to its relation with contemporary fine art practice. This relationship between the poles of fine art and computer games can be described as a permanent oscillation between appropriation and approximation. In other words, both forms are borrowing elements from each other to employ them in their respective systems and both exist in varying degrees of proximity. Two major questions can be said to emerge from this context. Firstly, how is this process organized and, secondly, what are the reasons for it.

From the perspective of art, the first question is synonymous with the examination of artistic practices and strategies at work. The particular artistic practices span from the appropriation of game iconography, via the modification and subversion of existing games

to the production of unique and original games. Yet, between these three broader modes that can be identified, there also exist vast grey areas.

However, why artists are interested in games at all is a lot harder to explain in categorical terms and one can find a vast number of differing motivations and interests. It might well be that it can only be dealt with appropriately in the context of particular artworks. Generally the computer game is increasingly treated as a new medium with unique and original technologies, functions and codes. Very much like film, the whole dispositif at work in games has become an object of examination and reference. Artistic examination is directed towards all aspects of games, such as the user's environment, the game-space, the game-play and its rules, the game's audio-visual representation as well as narrative structures.

Artistic Strategies in the Context of Computer Games
Three different modes of relation between contemporary fine art and games have been mentioned: appropriation, modification and production of original games.

Appropriation of elements from the audio-visual apparatus of computer games and their transportation into the art context is probably the most widely used artistic strategy in this context. Here, artists do not necessarily need in-depth knowledge of a game's technology or rules.

The second strategy demands a certain knowledge of the rules and system of a particular game but, even more important, an understanding of the wider context, such as the game's fans and communities emerging from it. The artist is changing a functional or aesthetic element in an existing game. This often critical or ironic intervention is referred to as modification (mod) or patch.

Quite often, modding a game, providing a new skin for an avatar or creating a whole level, generates better knowledge of its technology and functions. This leads directly to the third strategy that ought to be mentioned here, the production of unique and original games. A large number of these games, that have recently been termed artist games, are playable online.

Appropriation of Game Iconography
The classic pop art practice of the appropriation of aesthetic objects and codes from everyday life, in order to employ them in the creation of works of art has been a major force in modern art. Here, artists act as critical instances, highlighting and researching popular cultural phenomena. There are lots of similarities between the 1960s pop artists, highlighting issues such as branding of fabricated objects and the implications of aesthetics in the world of consumable objects, and the concentration of contemporary artists on the iconography of computer games.

The focus remains on the iconography of gaming as a popular activity that has completely penetrated all western societies as one of the most important manifestations of commercial entertainment. Artists are treating the aesthetic peculiarities, from the early reduced vector graphics and sprites, which already seem to have a relation to minimal art, to the highly

iconic game characters such as Super Mario and Lara Croft as an integral part of the contemporary media landscape. Furthermore, fashion and nostalgia are strongly influencing the choice of imagery. The "strong" iconic image of Pac-Man has been appropriated by countless visual artists, because it stands for a particular segment of 1980s youth culture.

There is a difference between artists who are interested in the idiosyncrasy of the imagery and iconography, such as the pixel-based characters that can be found in all videogames of the early 1980s and those who are more interested in the rules of the games.

It is an entirely different operation to consider the rules of the game, how it was played and which spaces are generated by playing it. This is why there is a need to separate the mere appropriation of imagery from strategies that generate a much greater proximity with games, such as the creation of mods.

Furthermore, other than with mods or artist games, artworks emerging from a strategy of appropriation are generally produced with traditional means, such as painting, drawing, photography, film or video.

A good example for the visual appropriation of game culture is the painter and media artist Miltos Manetas. His approximation to computer games has led to two separate strains of work: On the one hand, he has painted series of images depicting people playing console games in various environments, the game controllers and technical devices, cables and television sets.[8]

On the other hand, he has recorded gaming sessions, short videos[9] of games he played, without further changing or altering them. These games include *Tomb Raider*, *Super Mario Bros*, *Soul Calibur*, *Abe's Oddysee*, boxing and snowboarding games as well as *Metal Gear Solid*. All of these short videos show elements of the game being played and have titles that enhance the ironic distance to the depicted action. For example, in one video we see Mario sleeping beneath a tree and the title is accordingly *Super Mario Sleeping* (1998), another one shows the character Sophitia from the fighting game *Soul Calibur* in the winning stance, when she automatically utters the words: "I am sorry", which is also the title of the piece made in the same year.

In order to properly decode these videos and understand the humour they are transporting, people have to have played the games themselves. The ironic humour is triggered by evoking specific situations in games and thus addressing the gaming community as an audience. This process leads to a somewhat problematic situation: At present only a small proportion of the art audience is familiar with computer games.

It could also be interesting to consider the impact these pieces have on the game community. After all, appropriation in art is a process that is based on devolving the choice of important situations or cultural elements to the artist. The player of a game on the other hand is used to making decisions or choices on his/her own.

To put it in other words, these pieces need an audience that has played the games they are referring to, but their form of presentation prohibits the most important feature at the heart of these games – the active choice of what to experience at any given time. This situation arises from artworks, which are built on the reference to games, but at the same time do not employ game mechanisms.

Aesthetic appropriation can also be found in the work of Norbert Bayer, who uses the pseudonym "Mr. Ministeck". "Ministeck" is the name of a popular puzzle game from the late 1970s and early 1980s in Germany. It consists of sets of small coloured plastic bricks, which can be used to create mosaic-like images. Bayer uses these plastic bricks to represent iconic pixel and sprite-based imagery derived from video and computer games.[10] Under the series title "Analogue Eats Digital", his motifs include Pac-Man and its Ghosts, Mario and Donkey Kong. These images are for once playing with the pixel-based representation system on screens with very limited resolutions, addressing them as a stylistic system rather than being dictated by technical limitation, in addition they are infused with a certain nostalgia, remembering the decade of arcade computer games.

Some of the imagery taken from early computer games has generally penetrated the visual worlds of design, advertisement and visual arts as a fashionable renaissance of reduced pixel styles. To some extent this process might be related to the emergence of mobile phone devices, which also had limited displays similar to the early 1980s games. Since technological constraints of contemporary mobile devices are disappearing fast, it remains to be seen how important the reduced pixel approach will remain as a style.

The relation between mosaic and pixel-based representation from early videogames is also important in the ceramic mosaics used for the representations of aliens in the "Invader"[11] project. Invader positions the aliens from the famous game *Space Invaders* as mosaics all over numerous cities, thereby adopting the practice of graffiti and sticker artists. Although Invader's ongoing practice introduces another important element, the public space and the city as an arena for his work, he is directly appropriating the highly iconic images of alien invaders from the 1980s arcade game *Space Invaders*.

Since strategies involving appropriation have been at the heart of modern art practice for a long time, a lot more artists could be named in this context. Yet, here it has to suffice to remember that we are mainly dealing with artists who are employing the iconic elements from games because of their significance in a wider cultural sphere. This approach includes all artistic work that uses audio-visual elements from computer games without interfering with or relating to the game technology itself.

Intervention in the Form of Mods and Hacks
So-called mods and patches are modifications of the game software that can be applied after the full game has been obtained by the player. Frequently these patches are used to fix bugs or adjust the gameplay. In online games they are often used to close security holes that allow cheating or to introduce new objects or features into the game.

The practice of the quick fix, the patch that can alter a program, is strongly connected with the distribution system of the Internet. Contemporary PC games are subject to alterations,

and the patches can be obtained online. Although most patches are delivered as bug fixes by the game programmers and designers, they have increasingly become a means of creative involvement of the gamers themselves. The various skins for avatars in the well-known first-person shooter *Doom* – some of them relating to other pop culture icons like Mickey Mouse or the Smurfs – are falling into this category. So are the creations of maps or models for existing games. One of the earliest visible art exhibitions that highlighted the practice of modding and patching in the context of computer games was the online exhibition "Cracking the Maze", curated by Anne-Marie Schleiner in 1999.

In her curatorial statement,[13] Anne-Marie Schleiner delivers an overview of the historical evolution of mods and patches, emphasizes the importance of the Internet as distribution medium and hints at the subversive potential of mods. These mods, for example, were the first attempts to include representations of female bodies into the realm of player avatars in first-person shooter games like *Doom* and *Marathon*. Schleiner points out that these hacks introduced female avatars into games before they were officially included in games like *Resident Evil*, *Final Fantasy VII* and *Tomb Raider*. From this perspective, unofficial fan mods have transformed the representational strategies of the game industry. This could be an interesting incentive for artists who are interested in transforming the often stereotypical representations and narratives in computer games.

Schleiner writes: "On a technical level, of course, the artist(s) avoids having to put in the extensive time required for programming an interactive game engine. But the parasitic game patch is also a means to infiltrate gaming culture and to contribute to the formation of new configurations of game characters, game space and gameplay."[14]

It is important to note that "Cracking the Maze" included patches from artists as well as gamers and hackers who did not produce their interventions with an art context in mind. This fact shows that on the one hand the image of the hacker has become interesting for contemporary media artists, and on the other hand the artistic context has been widened to include a number of previously excluded activities such as programming software.

All of these facts are similarly important in the context of Net art.

Patches and Mods are leading to a number of different interventions:

Some affect the architecture, lights and sounds in a level (so-called maps), others affect the player representation (skins), some might use the well-known gameplay of classic games like *Pong*, *Breakout* or *Space Invaders* and exchange the visuals, some transform the whole aesthetic machine of a game while others only change certain rules of a game.

The most complete transformation possible is the patching of the way graphics are represented by the game engine. The artist group "Jodi", that has come to fame with its Net art projects was also one of earliest game-modding protagonists. Their deconstructions of the first-person shooter *Quake* entitled *ctrl-space* (1997) and the follow-up *SOD* (1998)[15] , which are based on completely changing the visual representation of the game by introducing different textures, reducing the colours to black and white and changing the

interface and weapon representation. The *ctrl-space* patch changed the game so much that it became unplayable, because the information conveying space and location which is necessary to navigate through the game environment was completely abandoned. The Jodi patches can be described as abstract kinetic screen sculptures, that often reference abandoned computer technology and to a certain extent minimal art. Essentially the objective in these patches is to turn the entire game into a purely aesthetic experience that removes the original gameplay and goals completely.

Another patch, which is directed towards the deconstruction of the entire game graphics, has been presented by Tom Betts aka Nullpointer in his *QQQ* project[16] (2002). An interesting additional element is that players online are constantly influencing the aesthetic representation of the game patch, which turns the piece into an online performance.

Modifications of games like *Quake* and *Unreal* became increasingly popular in the gaming community and accordingly they were used in the art context. The exhibition "Syn:Real",[17] organized by Netbase t0 at Museumsquartier Vienna in 1998, invited twelve artists to contribute mods for the *Unreal* game engine and presented them to the public as part of a LAN party, a type of event that is deeply rooted in gaming culture.

One year later the Berlin-based gallery Shift eV. organized a similar show entitled "Reload"[18] based on the *Quake* game engine. In the case of Reload, the game environment was mirrored by an intricate architecture in the exhibition space.

In both exhibitions the game engine itself became the exhibition space for the artwork thus taking on the traditional role of a museum, and the artists provided the spaces, sounds and character hacks for their respective showrooms/levels. This is particularly interesting in relation to Boris Groys' observation, that contemporary art is increasingly dealing with the context enabling the transformation of the profane into a work of art.

Here the most profane objects, the games themselves, are transformed into art spaces.

The artists Matthias Fuchs and Sylvia Eckermann, who submitted a level for Syn:Real, have created a virtual museum entitled *Expositur* (2002).[19] Fuchs writes about the piece: "Even though the virtual museum *Expositur* tells about objects and processes, even though there is a semantic framework and an underlying logic structure our knowledge space leaves ample room for alternative readings, it encourages the users to define their private paths away from the main roads."[20]

Chris Cornish has presented his *Repeater* series[21] which meticulously recreates art spaces such as the Tate Modern Gallery. Tobias Bernstrup and Palle Torsson have modeled a number of European art museums including artworks as the arena for the first-person shootout in a piece entitled *Museum Meltdown*.[22]

These artworks seem to mark a significant shift in the relation between games and art.

If, as Groys asserts, the avant-gardes of the early twentieth century were targeting the museum as storage halls for dead art, creating works that were meant to embrace life only

to end up inside museums, it could be added that the media artists of the twenty-first century are now incorporating the museum as backdrops in their games.

Apart from mods addressing the entire graphic engine or rebuilding and imagining spaces, there exist a number of interventions, which are addressing game characters.

The Chinese artist Feng Mengbo, for example, has introduced an ironic version of the self-portrait into game engine–based art by mapping his face onto a *Quake* bot in the piece *Q4U*.[23] The piece was shown at Documenta 11 in 2002, and the audience could play against the bot, which was programmed to react faster than any human contender.

Although most of the mods and patches are either subverting single elements in existing games or creating new audio-visual spaces, they are usually relying on the gameplay of the original games. Due to the popularity of first-person shooters and the vitality of the mod culture that has developed along with them, the game play in most of these patches is based on the well-known first-person shooting action.

Wherever artists have additionally altered the gameplay as well it is possible to speak about the creation of new and original games. Obviously there is a large grey area between the phenomenon of patching or modding a game and the creation of a new game. Numerous unique games on the market are based on the same game engine. What makes them different is the gameplay in relation to the aesthetic appearance.

Artist Games

The third major artistic strategy in relation to computer games is the creation of unique and innovative games. The term artist game has been coined for these products.

What usually unites these games is their relatively low budget in comparison to the game industry and most are based on the programming languages Java or Actionscript (Flash) ensuring their deployment on websites.

Numerous games are based on classic arcade titles from the 1980s, such as *Breakout*, *Space Invaders* and *Tempest*. A game that has to be positioned in the grey area between modification and original game is Natalie Bookchin's *Intruder* (1999).[24] It is based on the experimental adaptation of a short story by Jorge Luis Borges and subverts several game principles from classic arcade games. However, by introducing the narrative element derived from the story about two brothers falling in love with the same woman, she manages to completely transform the original game structures. The goals of the games change towards a different reading of the adapted text. Tiffany Holmes writes about this game: "Gamers can only advance in *Intruder* by perpetrating violent gestures. This novel, first person shooter structure invites gamers to see how popular computer games perpetuate masculine ideologies of spatial conquest, combat fantasies and sexual domination."[25] *Intruder* was built with Macromedia's Shockwave and is playable online. The use of the Internet as showcase and distribution system for these kinds of games is a central element.

Another game that uses gameplay elements from shooters is *Blacklash*.[26] It was developed by the artist group mongrel and has found critical appeal. This game plays with the racial stereotypes present in all media systems towards young black males. It is set in a stereotypical American inner city and the player has to fight hordes of racist policemen and KKK spiders. Mongrel, a multi-ethnic group of artists, has produced a number of projects, which encourage public participation, and *Blacklash* represents an attempt to reach a part of society that is significantly underrepresented in contemporary commercial games. *Blacklash* is one of the earliest attempts at delivering a critical political statement in this new form.

In 2003 the game scholar and developer Gonzalo Frasca started the company "Newsgaming".[27] It focuses on the production of simulations and games engaging with and critically commenting on important national and international events.

Mongrel as well as "Newsgaming" attempt to move computer games beyond mere entertainment into the realm of political activism. The enormous penetration of computer games throughout the whole of western society seems to have turned them into viable channels for such undertakings. In these cases the artist takes the role of testing the boundaries of the new medium and its potential for the dissemination of critical perspectives or information.

However, apart from this research into different optional content, other artist projects are concerned with the development of entirely new and original technological methods. An interesting example of this approach, which combines technological research with original game ideas in the art context, are Blast Theory. Their most recent work *Uncle Roy* [28] was presented at the ICA in London in June 2003. *Uncle Roy* is a "mixed reality" game that involved people participating as street players in the city of London as well as online players at their homes. Street players and online players had to collaborate and discover Uncle Roy's location in the city in order to send a street player there.

The most innovative element in the game is the collaboration across media boundaries, between players at home and on the street. At the same time the use of GPS-enabled hand-held computers creates awareness for the constant invasion of privacy that such technologies bring with them. Without being part of the game industry, Blast Theory are creating technologically challenging and critical games. Unlike the modification of existing games, the development of entirely new ones demands a very high level of technological knowledge. This could be one of the reasons for the prevalence of group structures in the field of artist games.

Conclusions
The question whether computer games can be considered art or not can easily be answered by pointing towards Boris Groys. Everything can be art and it is much more interesting to discuss the unique characteristics and the creative potential of computer games than to keep the galleries free from entertainment.

Furthermore art and games can be treated as siblings throughout the history of modern art.

Both cultural forms share a number of elements that have led numerous artists to employ game structures in their work.

Fine art practitioners have appropriated elements from video and computer games ever since they existed, but this process mainly tapped into them as a pop cultural phenomenon. More often than not this did not lead to a critical analysis of the potential of these games.

The exiting shift we have seen in recent years is related to the growing numbers of artists who are choosing computer games as a medium for artistic expression and critical comment.

Artists who use computer games as a means of expression usually have a foot in the gaming community as well as in the art world. They are developing ways to criticize the odd human machine relationship that has come to dominate work and life in the western world by exploring new interfaces. The stereotypical semiotic landscapes of commercial games is systematically infiltrated and transformed. Fixed identities are literally played with and transformed into fluid states. At the same time computer games are treated as models for experimentation with novel ways of audience participation and narration.

Increasingly the online distribution models which were originally developed for games are used to distribute artworks.

Finally, the defining characteristics of computer games, their potential to generate unique experiential spaces, is gradually being understood by artists and they are starting to experiment with it.

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Meltdown

Rebecca Cannon

Can one ever tire of killing and dying? Of witnessing life's cyclical truths played out in joystick – hand-held controlling device. Can one tire of embodying the conflicting roles of progenitor and progeny. Of actuating the atheist's existential parity; god and subject, subject and object, swinging til equilibrium. The addictive fervour of gameplay.

Did they tire of killing and dying? – These artists playing games throughout the night. Artists whose perspectives on games rapidly devolved. Artists who responded as only they know how. Playing with the medium of play. Interacting with the most interactive media. Illustrating new perspectives so as to highlight: Game as law, physical and formal: Play as symbol, real and virtual: Text as barrier to evolving comprehension: Network as carrier, convening revolution.

A movement of technological dissection and appropriation; the movement of Artistic Computer Game Modification. Artistic Computer Game Modification involves the creative reuse of a pre-existing piece of computer game software and/or hardware for a specifically artistic outcome. More easily referred to as Art Modding, this branch of digital media emerged in the mid nineteen-nineties, from America, Australia and Europe, however, unsurprisingly, the earliest known piece is from Japan. In 1993 Takahiko Iimura worked with Sony's mysterious real-time texture mapping "System G" game technology, to produce an interactive CD-ROM title *AIUEONN Six Features*. *AIUEONN Six Features* is a game of words which explores the structure of language to represent differences between East and West conceptions of time and space. It was exhibited as a video installation and is available online as an interactive CD-ROM.

AIUEONN Six Features, unlike many, later art mods, did not specifically address the nature of gaming, nor the nature of gaming technology, despite its appropriation of this technology. Intelligent self-reflexivity upon the inner-workings of the medium has become a defining quality of a successful art mod. The chronological development of art traces this awakening

amongst artists. Early sketches with game code – e.g. the many code mods that left trails of frame fragments strewn across the screen – built a library of techniques which would eventually be combined with insightful concepts to produce riveting digital artworks.

Artistic developments in art mods have provided rich basis for thought on gaming, and the cultural role of games, reflexively enriching our knowledge of computer games as a social material of entertainment media. However the basis of these works in computer gaming technology is, at times, a hindrance to their status as significant contemporary artworks. The syntax and ethics applied to the analysis of computer games often forms the basis for interpretations of art mods. Although these criteria are of some significance, on their own they too easily map a finite context which situates art mods within the services of entertainment media. This contextualization impacts upon the reading of art mods by reducing their perceived suitability as a vehicle for critical evaluation, predominantly because of computer games' emphasis upon the pursuit of "play".

Here an interesting comparison can be made between computer games and film, as film is similarly an entertainment media, but one which is accepted as suitable for conveying sensitive issues in a thoughtful and thought-provoking manner. This paradoxical treatment stems from the perceived contrasting passivity and activity of film and computer game audiences, respectively. The lower degree of physical and cognitive perception required to comprehend commercial films is seen to provide intellectual space for attending to and recognizing issues conveyed by the filmic narrative. The emphasis on participation in computer games is considered too demanding of our "lower" perceptual faculties, immersing players in the pursuit of selfish, short-term goals, that are dependent on trained hand-eye reflexes rather than philosophical or ethical enquiry.

Art mods that employ characteristics of computer games, such as interactivity, team-based problem solving, hand-eye co-ordination, emergent authorship and competition (as an ideology in itself) – to address political, social and philosophical issues, counter these common perceptions. These art mods reveal that the activity involved in gameplay is capable of arousing far more intellectual engagement than do films, which, after all, are designed to appeal to an audience's desire for passivity; a passivity which encourages passive, uncritical reading.

In order to avoid future misinterpretations of art mods, it is necessary to develop a lexicon for these works which references and builds upon the visual and aural fine arts, in addition to the language of analysis for popular culture and entertainment media which we now freely ascribe to computer games. Such efforts will provide room for conceptual foci within art modding that are otherwise avoided or rejected due to the potential of a work to aggravate negative emotional responses in its viewers. Conceptual art mods, like other conceptual art works, are multilayered, symbolic works, vastly embellished by a cognizance of the artist's motivation, as well as the work's relationship to preceding artistic projects of a similar ilk.

Art mods rely upon recognized contextualization within the fine arts. They should not always be viewed with the same preconceptions as their close relative, the fan-based game mod. Fan mods are in themselves an important form of creation, one which proudly celebrates

the value of computer games as an entertainment media. However, where fan mods negotiate the contextualization of pop culture as a point of departure, in discussions of art mods this is the very characteristic which needs to be de-emphasized. It is significant that the differentiation between art mods and fan mods is stipulated by both art modders and fan modders alike.

In an effort to contribute to the development of an art mod lexicon, this paper outlines several distinct categories of art mods that have emerged, profiling the resultant artistic and gameplay qualities highlighted by these genres. This survey provides a foundation for the following discussion of several art modding projects that have been subject to responses indicative of the issues described above. Responses such as fear, disgust and anger have been roused in viewers of the art mods *Adam Killer* (Brody Condon, USA 2002), *Velvet-Strike* (Anne-Marie Schleiner with Joan Leandre and Brody Condon, France and USA, 2003), and *9/11 Survivor* (Kinematic Collective: Mike Caloud, Aaron Kwong, Jeff Cole and John Brennon, USA 2003).

Art Mod Categories
As work within this field has continued, categories have emerged. Each of these can roughly be defined by technique and outcome. However, as a multidisciplinary medium, it is rare that a work has a single outcome, and it is frequent for an artist to use a combination of techniques. Even the categories themselves are not easily separated, with some categories of technique – through common use – naturally defining a category of outcome. The state of computer games, as a medium which naturally incorporates every preceding art form, also impacts upon the ease of categorization. However the process is still a useful one, aiding clarification of commonly used terms, and the discussion of aspects of artworks.

Each category fulfils various artistic motivations and outcomes. Machinima fulfil the role of screen-based narratives, or, in more abstract moments, they result in entrancing, temporal wallpaper. Sonichima are sound works produced within a game-based production environment. Art game mods and political game mods place less emphasis on commercial success so as to forge new terrain into game play and ideology. Generative art mods exploit the real time capabilities of game technologies to produce ever-renewing art works. Performative interventions disrupt in-game norms to expose underlying functions of gameplay. Site-specific installations and site-relative mods compare similarities and differences between real and virtual worlds, drawing us further into a reality of fantasy. Real-time performance instruments allow audio and visual artists to create stunning, live performances in a range of entertainment venues.

Like the games they are built upon, interactive art mods may be singleplayer or multiplayer, the latter often making use of the networked environment to develop new models of interactivity and collaborative production.

Game Format, Game Media
It is useful to make a distinction between art games and other art mods, as the differences between the two can elucidate qualities specific to art mods. This difference primarily revolves around the key explorations of game media and game format. Tiffany Holmes has provided a useful definition for art games:

> ... an interactive work, usually humorous, by a visual artist that does one or more of the following: challenges cultural stereotypes, offers meaningful social or historical critique, or tells a story in a novel manner. To be more specific art games contain at least two of the following: a defined way to win or experience success in a mental challenge, passage through a series of levels (that may or may not be hierarchical), or a central character or icon that represents the player.

Art games may be made in a variety of media, sometimes from scratch without the use of a prior existing game. They always comprise an entire, (to some degree) playable game. Art mods always modify or reuse an existing computer game but they only rarely include reward systems, and if so, only when of thematic relevance. The issue of playability, integral to a successful game, remains important to art games.

For art mods, playability is often of no consequence. Many art mods are not interactive; art games always are. Although both forms follow the lineage of fine art and computer games, art games explore the game format primarily as a new mode for structuring narrative and/or cultural critique, whilst art mods employ game media attributes for extensive artistic expressions – abstract, formal, and narrative, as well as cultural, political and social.

Confusion arises from the fact that some art games make use of pre-existing game hardware or software, and thus technically comprise a mod. It is therefore valuable to emphasize the difference between exploration of game format and game media which differentiate the two forms. The art game *Graf War* (Andrew Waer, Joe Callahan, Eric Cho and Sky Frostenson, USA, 2003) and the art mod *Velvet-Strike* provide good examples for illustration. *Graf War* is a mod of the popular first-person shooter *Half-Life*. It allows players to install a new map of a futuristic Californian mass transit system into the game. The resultant game premise is that "in an effort to crack down on alleged '1st amendment abuses', the State of California has just enacted emergency legislation making vandalism a crime punishable by instant death, to be enforced by the newly-created, paramilitary, Graffiti Task Force." Suspected vandals may be eliminated on sight, thus the motive of gameplay is to avoid the Graffiti Task Force whilst bombing the city as much as possible. Players may install their own graffiti into the game, spraying real, original, personal artwork into the virtual game space. Although there is no point system relative to bombings, killings and deaths – success is achieved by executing the most bombs, thus each spray symbolizes a score. The element of competition integral to game format remains a primary motivation in *Graf War*.

Velvet-Strike employs a similar process, encouraging the installation of personalized graffiti sprays into the popular, commercial *Half-Life* mod *Counter-Strike*. However, the motivations behind – and distribution of – *Velvet-Strike* firmly anchor it within the art mod form. *Velvet-Strike* was conceived during the beginning of Bush's War on Terrorism as an anti-war protest. Although the artists behind the project are avid gamers who enjoy first-person shooters, their previously light-hearted attitude towards the assassination of terrorists in *Counter-Strike* was shattered when the US declared war on Afghanistan. As Anne Marie Schleiner – the main protagonist behind *Velvet-Strike* – reflected "what I once approached with playful macho geek irony was transformed into uncanny echoes of real life violence."

Velvet-Strike – the team, make anti-war images available for download from their website, encouraging players to spray these on the walls of their networked *Counter-Strike* games. These images, submitted by the public, are creative interpretations of anti-war sentiments, providing players an opportunity to indulge their desire for violent game play whilst reaffirming their desire for world peace. Although the images are installed into a game, they comprise a modification of the game in that they are strategic alternatives to the sprays traditionally shipped with *Counter-Strike*. *Velvet-Strike* does not alter the normal mechanics of *Counter-Strike* gameplay. It is rather a tactical vehicle for creative expression, which exploits two elements of the game format of *Counter-Strike*, its networkedness, and the function of uploading personal graffiti sprays.

Both *Graf War* and *Velvet-Strike* ideologically criticize war, shifting real world politics into the sphere of games as an entertainment media. This striking juxtaposition, reflected in many art games and art mods, is a powerful method of highlighting the sometimes short-term, myopic, goal-oriented, competitive motivations driving global conflicts. *Velvet-Strike* provides conscientious players with the opportunity to publicly express, through internetworked games, their dual love of fantastic violence and abhorrence of real violence. In doing so it formally interrogates the networked characteristic of online game media as a context for circulating political ideology. *Graf War* utilizes the format of game play, coupled with comedic parody, to explore sociological debates surrounding the expression of artwork in public space and apposite punishment thereof – *Graf War* does not extensively concern itself with any formal characteristics of the computer game as a medium. Its creative use of gameplay as an analogy for real-life contest, and its symbolic linking of graffiti bombing with in-game military bombing, make creative statements about play in the broader context of social behaviour, but not specifically in relation to computer games as a hard/soft-ware medium.

If we relate these two works back to Holmes' introductory definition of an art game, both works are "interactive", "humorous", made by "visual artists", "challenge cultural stereotypes" and "offer meaningful social or historical critique". However, in relation to her detailed definition, that "art games contain at least two of the following: a defined way to win or experience success in a mental challenge, passage through a series of levels…, or a central character or icon that represents the player", *Graf War* has both a defined way to experience success in a mental challenge and a central icon that represents the player. Although *Velvet-Strike* has a way to experience success, it is not through mental challenges, and the character, although used, is a side effect of the context. Where *Velvet-Strike* exploits the existing game, *Graf War* replaces it.

Narrative + Abstract Machinima
The word machinima is an amalgam of the terms machine animation and machine cinema. Narrative machinima is a method of film-making that involves the use of a 3-D computer game engine, whereby a script is acted by game players through their game avatars in a form of digital puppetry. Video machinima involves gameplay being recorded and edited into a film, with post-production elements such as voice-overs and sound effects later added. In basic machinima productions, the characters and maps of the computer game remain unaltered. More complex forms of machinima involve the production team making new textures and models for characters and maps.

A basic example of machinima production is the infamous *Red vs Blue* series. The narratives are set entirely within native *Halo* game maps, using the native, competing Red and Blue team characters. These characters are embellished with dry wit by the production team's voice-overs. Elements of computer-based play which one takes for granted as a player – e.g. competition, the game scenario, characters being controlled by a force external to the computer – in *Red vs Blue* becomes parodied fodder for philosophical enquiry.

Machinima can also be distributed as a code script which plays back inside a computer game. Using code scripts to instruct character movements, code-based machinima do not require video files for playback, and are hence significantly smaller in data size and easier to distribute. Code-based machinima often include maps and skins that need to be installed into the parent game, similar to standard mods. They are dependent on a copy of the original game software for playback. Machinima.com hosts a selection of code-based machinima which can be searched by format.

A more abstract style of non-interactive, game-mod animations exist which are not broadly thought of as machinima because of their lack of perceivable or inferable narrative. Abstract machinima largely comprise formal inquiries into game-based visualization. This abstract approach to machinima is usually undertaken by those with an education in the fine arts. *gLanzol* (Glaznost, Spain 2001) is one such work. A two-minute-long music-video animation, *gLanzol* explores a customized *Counter-Strike* map to the beat of an electronic audio track. Digital mists and fractured trajectories merge with shards of architecture in this edited, rhythmic montage of colour, light, shape and space.

Abstract machinima share more with video art than they do with computer games, however, they are often received warmly by avid gamers due to the manner in which they encapsulate the chaotic, fast-paced essence of FPS gameplay. Given this similarity to video art, it is interesting to note that the method of production, which usually involves the construction of a new map, as well as the use of mouse and keyboard controls, console commands and code hacks, is a complex one for the video art genre.

Techniques employed in the production of abstract machinima are easily applied to real-time performances, thus the crossover between abstract machinima and real-time performance is a fluid one, undertaken by many artists working in this field. Glaznost, for example, have performed their abstract, game-based video art as VJs at many international, electronic arts festivals.

Real-Time Performance Instruments
Where the pre-recorded machinima method of video art production was used to sync aural and visual rhythms and edits, the mixed media, real-time format of games makes them a ripe environment for live audio-visual syncing. An early art mod used specifically for this purpose was Julian Oliver's *Quilted Thought Organ*. Built in *Quake II*, *Quilted Thought Organ* allowed a player to trigger sound events attached to objects in the game space. It exploited game-based collision detection to create a 3-D, musical synthesizer. The visual richness of the custom map made gameplay of the performance as fascinating visually as it was aurally, resulting in an integrated, easily customizable platform for live performance instrumentation.

Oliver's continued work into game-based sound production has led him to coin the term sonichima. Described as "Audio Compositions made using an existing computer game as the performance medium and playback device. In the manner of machinima, sonichima is made by playing the game. A minimal amount of mixing between games and/or post processing is used". A growing collection of sonichima can be found online at Selectparks.net. As the quantity of sonichima audio works increases, it will be interesting to see if this game-based method of musical production results in the evolution of new compositional forms – e.g. will 3-D games affect the structure of a musical composition by replicating the structure of the physics of multi-dimensional, virtual spaces within which the sonichima are composed?

q3apd is an extension on the real-time performance environment of Quilted Thought Organ, providing a multiplayer, networked art tool for collaborative audio production. Developed by Oliver and Steven Pickles, q3apd consists of custom Quake III modules which can be loaded into the game, allowing the delivery of gameplay data to a software audio synthesizer. q3apd translates bot and player locations, view angles, weapon states and local textures into control data for the real-time, audio-synthesis environment Pure Data. Once this rich, control data is available in PD, it is then used to synthesize various elements of generated audio. Although any Quake III map can be used with q3apd, Oliver and Pickles' q3apd maps were carefully architected so that the dimensions, bounce pads and placement of textures afforded a highly dynamic environment for versatile, music playability.

Oliver and Pickles have released, and continue to develop, a specific engine for real-time audio/visual performance. Based on the open source game engine Nebula, Fijuu allows player/s to dynamically improvise music by manipulating 3-D instruments with PlayStation 2–style gamepads. The suite of instruments in Fijuu will include a non-linear beat pattern sequencer, granular synthesis tools and a graphical filter bank. The project runs in Linux and will eventually be distributed on a boot CD, allowing various terminals, regardless of operating system, to launch the engine. As the developers have keenly noted, "this effectively turns the domestic PC into a console for game based audio performances".

The use of a game engine for real-time performance is not limited to music production and video art. In fact, participation in a game always involves some element of real-time performance, thus it is natural for interactive/participative art mods to function as real-time performance instruments. The works previously described focused largely on performance as the result of the user's input into the virtual space – the performative aspects were less corporeal than they were virtual. There was less dependence on activity in the real world, as the computer's input devices and interpretive algorithms carefully scaled up the performance.

There are other art mods that take an alternative approach, increasing the degree of physical activity. This is not new behaviour to games (think "tag"), nor to computer games (Dance Dance Revolution, et al.), however, the technique can provide amusing and insightful outcomes. One such work is Tekken Torture Tournament by Eddo Stern. Tekken Torture Tournament is an infrequently held event that sees willing participants wired into a custom fighting system: a modified PlayStation that converts virtual onscreen damage into bracing,

non-lethal, electric shocks. Players wear arm straps wired to the software/hardware hack and receive real pain corresponding to attacks on their game character. Although technically complex, *Tekken Torture Tournament* uses a very simple scenario to illustrate one of the major attractions of in-game violence – the violence is not real. It makes a witty contribution to the debate surrounding the sociological effects of game-violence by reminding us first-hand that real pain actually hurts – and we know this. It also sets up a compelling experiment for testing the perceptual results of a forced synchronicity between virtual and physical experience.

Abstract Interactives

Many interactive software mods focus on deconstructive techniques for the purposes of exposing the greater functioning of game mechanics and their true, or hidden, power over players. These works usually involve some degree of technological proficiency with the medium. Leading the field in the complete reduction of navigational cues in a 3-D game are Dirk Paesmans and Joan Heemskerk, aka JODI. Their three game mods, *ctrl-space* (1998), *sod* (1999) and *untitled game* (2002), were built on the *Wolfenstein 3D* and *Quake* engines. For each piece, JODI have hacked various aspects of the game engine to produce stand-alone games that are hard-core minimalist reductions of the original 3-D parent games. These range from the "Arena" level which is nothing but a stark, blindingly white "space", without a single distinguishable visual spatial cue, through to levels which are chaotically shifting shapes, producing hallucinatory op art effects as one tries to move about. Here are descriptions by two players:

> Every "wall" of the maze is rendered in black and white geometric patterns, while the main enemy in the game appears as two inverted triangles. Weapon use is signified by an animated black circle, and each game level is marked as "Untitled 1", "Untitled 2", and so on. There is no specific scenario, and no coherent game instructions. All that remains of the original is the typically dramatic sound track, and the sound effects when you lose a life or start hitting the fire button.

> (JODI) complement the game-play difficulties with a cryptic interface (setting game preferences is no easy task!) and tongue-in-cheek game instructions along the lines of "If you are tough, press N. If not, press Y daintily." With its stark elegance, *SOD* offers a compelling alternative to the computer game industry's mindless pursuit of representational realism.

These mods illustrate the function of gameplay as being irrevocably linked to an apparatus – the game program – that is implicit in the determination of user freedom. To paraphrase Erkki Huhtamo, although a player may be granted certain liberties to explore virtual worlds, adopt different personalities, make decisions and discover secrets, these options remain carefully tested and calculated parameters, the main criteria of which are economical. By abstracting the semiotics for navigation; by reducing mobility, enemy identification, narrative cognition, reward systems, landscape and even gravity – to mere symbolic fragments, JODI leave the user without any sense, objective or intention. Their work is an excellent example of the potential for reductive techniques to impose an awareness of the cognitive processes affected by artificial physics of virtual worlds.

Site-Specific Installations

One area that has received a lot of attention by mod artists are constructions that interrogate actual and perceived differences between the physicality of real and virtual spaces. These works are primarily environmental and architectural – usually site-specific installations. One of the most common approaches is to replicate an exhibition context in a game map. So common is this approach now that most works are not worth describing as projects on their own. These basic contextual installations are still very fun to play with, and are an easy introduction for audiences to art mods. They allow the user to analyze how their experiences in a virtual space affect their relation to the real equivalent of that virtual space once they walk away from a game. The Tate Modern, for example, is going to seem slightly more vulnerable once you have finished blowing it apart in Chris Cornish's *Repeater* series (2002), than it was when you were walking around in it, looking at millions of dollars worth of architecture and artwork, only moments before you played.

The more sophisticated examples of contextual installations focus their interrogation on specific game-related criteria. *Container*, by Stephen Honegger and Anthony Hunt, is a constructed full-scale replica sculpture of a shipping container which explores the power of gameplay to bridge the perceived divide between real and virtual experience. *Container* is open on one side, and can be entered by the viewer, where they stand watching a machinima video projection. The machinima narrative reveals the curious origins of the container, whilst also depicting a sinister and unsettling event which took place in the gallery. A thief breaks into the gallery and sneaks through the back rooms to arrive, gun in hand, beside the shipping container. The viewer is drawn in to this virtual narrative at a surprising moment in which the real and the virtual collide, the machinimated character shooting the person standing inside the container.

Adam Killer by Brody Condon

Many people in the First World are now aware that the mass media subtly coerce their audiences. Generally, people can be thought of as "media-savvy". Most people watch TV, see films, read books and listen to the radio, and do so with a degree of critical awareness. There is a social knowledge of the techniques used by these media and by advertising in these media. These techniques of persuasion, although they still work, are greeted by an audience who believes it makes educated decisions based on mediated information, which they can knowledgeably interpret to be objective.

This social knowledge of media awareness does not yet extend to computer games – a medium which many people have yet to come into contact with and which is not frequently included in media studies curricula. For a considerable proportion of the population, this ignorance extends to a suspicion, or fear, of computer games, which is often increased by the high-technological nature of computer games and perceived anti-social content. By association, these presentiments extend to anything that is "of" the computer game, repeatedly affecting lay readings of art mods.

The frustrations that artists feel as a result of these misunderstandings are very real, as we will see in the case of Brody Condon's work *Adam Killer*. *Adam Killer* is a series of eight *Half-Life* mods. Multiple replicas of Adam, biblically pure in white slacks and a T-shirt, stand

"idle" in a white plane, patiently inviting the player's interaction. The work is available as a playable, stand-alone mod, as well as a narrative-abstract machinima based on video documentation of Brody's private performance of the work.

> White was an aesthetic decision, I felt it contrasted well with blood. As the characters were shot and bludgeoned with various weapons, an exploited glitch in the game's level editing software created a harsh trailing effect. This turned the environment into a chaotic mess of bloody, fractured textures.

Although *Adam Killer* has been installed as an interactive work at various galleries, Condon has commented that the piece works best at home, in a private context, amongst modders who understand the origins of the genre, or in lecture situations where Brody provides supporting information about the work as he plays it. However, this was a realization he came to after several, controversial exhibitions of the work. The first time he showed *Adam Killer*, one woman in the audience started crying, and another started yelling at him about the poisonous nature of mediated violence. Intensely frustrated with their myopic reading of the work, Condon threw a chair against the wall to shut them up. He then asked them to make a distinction between the reality of that act and what they saw on the screen. "If I am ever asked the idiotic question 'what is the difference between real violence and media violence' again, I think I will cry."

Although *Adam Killer* offers the player a spiritually heightened focus on the recreational attraction of murder, Brody maintains that for him, *Adam Killer* was an "intuitive investigation into the material and some of the issues that surround it". An art mod such as this, artistically inspired, is a vehicle for release, for self-expression, for improving self-awareness. This particular work was made not long after the Columbine killings. A hard-core gamer at the time, Brody and a friend "were looking through a list of victims and laughing, deciding who we would have shot and not shot had we been in the killer's position. Then I realized that I had no connection to media images I saw on the news and their actual context and meaning. Death had become a floating signifier".

For Brody, producing *Adam Killer* allowed him to express "intuitive gestures" through one of the entertainment media responsible for his desensitization, as a form of therapy. His aim was to re-associate himself with the real element of carnage behind mass murder in the media. He says "As soon as *Adam Killer* was functional, I sat down and shot Adam again and again for about an hour. Every time I stepped back and looked at the carnage, all the bloody Adams on the floor, I felt a sense of release and peace, like all was right with the world."

This release, this addictively appealing quality of first-person shooter gameplay, whether due to re-sensitization or not, asks us to question whether we innately possess a desire to kill. Do survivalist urges, repressed by civilized behaviour, cause more internal damage to oneself than they would if provided release via virtual surrogate?

Velvet-Strike by Anne Marie Schleiner, Brody Condon and Joan Leandre
There is a substantial history of protest in online games, in the manipulation of computer games as a form of tactical media, starting with early protests in *Ultima Online* over glitches

in the software. Another notable protest, in *The Sims*, was against the introduction of Macdonalds into the reality of the game. There were also several peace rallies held in online games post-9/11. Networked games, as networked communities, and as systems of rules, provide logical contexts for ideological expression. They are not, however, anticipated as a location for ideological artwork.

An online protest relevant to this discussion is the game patch *Velvet-Strike*, described above. In addition to encouraging players to download and install anti-terrorism graffiti tags that can be sprayed onto the walls of *Counter-Strike*, the *Velvet-Strike* website also offers a collection of intervention recipes; that is, scripts for disturbing gameplay. This form of tactical disruption is highly unpopular amongst gamers due to its potential to undermine fairness and quality of gameplay.

This combined intervention into *Counter-Strike* gameplay was perceived by many gamers as an attack on their right to enjoy a violent game. The response by gamers to *Velvet-Strike* was one of defensive anger. Their anger at the interventions was so heated that it became a telling element of the creative project itself, as flamers spouted their opinions via e-mail and in the online forum:

> You and your boss are dumb and deserve to die...it's a fucking game, and if you have nothing better to do than to try and fuck it up, then I pity you and you are making yourselves as low as the people you alienating.

> It's just a game. It's not meant to have an outlook on the world outside the computer, it's just a game. Something you clearly didn't understand. You thought there was more when there was none.

> What a stupid initiative... don't piss off other people with your shit. Just a woman could have think of making something like *Velvet-Strike*... if you don't realize that videogame is just a videogame, an that it's a fake world, then GO PLAY WITH YOUR BARBIE.

Clearly the problem here was that gamers at first considered these actions to be made by critics of games and, particularly, critics of game violence. To these gamers, it was a situation of us and them. Initial responses to the project were limited to the perception of these tags as an attempt to symbolize the reciprocating dialogue between social and game ideologies. From their perspective, any effort to contextualize a computer game within an extrinsic political framework must necessarily have come from outside the gamer community. The world of extrinsic reality against the intrinsic world of virtuality. As Anne Marie noted, *Velvet-Strike* "led to some confusion amongst gamers who didn't want reality creeping into their fantasy".

Although *Velvet-Strike* was conceptualized during the start of Bush's war against terrorism, it was not intended to support censorship or oppose violence inside computer games in any way. What these gamers completely overlooked was the possibility of this project coming from within the gamer community, as a self-reflexive comment on their own entanglement, as gamers, in the war on terrorism. Most gamers were unable to consider the project as a

more abstract exercise in creative self-expression; as an artistic deconstruction of the constricted semiotics of the game. In his 1999 article "Game Patch, the Son of Scratch", Erkki Huhtamo made some observations on the game patching trend, noting that most people do it with the "aim of subverting the existing relationship between subject and media...with an urge to reassert the role of the player as co-creator".

As a potent online intervention, *Velvet-Strike* highlights the debate over how much of a right players have to assert their co-authorial desires within games, beyond the opportunities already granted to them via the game scenario. *Velvet-Strike* has not received criticism from the makers of *Counter-Strike*; however, as Erkki Huhtamo noted, like "any form of appropriation art, game patch artists will have to deal with issues of copyright and intellectual property". Lucasfilm have already announced in an interview about their upcoming *Star Wars* MMORPG that they will repress any activities that do not represent their interests.

Autonomous game patching, and illicit cheating, force us to question whether free speech should extend to the online world. Who owns cyberspace and the representations, or extensions, of ourselves, that exist within it? Is it not possible that since there is a boundary between the reality of the real and the fantasy of the virtual, (e.g., we cannot be mass murderers in real life and get away with it), we may not really be in a position to demand the same rights that we have in reality. Are we not buying into the conditions of virtual worlds because of their distance from reality? Are games not authored artworks in their own right that deserve the respect granted to artistic antiquities preserved from disfiguration in museums?

9/11 Survivor by Kinematic Collective
9/11 Survivor, developed by the Kinematic Collective, is a mod of *Unreal Tournament 2003* which replicates the World Trade Center just moments after it is hit by a plane. A lone businessman walks around a deserted, fiery floor high in the towers. He contemplates his circumstances before jumping out of the building to his death. *9/11 Survivor* is in third-person perspective, the viewer can only interact with the piece by controlling the camera angle, like watching a film unroll in real time with the ability to view from any angle you choose. There is no reward system, there is no character controlled by the player, there are no challenges.

The mod was built by students as an exercise in level building, but was introduced to the world via the project's website, which framed the work as a new PC game. The concept of a game based on 9/11 was too much for most people to handle. Within a couple of weeks of this work reaching the public eye, the artists had to remove their site from the Internet, facing a hosting bill of thousands of dollars. They also had to delete their current e-mail addresses and any public contact information, so huge in quantity was the influx of critical, angered responses. One artist even had their home phone number announced on public radio for all to call with abuse. These reactions clearly illustrate the dubiety towards the ethics of computer games as a commercial, entertainment media. Here is an edited e-mail articulating much of the argument against the work, as a game:

> It was without taste. Making a game out of such misery neither does the victims any justice, nor does it help game developers when politicians are clamouring for censorship of game content. Escaping from a burning building in the context of a story is one thing, but capitalizing on it in a maze-like game is another. If you look at the landscape of gaming, there is no other game in which the sole purpose is to give people a sense of grotesque and morbid experience. It has no education or entertainment value. You weren't there so you can't appreciate the gravity of the situation. You obviously don't know what it was like to watch from a block away while searching for someone who was in the building, and it's that disconnection from the event which probably led to you thinking the game was a good idea. I see no point in creating this project except maybe from apathy.

A particularly revealing comment is that in the context of a story, and I believe we can presume "story" to mean literature and film, this content would be okay. That story is integral to game scenario is not a concept this person is familiar with, despite their experience with the medium. Further beyond their immediate knowledge is an appreciation of story conveyed through a conceptual artwork, contextualized within game technologies, and posed within the framework of a game. An additional comment, that there are no other games "in which the sole purpose is to give people a sense of grotesque and morbid experience", despite this suggesting they have not played PC games since *Doom*, illustrates how much more grotesque and morbid the concept of real violence/death is, even when conveyed through virtual media, without the trappings of excessive blood, gore and visual effects, executed through murderous players in many existing violent games.

Where this critic hits the mark is with their last two points, that the artists are disconnected from the event and that it was probably a result of apathy. Where they were wrong was in presuming this state to be a result of the artist's own negligence. Like Condon's *Adam Killer*, this project, although initially a simple class exercise, taught the artists the power of conceptual artwork, whilst providing them with a proximity to the events they had previously not experienced, despite their exposure to a barrage of mass-mediated news coverage of the event. For the artists,

> There was no explicit political theme...We merely had this media event repeating over and over in our collective mind and we wanted to talk about it... our recollection does one better than all of the photos online and all of the archived blog posts in that we let the user try the leap for themselves, without consequences, over and over again....Just because we didn't see people leap first hand, we saw it on tv, over and over and over...we lived it too, and we want to talk about that media experience.

When collecting images for the development of the game, Kinematic Collective found themselves developing an intense, emotional response to the event that had not been granted to them through news and print media, and almost stopped the project through self censorship. In the end they decided to continue because they were so angered by the commercial exploitation of the event through the media. Despite this exploitation the media had failed to authentically communicate the reality of the event in a way to which they could emotionally respond. The empathy that their project aroused in them is evidenced in their slight modification to the AI of the bot. "I felt bad for the lemming-bot, because he would

always just spawn and immediately leap to his death, over and over again." It now wanders around the building a little bit first, contemplating the gravity of its situation.

Kinematic Collective found that gamers appreciated the experiential potential of the project. They found that "the more disconnected the viewer is from game culture, the more shocked they are by the mod & the screenshots… Once we explain it's not really a game (there's no score, no opponents or level boss to overcome, etc) most people seem ok with it. 'Ok' in the sense that it's ok to talk about events like this, but they're still uncomfortable looking at the screenshots & mod…"

These next comments somewhat complicate my argument, that it is the artistic intention behind these projects which is being overlooked. Kinematic Collective have explained that "we're not particularly interested in invoking an art context. All three of us are comp art majors, but we're gamers too. We wanted to do something compelling, but nothing so theoretical it would be passed off as art. We like the grey area between fandom and art". These comments only further illustrate the lack of social knowledge surrounding the artistic and cultural significance of computer games, and the fan-based "digital folk art" offshoots they generate (to borrow a term from Condon). Their apprehension towards gallery practice would also stem from street-credibility of underground, gamer culture, which, like many subcultures, is believed by its followers to only ever be truly understood by insiders. In their own words they do equate the need for self-expression which informed this work with that of other art practitioners. "We're not poets, we're not sculptors, we're gamers, so we're using a medium that we're most familiar with."

It may not be correct to view this work as a single attempt to re-establish an emotional response to the 9/11 event by playing the mod. If such an emotional response was established, it probably occurred to the mod makers through the process of building the mod, during which they assimilated mediated imagery with the reality of the event, for example, by comparing photos of the devastation with original architectural plans. I say this because of their description of the very different response that gamers have to the mod: "They laugh and snicker. They wait at the ground floor so as to watch the bot leap, trying to stand under his falling body so that he lands on the user's head. We don't know exactly why people laugh, but there is just something amusing about the way he lazily strolls around as the flames burn around him, and he casually leaps from the building. Even the flail animation is kind of silly as he jumps. He's a lemming-bot forced to do our bidding." Without wanting to suggest callousness on the part of the gamer's responses, I think that it is necessary to remind ourselves of the emphasis gamers place on their conscientious awareness of the fantasy of gaming worlds.

The title of this work is very significant in a reading of the project. Because the bot always dies, the *9/11 Survivor* is not the central character. The *9/11 Survivor* might symbolize the desire of the bot for a more positive outcome in an alternate reality and suggest potential new determinisms in virtual worlds. And, it might also be that the *9/11 Survivor* is the controller of the bot – the game makers, and that the production of this work was a creative method by which they might establish their position in relation to the event as a mediated spectacle: by constructing their knowledge of themselves as *9/11 Survivor*s: having lived

through, and resolved, the repetitive, numbing, commercially exploitative communication of yet another horrifying reality through mass media.

Although it is easy to dismiss the above criticisms of these works as ignorant, they evidence a social sensitivity towards the power of games to convey ideology. Because games can successfully do this, they, like any media, should be actively criticized; especially games with an admitted agenda, like the U.S. military's *America's Army* which is available as a free download, to anyone of any age. Under no circumstances do I advocate censorship, I believe educated adults should have unlimited access to well-described cultural artefacts; however, the critical attitudes described above do have their place in the public discussion of commercial games.

At the same time, given the risk of misinterpreting art mods, it is quite necessary to promote the significance of these game artworks as a contemporary art form in their own right, one which, like other art media, has a lexicon for critique especially developed for this purpose. One of the functions of artistic contexts is to also convey hidden meanings and motivations behind a particular cultural work, as integral to a complete understanding of the piece. Commercial cultural works presume the viewer/user to be capable of dissecting relevant meanings without assistive information.

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Videogames as Literary Devices

Jim Andrews

1. The Mechanism/Device

"Time is a child playing at dice. The kingdom is a child's."[1] So said Heraclitus some 2500 years ago. An image of time, of eternity. Of how it proceeds. A notion of the larger meaning of play and game. A description of cosmic power and perhaps an intimation of the nature of earthly power. Disturbing, perhaps, in its evocation of a cosmos or a kingdom at the mercy of chance and the whims of a child.

Heraclitus uses the notion of the game within a metaphor, a *literary device*. We read at dictionary.com that a literary device is "a literary or linguistic technique that produces a specific effect, esp. a figure of speech, narrative style, or plot mechanism."

The basic thing about games is that events in a (usually imaginary) structure/world are generated via some mechanism (throwing dice, for example, or moving), and the events are interpreted and meaningful within the world of the game. Each event introduces a change to the game world that the player responds to, which is the next event. What I would like to do in this meditation is consider several Net-based works of digital art which use games as and within literary devices.

The artists creating these art pieces were more intent upon creating works of art than computer games. The works we will look at subordinate the videogame dimension to the literary or visual art dimension, to different extents. The videogame is used *as and within* literary devices whereas, in typical videogames, the game is not subordinated to anything. Like Heraclitus, the artists are most interested in seeing game and play in relation to the world. For instance, immersion would be in the literary dimension, typically, not the videogame dimension, or would be more in the literary than the videogame.

Even the process of reading a poem or book or viewing a picture or listening to a piece of music etc. can be thought of as a process whereby events are generated by some mechanism

and the events are interpreted and meaningful within the world of the piece of art. When you read a poem, you make something different of/from/with it than the next person, just as two playings of a game may differ. At every turn in the reading, you will have probably responded differently from the next person reading the same words. The events are reading/interpreting the words or sentences etc. of the work of art.

2. Devices in Bookchin's *The Intruder*

In Natalie Bookchin's Shockwave piece *The Intruder* (dian-network.com/con/intruder), we are presented with a sequence of ten videogames, most of which are adapted from classics such as *Pong*, *Space Invaders*, and *Textual Vagina Blood*. We interact via moving or clicking the mouse; and by making whatever we make of/with/from the story. Meaning is always constructed, never on a plate. The interaction is less focussed on videogame play than it is on advancing the narrative of the story we hear throughout the presentation of the ten games. The story is the Jorge Louis Borges piece *The Intruder* with a few changes. The female in the story is "the intruder". She is as a possession of the two closely bonded miscreant brothers enmeshed in a hopeless triangle of pyscho-sexual possession with homoerotic undertones. Finally one of them kills her to end the tension between the two men. Game over. Story over. Bookchin presents an awareness of being an intruder, herself, in the (previously?) male-dominated world of videogame creation and enjoyment. The videogame paradigms are subverted, mocked and implicitly criticized for their shallow competitive and violent nature not unrelated to the nature of the violent males.

Although moving and clicking the mouse is associated with advancing the videogames, the videogames are subordinated to the story; the videogames are used as and within literary devices. The videogames are literary devices in that they are programmed machines functioning less to advance gameplay as triggers for the advancement of the audio of the story. The videogames are also functioning within other comparative/metaphoric literary devices. We compare the worlds of the games with the worlds of the story. Metaphor is operational here. We compare ourselves in the world of the games with ourselves in the world of the story, i.e., we compare the goals of the games with our goals in reading/listening to and understanding the story. We cannot enjoy the games in the way that videogames are usually meant to be enjoyed. Partly because they are not as attentively programmed as well-crafted videogames. But mostly because they are subordinated, in every sense, to the literary dimension. Structurally. Morally. Narratively, etc. The artist mops the floor with the videogame. Art 10. Videogames 0. Women cheer this artwork like few other Net-based works. It is deservedly famous both as statement and for its formal literary innovation. It is not innovative as a computer game. That is not what it aspires to. It aspires to literary/artistic innovation and literary depth. It is a darkly comic, blistering critique of the typical mentality involved in both the design and playing of videogames.

It is a kind of anti-videogame/patriarchy work of media art. But it also explores the relationship between game and art in a different way: both videogame and story are presented as make-believe activities which proceed via the generation of events that change the game/story world and that the player/wreader responds to, generating further events.

Heraclitus poses the game amid the amoral attentions of a child playing dice. Bookchin poses it amid the evil of men.

3. Art Play in Regina Célia Pinto's *Viewing Axolotls*

Regina Célia Pinto's Flash piece *Viewing Axolotls* (arteonline.arq.br/viewing_axolotls), like Bookchin's piece, uses a story. *Viewing Axolotls* uses the Julio Cortazar story "Axolotls" from his collection *The End of the Game*. The Cortazar text is included in its entirety. We might describe Cortazar's story and Regina's use of it as an exploration of transformative immersion. In the Cortazar story, the narrator does and does not become one of the axolotls he views with fascination at the aquarium. He does, insofar as he realizes with immersive, imaginative intensity a possible "mentality" or existential condition of an axolotl, i.e., he becomes fully figuratively an axolotl. But the story is unlike Kafka's *The Metamorphosis*, wherein the main character literally becomes a cockroach. In Kafka, the metamorphosis seems the tragi-comic consequence of the character not having fully lived. In Cortazar's story, the figurative metamorphosis is a kind of imaginative achievement. The narrator remains a human being and somehow his humanity is complemented or extended via this realization of axolotlness.

The Cortazar story explores the nature and limits of figurative immersion, which is the existentially strong assumption (necessarily figuratively) of a point of view different from the normal ones. The character experiences figurative immersion and, in parallel, the reader may experience figurative immersion. Regina's adaptation explores immersion in a work of art (Cortazar's) and offers the reader immersion in a virtual work of art (Regina's and/or Cortazar's). How immersive is the experience? Like Bookchin's piece, *Viewing Axolotls* is not as smooth or visually/sonically compelling as a professional videogame. It seems to me that the term immersion is used more literally in connection with videogames than in literature. Yet of course it must remain figurative: we are who we are where we are when we are and there isn't any getting around it. The transformation to realize is not so much becoming an axolotl as becoming Regina (reading Cortazar) becoming an axolotl. The piece is as immersive as you make it. Which, it seems, is part of the nature of immersion. Building a compelling world to immerse in is only part of the task for those who would permit an immersive experience; the other part is allowing/encouraging the imaginative leap that humans can make to figuratively assume perspectives outside of themselves. And that is as well accomplished via the literary as anything else.

Viewing Axolotls also involves a "game". "The objective of the game is to make the avatar and the axolotls exchange glances." The "avatar" is a silhouette of Regina or the speaker of the piece. You cannot literally get them to exchange glances because the silhouette has no eyes. The goal is figurative. The game is even less gamey than Bookchin's efforts. It is playful, however. Again, the notion of the game is used figuratively, as a literary device, in this case perhaps to think of a game as simply play toward the goal of imaginative or literary realization.

4. Game as Device to See Anew: *Pac Mondrian* by Neil Hennessey
When Toronto's Neil Hennessey and friends released *Pac Mondrian* (pbfb.ca/pac-mondrian) in 2004, the *New York Times* wrote about it. And then so did the *Globe and Mail* and *National*

Post, the two national Canadian papers. And many bloggers linked to it and discussed it. What was all the fuss about? *Pac Mondrian* uses a Piet Mondrian painting called *Broadway Boogie Woogie* as the playing surface. As you play *Pac-Man* on it, the surface/painting changes according to the graphical logic of the old *Pac-Man* game. And the audio is boogie-woogie.

One of the main things people comment about is how it lets them experience Mondrian's work anew. Again, the emphasis is on art, not the computer game. Hennessey and friends have also made an arcade version of it that can show in a gallery.

Another of the common observations goes something like this:

Videogames, meet modernist art; modernist art, meet videogames. Now that you two are aquainted, please mash up two of your most iconic symbols. Pac-Man and Piet Mondrian? Okay, sounds good to us. So, anyone for a game of Dali Kong, Warhol the Hedgehog, Man Rayman, or Super Kahlo Brothers?

From engadget.com

The emphasis here is not on either art or the videogame, but on a more or less equal "mash up" of the two. *Pac Mondrian* is not solely for those interested in visual art but also for anyone who likes *Pac-Man*. There is movement here from videogame as solely figurative (Regina) or strictly subordinated to the art (Bookchin).

It is still possible to see the videogame as a device: if we look at it from the point of view of someone interested mostly in visual art and the work of Mondrian, we can see that they will see the videogame as a device that allows us to see Mondrian afresh.

However, we can also see *Pac Mondrian* from the point of view of someone interested not at all in Mondrian, at least initially, but interested in videogames. They will find *Pac Mondrian* an OK implementation of *Pac-Man* and may move from that interest into some engagement with the artistic dimension of the piece.

Comparing the previous work with *Pac Mondrian*, it seems that Natalie's and Regina's works are more complex in their emotional depth and intellectual range. The notion of the game is fully figurative; the notion of play is art play, not game play. *Pac Mondrian* bops lightly upon the surface of pop and modernist art, yet is more deeply realized as a programmed piece and as a juxtaposition of art and videogame. It is a work of strong delight in both art and game and provides people with a sense of the relation of both; it also gives people a sense of the relation of Mondrian's piece to Manhattan, conveys something of the spirit of Mondrian and boogie-woogie in Manhattan.

5. *Arteroids*: Twin Devices
I have worked on *Arteroids* (vispo.com/arteroids) since 2001. It is never really finished. I call it the battle of poetry against itself and the forces of dullness. It is based on the ATARI classic arcade game *Asteroids* ("ATARI", by the way, is "art" and "ai" mixed together). Instead of a space ship, the id entity is a text. Instead of asteroids, you encounter texts.

Some of the features I wanted to program into it were appropriate to gameplay. Other features were more appropriate to a different notion of play. So I separated the piece into two "modes": "game mode" and "play mode". In "game mode" you play with what you are given and scores are saved. In "play mode", you can compose/save/edit the texts you encounter when playing; and you can adjust all the parameters of the app: textual density, velocity, fictive friction, whether the texts can "kill" you, etc. "Play mode" is more a Do-It-Yourself combination of odd poem editor and videogame adjuster so that you can mash poetry and game together in a way that permits you to think about both without worrying about being killed. "Game mode" is a videogame, though there, also, you can read the text at low velocities. The velocity increases as you progress through levels.

At high levels of play/velocity, text is a device for the game. At low levels of play and in *Word for Weirdos*, the game is a device for the poetical text. The idea was to try to deal both with poetry and videogame on a more or less equal basis in order to be able to observe their interaction well. What do you get when poetry and shoot-em-up videogame collide? I did not go in with a lot of preconceptions.

Once I had the videogame working, I found that the game was dominating poetry. That is when I started building *Word For Weirdos*, which you reach via the "edit" menu option in "play mode". That is also when I made the program capable of 216 levels of play. So that it goes from a manageably – and readably – slow speed up to speeds that defy reading altogether. This was also a help to the "game mode".

The relationship between poetry and videogames is mostly of the oil and water variety. Poetry is not a game somebody wins. Just as art is not a game somebody wins. It was not long before I realized that there was no resolving this conflict. But exploring the conflict and also exploring the meeting points is interesting to me. There is great energy in their collision. One of the main intersection points of art and game is in the notion of play. And there are various types of play, some more appropriate to art, some more appropriate to games.

As we move into a situation where poetry is more electric and Net-oriented, and where videogames are maturing into their art possibilities, there will be more exploration of the meeting ground of poetry (and other arts) with games. Because games need to be literate, in some sense, to attain art in which language is handled with depth and precision, and poetry needs to move into the digital and find new ground rather than simply porting print to the digital.

Notes

1. The word eternity is sometimes used instead of time. Sometimes kingly power is used instead of kingdom. Also, the original refers to something like draughts, not dice; apparently philologists are unsure if this refers to something like knucklebones/dice or something like a checkerboard.

High-Performance Play: The Making of Machinima

Henry Lowood

A body of research on the social and cultural impacts of interactive entertainment is gradually replacing the dismissal of computer games and videogames as mindless amusement for young boys. There are many good reasons for taking computer games[1] seriously. Is the claim that computer games have emerged as an art form one of them? Henry Jenkins, for one, has suggested that it is indeed time to think about videogames as the "art form for the digital age." Some will find this thought difficult to reconcile with *Pong* and *Pokémon*, or with images of children staring vacantly into a Game Boy. Jenkins observes that such reactions "tell us more about our contemporary notion of art – as arid and stuffy, as the property of an educated and economic elite, as cut off from everyday experience – than they tell us about games."[2] It is tempting to respond to the rejection of games as an artistic medium by citing the narrative and social aspirations, technical mastery, visual storytelling, strategic depth, or simulated reality found in the palette of game genres today. For computer games today do cover an astonishing range of entertainment, simulation, artistic, competitive and narrative experiences. Tempting as it may be to tout the artistic status of games in this way, it says little about the direct impact on contemporary artistic practice – demonstrated and potential – of performance rooted in computer games. In this article, I will narrow the focus of this relationship even further to the history of machinima, a new narrative medium that has sprung almost whole out of computer game technology and play.

Machinima movies transform gameplay through performance, spectatorship, subversion, modification and player communities. The ways in which early machinima projects defined the "convergence of filmmaking, animation and game development" that became machinima are instructive.[3] They certainly tell us something about the impact of improvements in computer graphics and game technology, but the history of machinima is more than a story about the rise of real-time animation techniques since the mid-1990s.

Like the cellphone camera craze, we also learn from machinima how the dissemination of accessible tools – even if they are not necessarily easy to use – creates opportunities for the emergence of unexpected content in a postmodern environment that places playful experiments and throwaway pieces alongside startling and original instances of creative expression.[4] Machinima reminds us that the nature of computer games as software allows for an almost limitless flexibility of content, the potential of which has yet to be fully explored.

This article will be concerned with machinima as an episode in the history of game performance, design and technology.[5] Depicting machinima as high-performance play stems from its emergence from inter-relationships of play, spectatorship, technical virtuosity and storytelling in computer games. Each of these factors played a role in defining the practices of machinima as practices of game performance. Already in its early history (1996–1997), we can identify elements of machinima that are particularly indicative of narrative and artistic performance generally: play as performance, modification of content, and community-based tools and content development. At the end of this article, I will visit the question of what machinima tells us about the appropriation of game performance (both play and technology) as an art form.

The word "machinima" was derived from "machine cinema".[6] A more apt derivation might be "machine animation".[7] Whether we think of machinima as cinema or animation, it means making animated movies in real time with the software that is used to develop and play computer games. Game developers produce or utilize software called "game engines" to manage sophisticated real-time graphics, physics, lighting, camera views and other facets of their games. Games are interactive; pre-rendered animation has limited applicability in software that must immediately respond and redraw the screen in response to player actions.[8] Games such as "first-person shooters" raise the stakes of this technical challenge. In order to immerse the player in the rapid action of the game, they must render the virtual environment as a three-dimensional space seen from the player's point of view, constantly re-rendering at high frame rates as the player "moves" through that space. Since the early 1990s, specialized hardware and software solutions have been found to the computationally intensive problem of redrawing these views on the fly (in "real time"). Machinima makers have learned how to re-deploy this sophisticated software for making movies, relying on their mastery of the games and game software. Beginning as players, they found that they could transform themselves into actors, directors and even "cameras" to make these animated movies inexpensively on the same personal computers used to frag monsters and friends in *DOOM* or *Quake*. They recorded their actions, generally in real time, as game files (logs of keystrokes or other information capable of being saved and replayed). These files could then be distributed over the Internet at almost no cost, either in the original game replay files or in an encoded movie format. Recently, as machinima has matured technically and artistically, attention to it has focused on its significance as a low-cost, efficient way to produce animated films that compete with hand-drawn or digital frame-based techniques. For example, the *New York Times* reports that, "Machinima movies, which range from short comedies to science-fiction epics, are produced entirely on computers, eliminating the need to buy costly equipment, rent spectacular locations or hire glamorous actors. The films are then distributed free over the Internet."[9] In another article that appeared in *New Scientist*, Hollywood animators, machinima makers, and game developers discussed the limitations

and advantages of real-time animation as a possible business threat to intensive, frame-based methods such as those used by Pixar and Disney. Tom Sito, a distinguished Disney and DreamWorks animator, encapsulated the attitude of Hollywood animators to machinima by insisting that "real-time performance-based animation will never replace traditional methods."[10]

Portraying machinima as a potential threat to the tried-and-true methods of the movie industry has directed attention to its cost, technical quality and scalability. By focusing on the trade-offs in abandoning time-intensive, frame-based animation for computationally intensive real-time rendering, the debate has obscured the implications of machinima emerging from game performance, a notion that encompasses cyber-athleticism, theatricality and the elevation of the player to producer.[11] It is therefore important to recall that the origins of machinima lie not in content production, but in gameplay.

Without a doubt, "play was the thing" in the early history of game movies. Id Software's first-person shooter games were the first stage. The authors of these games were a group of programmers, level designers and artists led by John Carmack and John Romero. They had founded id[12] in February 1991. By that time, Carmack had established himself as a uniquely talented graphics programmer. His first significant exploit along these lines was figuring out how to recreate the first level of *Super Mario Brothers*, a side-scrolling platform game, on a personal computer. The demonstration program was titled *Dangerous Dave in "Copyright Infringement"*, because other than the protagonist, it was a virtually perfect reproduction of one of Nintendo's flagship games, emulating its technology and game design. Despite the playful name, the project implied far more than homage or imitation; it signaled an impending shift in technical leadership and practice for game developers. During the 1990s, games developed primarily for personal computers, not for proprietary game consoles, would dominate innovation in the development of graphical game engines, the software that controlled the real-time generation of imagery and game physics.

By 1992, Carmack had locked with laser-like intensity onto the problem of solving the vast programming challenges associated with building realistic and immersive virtual worlds as settings for three-dimensional action games.[13] Having turned his full attention to 3-D graphics, Carmack achieved a major milestone with the graphics engine for id's *Wolfenstein 3D*, released in May 1992. It depicted the game's action (mostly shooting) as the player's character would presumably see it by simulating the player's perspective into a three-dimensional virtual world. "But it could be better," as the *Book of id* proclaimed about *Wolfenstein 3D* a few years later. "The games weren't real enough yet."[14] *Wolfenstein 3D* set the stage for *DOOM* as the breakthrough achievement of this game genre, which would be called, appropriately, the "first-person shooter".[15] Released in December 1993, *DOOM* featured completely revised software with numerous technical and design improvements over *Wolfenstein 3D*: a superior graphics engine, fast peer-to-peer networking for multiplayer gaming, a modular design that let authors outside id create new levels, and a new mode of competitive play devised by Romero called "deathmatch". This batch of innovations immediately transformed personal computer-based gaming. *DOOM* established competitive multiplayer gaming as the leading-edge genre of PC games during the mid-1990s.

Figure 1: DOOM, *screenshot from pre-beta "Press Release Version," dated Oct. 1993. Source: http://www.johnromero.com/lee_killough/versions/prnotes.shtml#shots. With permission of id Software.*

Just as important as the improvements in graphics and networking technology, *DOOM* revised notions of authorship by allowing for game modifications, third-party level design, and the creation of independently developed software tools. According to its own corporate history:

id Software didn't stop there, the team of innovators also made *DOOM*'s source code available to their fan base, encouraging would-be game designers to modify the game and create their own levels, or "mods". Fans were free to distribute their mods of the game, as long as the updates were offered free of charge to other enthusiasts. The mod community took off, giving the game seemingly eternal life on the Internet. In fact, id discovered many of their current employees and development partners based on mods that were created and distributed over the Internet.[16]

id's self-conscious advocacy of the modification of its own software by the player community reminds us that the loss of authorial control is not generally a dilemma for game designers.[17] Indeed, they embrace subsequent modification of their work by others as the seed of an ongoing relationship with the player community. As the media artist and museum curator Randall Packer reminds us, computer games occupy a salient position in accepting the role of the player as co-producer of content:

> While theater begins with the notion of the suspension of disbelief, interactive art picks up where theater (and film) leave off with branching, user-driven non-linear narrative. The letting go of authorial control has been the big dilemma of interactive works as an art and/or entertainment medium, games being the exception.[18]

Not only was the loss of authorial control not a dilemma; id openly embraced it. As developers of first-person shooters, defined even more than other game genres by actions rather than by fixed narrative content, Carmack and Co. focused on technology as the foundation for game development and openly encouraged the player community to modify their games.[19]

The nature of computer games as software leads to another sort of variability of content, one that has generally been limited to PC-based games. I am referring to what Lev Manovich has called the new "cultural economy" of game design introduced by *DOOM*.[20] When a computer game is released today, it is as much a set of design tools as a finished product. Game developers often provide software utilities for modifying their own games, sometimes including these tools in the packaged release of the game, or soon after publication for downloading from websites.[21] Independent level, scenario and mod designers take over from there, creating "mods" (modifications), ranging from cosmetic changes (new "skins" for avatars, models, textures, etc.) and add-ons to "total conversions" (essentially wholly new games). Websites and discussion lists build the community of mod authors and provide means for distributing their work, as well as exchanging information about content or tools. Manovich contrasts modifiable games to the characteristics of a more customarily authored game like *Myst*, which he describes as "more similar to a traditional artwork than to a piece of software: something to behold and admire, rather than take apart and modify."[22] In the game world, it was the modifiable first-person shooter, not the lavishly pre-rendered puzzle game, that created the means for machinima to become a new narrative medium.

The introduction of fundamentally new styles of play and modes of content development set the stage for early game movies using *DOOM*. These were largely demonstrations of gameplay made by recording actual matches. *DOOM*'s unprecedented success as a platform for competitive play heightened interest in the feats of stellar players, especially as word got out about their prowess in the growing player community. Players had competed publicly since the early days of computer games, whether in the *Spacewar!* Olympics at Stanford in the early 1970s or in Nintendo-sponsored tournaments of a later day.[23] But the modes of networked play by modem or in local area networks made possible by *DOOM*'s peer-to-peer networking architecture intensified multiplayer competition. Established teams were formed, and players operated networked games in offices, local area networks, and by connecting up directly with opponents in cyberspace. As id proudly noted in its press release announcing *DOOM*, it "is the first game to really exploit the power of LANs and modems to their full potential. In 1993, we fully expect [it] to be the number one cause of decreased productivity in businesses around the world." id also hinted in this announcement that their high-performance game technology – encompassing unprecedented immersive realism (3-D graphics) and multiplayer interaction – would profoundly affect virtual spectatorship as well as gameplay.

You can see the other player in the environment, and in certain situations you can switch to their view. This feature, added to the 3-D realism, makes *DOOM* a very powerful cooperative game and its release a landmark event in the software industry.[24]

As released, *DOOM* offered options for viewing games, and players soon took full advantage of the ability to record "demo movies" of gameplay. These demos were distributed as discreet files and replayed by other players with a copy of the game. Thus, *DOOM* linked unprecedented multiplayer competition, reproduction of gameplay as demo movies, and a context for spectatorship through the creation of a player community that would distribute and replay these movies. The result was nothing less than the metamorphosis of the player into a performer.

The intensity and rapid action of *DOOM*'s multiplayer deathmatch established a basis for the performer-spectator relationship. *DOOM* required skills. Some players excelled in marksmanship, others in movement tricks, others in stealth and the psychology of stalking their opponents. Star players emerged, and everyone wanted to see them play, to gather insights into their play tactics and possibly learn a trick or two. As BahdKo, a veteran of the *DOOM* demo scene, points out, "Use of demos for their educational value has been going on since almost the beginning." Demonstrations of skill by admired players such as NoSkill,

Figure 2: NoSkill, Screenshot from DOOM *demo movie.*

XoLeRaS and Smight circulated widely. In a typical use of these movies, "a new player who wants to get better requests that a game with a higher-skilled player be recorded, and then the new player watches the demo (where presumably he lost) from the higher-skilled player's point of view, hoping to learn ways to improve his own skill. Such a player is then able to plainly compare his own movement, aim, and possibly strategic ideas with those of the higher-skilled player, enabling him to practice on his own in order to improve or otherwise attempt to adjust his own performance."[25] If the goal was to see the game through their eyes, demo movies did just that. But they also certified the status of these star players. Beginning in 1994, the *DOOM* Honorific Title (DHT) Program, a game rating system, became "the means by which good players can objectively prove to the world that they are as good as they claim." The certification process explicitly promoted the performance of gameplay through demo movies:

> An exciting feature of the game is the ability to record the player's input in a form that can be replayed later, like a movie. The file containing the recording, known as a LMP, can then be sent to other people for viewing.

The *DOOM* Honorific Titles, based on LMP recording with an authentication mechanism, are the means by which good players can objectively prove to the world that they are as good as they claim. The DHT system also has the beneficial side effect of promoting the production of amazing LMPs – if you want to see some superior *DOOM* action, turn to the ever-growing repository of DHT exam files.[26]

These recordings duplicated the first-person perspective of the player, in essence providing a series of screenshots.[27] In the early *DOOM* demo movies, the player was not only a performer, he was quite literally the camera. Just as the protagonist's weapon was seen as emerging into the virtual space of the arena during competition, the spectator saw the same image – an appropriate projection of the player/actor in gameplay, but somewhat dubious as an intrusion blocking the passive spectator's full view into the screen. Establishing a basis for spectatorship by recording gameplay further encouraged growth of the player community, as well. Individuals and regular teams of players joined together as semi-official "clans" and established reputations based on superior play. Naturally, demo and game movies were used to put exploits on exhibit and document the skills of players and clans. Years later, the surviving demo movies put viewers in the shell of the ghosts of players. One of the best surviving series features perfect reproductions of matches recorded as early as May 1995; these recordings allow us to look through the eyes of one of the first "game gods", NoSkill, having been preserved on the memorial site of this now deceased player.[28]

The machinima community always begins its historical reflections with the publication of *Quake* in mid-1996, the successor to *DOOM*. Work on *Quake* had begun in earnest during 1994. In August of that year, Carmack wrote:

BTW,[29] *Quake* development has started. It will run on (and use) arbitrary resolutions and color depths. It will support dozens of concurrent players and persistant game servers. It will be the coolest thing anyone has ever seen...[30]

When it was released in June, 1996, *Quake* did indeed prove to be an enormous technical leap over *DOOM*. But not in its game design. It preserved *DOOM*'s fundamental modes as a competitive game, which had the effect of establishing genre boundaries of the first-person shooter. The technical improvements were more than incremental. For example, *Quake* introduced built-in client/server networking, thus stimulating the popularity of Internet-based multiplayer games, and it featured the first implementation of a genuinely 3-D graphics engine written by Carmack and optimized by Michael Abrash. This put demands on personal computer hardware, and *Quake* thus became a major factor in the rise of a consumer market for add-on video cards. The complexity of creating fully three-dimensional game levels may have daunted many enthusiasts, but during the development of *Quake* it became clear that id would provide more information and tools for modifying *Quake* than they had for *DOOM*. A Usenet discussion group, rec.games.computer.Quake.editing, was launched in January 1996, and the participants filled it with discussion of how *Quake*'s levels could be edited and the game modified. In April, Carmack issued information about a new editing tool, QuakeEd, followed in May by dissemination of some *Quake* source code, and in June by the shareware version of the game.[31] The retail version would include the QuakeC script programming language for modifying *Quake* itself, along with source code for QuakeC. Access to QuakeC, QuakeEd, or the tools created by programming talents in the *Quake* community made it possible to design new "skins" for the avatars or textures for the environment, to devise programming exploits such as the creation of ever more competent "bots" (robot opponents controlled by computer AI), to be the architect of new levels, and even to modify the game itself (as in the introduction of "team fortress" and "capture the flag" modes of play). Customization of *Quake* would become a new arena for demonstrating one's skills.

Quake, as software, was far more complex than *DOOM*, but it had also been made more accessible. This mixture of qualities set the stage for a new wave of high-performance game practice. As Douglas Thomas has noted in his study of hacker culture, programming feats alone do not a hacker make. The hacker emerges into public view by affiliating with other elite programmers, sharing information and refining skills in groups such as the infamous Legion of *DOOM* and Masters of Deception.

A second and related means by which hackers made their reputations was by sharing information in public forums, either by disseminating text files through the underground or by publishing in underground journals such as *2600* or *Phrack*. ...These files served as means to solidify hackers' reputations, illustrating the degree to which they understood the systems they infiltrated.[32]

Moreover, as a "performance of technology",[33] hacking hovers between a discourse of technological mastery and one of subversion, between practice as expertise or exploit. While the *Quake* player community operated in a different technical realm, its participants operated under similar practices and tensions of technical performance. Immediately after *Quake*'s release, players formed groups in response to the vast improvement of multiplayer connectivity and chat options over *DOOM*. Like hacker gangs dissecting the intricacies of computer networks, these *Quake* clans provided a setting for sharing techniques of high-performance gaming, both play and programming. The Ranger Clan provides a telling

example. Arguably the most famous clan of all, the Rangers' top-notch players contributed visibly to the technical community that grew around the game. They had participated in the first pre-release test of the *Quake* engine distributed to the *Quake* community. One member designed the original Capture the Flag mod; another founded one of the major sources of information about *Quake* development, Blue's News; in all, about half the 25 or so members remained active in game development or went on to work in the game industry.[34] With their reputation for stellar performances as players and programmers already firmly established, they surprised the *Quake* community in October 1996 – barely a month after the commercial release of the game – with an exploit of another sort: the first machinima movie, *Diary of a Camper*.

The Rangers' animated short resembles the demo movies of *DOOM* gameplay, with short bursts of frantic action punctuated by flying blood and bits of body parts. With spare visual reference to the *Quake* storyline, the plot offers little more than a brief sequence of inside jokes – the "camper" (a player who gains game advantage by camping in a prime location) is reduced literally to a headshot that reveals him to be none other than John Romero. Yet, *Diary of a Camper* breaks with the demo movie as documented gameplay in several important respects. First and foremost is the independence of the spectator's view from that of any player/actor; the movie is not "shot" from the first-person perspective of the shooter.

Figure 3: The Rangers, Diary of a Camper *(1996).*

An independent camera view now frames the action. This innovation illustrates *Quake*'s significance as a platform for high-performance play: It could be exploited as a "found technology" for purposes other than those envisioned by the designers. Uwe Girlich, the leading technical authority on *Quake* movie-making, noted in his analysis of its new demo format before *Quake*'s release that "the player coordinates and the camera positions may be different." He added wryly that "for people with too much spare-time *Quake* can replace a full 3D modelling system for cartoons or the like." Even more was now possible, he claimed: "The demo file can contain console commands, which the client runs during replay. With this feature it should be possible to write a screenshot after every time stamp in the demo file. This makes it very easy to create a MPEG movie out of a DEM file."[35] In other words, he had found an opportunity hidden inside the *Quake* programming code. One could now with a bit more sleep deprivation encode their game movies as video files that could be viewed even by those lacking the game software.

The Rangers began work on *Diary of a Camper* before software tools for movie production had been built to realize Girlich's vision. This *Quake* clan's motto, "Rangers Lead the Way," could be applied to their coding skills, as well. They devised their own programming hacks for editing the *Quake* demo format. But Girlich made his inside knowledge known to the *Quake* community. As in hacker culture, sharing knowledge about the otherwise hidden aspects of the software would lead to impressive technical achievements, such as building tools that non-programmers could use to analyze and edit *Quake* demo files. Girlich had previously written the "Little Movie Processing Center" for *DOOM* and several other games that used the earlier LMP format for gameplay recording; he wrote a capable editor for *Quake* movies, as well. These coding exploits provided a foundation for David "CRT" Wright's influential Keygrip and Keygrip2 programs, which became the most widely used utilities for editing and other post-production work on machinima movies. Wright was a mod coder known among *Quake* players for the Rocket Arena series of one-on-one dueling games and later developed Gamespy Industries' Gamespy Arcade system for networked multiplayer matchmaking. Girlich and Wright thus epitomized the high-performance player as programmer, performing exploits neither of gaming nor film-making prowess, but of technical mastery.

Like the hackers' exploits, making movies with game software required a mixture of expertise and subversion. The second sense in which play is at work in machinima comes from a notion I am borrowing from Katie Salen, that of "transformative play". She writes:

> Because the creators of emergent systems, like generative music or games, can never fully anticipate how the rules will play out, they are limited to the design of the formal structures that go on to produce patterns of events. Sometimes the forms of play that emerge from these structures overwhelm and transform, generating rich and resistant outcomes. Sometimes, in fact, the force of play is so powerful that it can change the rule structure itself.[36]

Salen argues that the "free movement of play" allowed within robust game systems is capable of generating unexpected rules that fundamentally alter the nature of the game, in

effect generating a new creative space altogether. The result is unexpected forms of play.[37] The Rangers give us one example in their transformation of competitive play into theatrical play. Another example of transformative, high-performance play that set the stage for machinima is the variant of *DOOM* and *Quake* known as speedrunning.

The *Quake done Quick* team, speedrunners par excellence, have defined their work/play as "a project to record runs of multi-level sequences from *Quake* and its friends in the fastest times possible. Any short-cut except cheating is approved of, and Nightmare difficulty is assumed."[38] This is neither deathmatch competition nor gladiatorial combat like Rocket Arena; rather, it is a single-player show that combines virtual gymnastics, game engine analysis, trickery and expert gameplay. In the words of one of the leaders of the *Quake done Quick* team, "speed-running offers another way to compete at *Quake*."[39] Speedrunners dash through game levels by all means available, including stepping on grenades to jump up or past enemies or igniting rocket launchers to shoot themselves rapidly through the virtual space. Runs are timed, then documented as demo movies and often edited together with other runs to make complete movies that race all the way through the game, level by level. As new tricks are invented that cut down on the time in this or that level, runs are re-recorded and the movie re-edited. Speedrunning was not unknown in *DOOM*, but the constraints on camera control, recording and playback limited the "filming" of speedruns, just as they did demo movies. Opening up the hood of the *Quake* game engine to programmers and players transformed speedrunning.

Like the Rangers, the *Quake done Quick* team got to work shortly after the release of *Quake*. "In late 1996", a graduate student in computer science at the University of Manchester named Anthony Bailey viewed a speedrun by Yonatan Donner. Donner had already made a name for himself by speedrunning through *DOOM* levels. Watching this run, Bailey "caught the bug" immediately. "Figuring I could maybe barter some programming skills and ideas for a piece of the action, I wrote to Yonatan a couple of months back with a few ideas about how the time might be improved."[40] They banded together with two other *Quake* players to make speedrunning movies. In order to provide an independent, floating camera view of the action, Bailey programmed a software utility to "recam" (re-camera) *Quake* demo movies, building on Girlich's work on LMPC. He called the program Remaic ("remake"), because it was now possible to revise the camera view on portions of a speedrun recorded in real time without re-recording the run. Recamming did not literally mean refilming; *Quake* recorded the movements of player-actors, rendering them into data for the game engine's built-in replay facility. The software only needed to manipulate the data to produce a new shot. The *Quake done Quick* team then compiled and recompiled these data using Girlich's LMPC program. The "director" enjoyed virtually complete freedom of moving the camera view. Bailey used Remaic and other available software utilities to shift camera views, connect runs into a continuous movie, or add sounds and text. In early 1997, the team finished *The Elder Whirled*. This short ran a little over five minutes and would later become the fourth episode of *Quake done Quick*. Put together as an entry in the Quakelab Multimedia Contest, the run was never released separately, but *The Elder Whirled* was the first use of Remaic to recam a *Quake* speedrun, thereby becoming the team's first "refilmed movie".[41]

When it was released in June 1997, *Quake done Quick* demonstrated more than impressive playing skills or the technical wizardry of its makers. It signaled a shift from cyberathleticism to making movies and the emergence of a new form of play. As if to underscore the transition, the team released two versions of the complete set of speedruns, which lasted nearly twenty minutes after stitching together the individual runs for each level of the game. The first was visually a conventional demo movie viewed from the first-person perspective of the player; the second was the recammed movie. The technical performance involved in recording separate demos and patching them together to make either version, all while preserving a smoothly integrated whole, was of course non-trivial. So was the performance itself. As Bailey put it when describing his work on the project, preparation for a perfect speedrun meant "trying to understand more about how the engine underlying the game works so that we can turn its little nooks and crannies to our advantage." Even though he considered his skills at conventional *Quake* play "woefully lacking", this was "experimental physics in a whole new universe", finding anomalies or quirks in the world that might help to shave a few seconds off the time to get through a level. But unlike real-world physicists, Bailey could also examine the code underlying the world and build tools to monitor its physics during every run.[42] The *Quake done Quick* collaboration thus represented a meeting of programming and play, a dual performance. But that was not all. Just as

Figure 4: Quake done Quick *(first-person version). Screenshot.*

speedrunning itself was a reformulation of the rules of play, the collaborators also found that the making of movies became a meta-game of another sort:

> Continuity is very important to us; a demo made simply by pasting together unrelated recordings of each level in turn would not be a proper run of *Quake*. Continuity adds a lot of strategy to the game, since items that one finds in earlier levels can be used in later ones, but those that one avoids to save time cannot. Is it worth the deviation to get that grenade-launcher? Can one afford to sacrifice health at some point to save time? Many subtle interconnected decisions have to be taken. It's great fun![43]

Indeed, the game systems interacted. In his write-up of the making of *Quake done Quick*, Bailey commented on the suspicion that "some degree of demo hackery" would be required to stitch together runs of such perfect gameplay. Neither cheating nor hacking were acceptable to the group, only "spectacular human play", not "bot-driven hackery". He argued that, "this is as close to a 'proper' run through *Quake* as we believe it is possible to get." [44]

The second version of *Quake done Quick* revealed the third leg of the project's stool, adding cinematic to technical and game performance. Having "wondered if maybe we could alter the camera position in our demos to make them more movie-like to watch", Bailey used Remaic to create a new recammed version of the speedrun. It was the same run, but now the camera floated behind, alongside, above, and in front of the protagonist, sometimes zooming in or zooming out. *Quake done Quick* thus joined *Diary of a Camper* in breaking the visual identity of player, camera and spectator that had characterized *DOOM* demo movies. Machinima (as such *Quake* movies would come to be called) in turn revised the presentation of game performance, as replay movies would be recammed as well. When legendary *Quake 2* players Thresh and Billox went up against each other at the British Quakeadelica tournament in 1998, the recording of their one-on-one deathmatch became one of the most popular *Quake* movies and contributed to Thresh's reputation as the world's best competitive gamer. Originally captured from a spectator perspective, the unedited demo movie was recammed into its canonical version by Phil "Overman" Rice, the founder of a machinima production company, Zarathustra Studios.[45]

Diary of a Camper and *Quake done Quick* established the *Quake* movie as high-performance play. In the year after the full release of id's game, these movies were joined by a third project that incorporated elements of traditional animation and performance. *Operation Bayshield*, released by Clan Undead in January 1997, completed the trilogy of seminal machinima projects. "After seeing what the Ranger Clan had done", this group of friends decided on New Year's Eve to "make something we thought would be fun", namely, a "larger comedy film in the *Quake* engine".[46] They departed from the reliance of *Diary of a Camper* and *Quake done Quick* on gameplay as in demo movies. Instead, Clan Undead borrowed extensively from traditional linear media, both in conventions of storytelling and playful allusions to popular media such as television and cinema. The title and plot referred to the popular television series *Baywatch*, while the title credits (a remediation[47] in machinima of movies) parodied traditional movie openings and soundtracks.

Figure 5: Quake done Quick *(version with floating camera view). Screenshot.*

Operation Bayshield offered two noteworthy innovations that would become standard feature of machinima. The first was in customization of *Quake*'s content. Clan Undead dressed the characters (avatars) in new skins, manipulated the character images to simulate lip-synching, and added visual effects. While the movie appears to have been recorded in a small number of continuous runs, these modifications of game content required pre- and post-production work, largely programming of scripts in QuakeC. In the absence of available utilities at that time, the makers of *Operation Bayshield* performed not only as actor-players, but also as coders in the tradition of level designers and *DOOM* hackers. id's invitation to look under the *Quake* engine's hood encouraged these efforts and may have inspired Clan Undead to release the source code for their movie scripting in April 1997.[48] Like the larger *Quake* community, machinima clans were encouraged to publicize their exploits not just as players, but also as content developers. Just as after *Quake* the modification of games progressed from scenario to level design to full-scale total conversion mods, machinima makers likewise grew bolder as they learned more about the graphics and programming resources *Quake* provided. The techniques that produced custom artistic assets for machinima movies were essentially identical to those used to create game mods: creating skins for avatars, designing new visual effects, adding new sounds and, in time, producing new models and graphics.

Figure 6: Operation Bayshield. *Screenshot.*

Clan Undead's second major innovation could be found in their singular attention to the movement and mannerisms of virtual actors. They devised tricks to suggest crude lip movements during character dialogue, and when a character laughed at a joke, the avatar seemed to shake his body appropriately. In *Operation Bayshield*, the onscreen "actors" spoke their lines, an advance Clan Undead probably achieved by dubbing audio encoded as .wav files and activating them through QuakeC's sound command at the appropriate points in the movie. This was a first step towards what Paul Marino, one of the founding members of the Ill Clan, would call the virtual puppetry of machinima – that is, the careful synchronization of avatar actions (moving, speaking) to voice actors/game players via keyboard bindings.[49] Unlike *Diary of a Camper* and *Quake done Quick*, Clan Undead suggested that theatrical play in *Quake* movies need not be wholly bound to gameplay, that a suite of performance gestures could be more closely mapped to narrative and character. This freedom of theatrical performance could not be achieved, however, without programming prowess and playing skills.

The early history of machinima illustrates a number of themes in the appropriation of game technology to create a new narrative, even artistic medium. I would identify these as technologies of modification, subversion and community-developed content. id Software's

decision to embrace and extend the player community's role in creating new *DOOM* levels set the stage for the unprecedented degree to which it opened up access to the game engine inside *Quake*. Not only did providing an editor and scripting language stimulate modification and extension of the game, it encouraged the development of tools for unforeseen purposes, such as the editing of demo movies and, eventually, the making of animated movies using real-time techniques of gameplay as performance. While these modifications were sanctioned by id, they were also subversive. In this regard, I am insisting that Salen's notion of transformative play applies to the underlying technology of computer games as well as to game design. In other words, the technology became a field of play, but not just in order to play the game of optimizing game performance; less than a year after *Quake*'s release, game software was used – playfully – as a technology for making movies. As speedrunning became a new game form within the structure of play provided by *Quake*, machinima makers subverted the game system altogether, turning it into a performance technology. Machinima meant narrative or experimental movie-making, not competition. Just as important, machinima benefited from the strong social network spawned by multiplayer gaming. Knowledge of the capabilities built into *Quake* and access to independently developed tools disseminated rapidly in the virtual community of *Quake* players. The clans and project members deploying this knowledge added to it in every one of the early machinima projects, in turn publicizing a body of work that consisted of movies, software tools and techniques. Exploits of high-performance gameplay, programming and storytelling were not isolated achievements or acts of creativity; performers crave spectators, and the existence of a gaming community engaged at every level of their work – clans of players, teams of movie-makers, or virtual networks of programmers and tool builders – cannot be underestimated as a factor in high-performance play.

The founding trilogy of machinima – *Diary of a Camper*, *Quake done Quick*, and *Operation Bayshield* – were completed less than a year after *Quake* launched. By comparison to early film, these experiments in the use of computer games to produce animation rank somewhere between the Lumière Brothers footage of a train pulling into a station (1895) and Georges Méliès' *Le Voyage dans la Lune* (1902). They are milestones in the evolution of a new narrative medium, pointing forward to new possibilities of expression. Superior techniques and software resources have since been added to the machinimist's box of tools, paced by the rapid evolution of 3-D graphics software and hardware available on personal computers. Machinima is now capable of producing animated shorts (such as the Ill Clan's *Hardly Workin'*), music videos (Ken Thain's *Rebel vs. Thug* or Fountainhead Entertainment's *In the Waiting Line*), feature-film-length animated movies (Jake Hughes' *Anachronox*), avant-garde shorts (Dead on Que's *Fake Science* or Fountainhead's *Anna*), cutscenes and trailers for videogames (*Metal Gear Solid*), episodic comedy programs à la television (*Red vs. Blue*) and even live improvisational comedy (Ill Clan's *Common Sense Cooking with Carl the Cook*). It is safe to predict that game developers will soon put robust but easy-to-use machinima tools directly into the hands of an increasing number of players.[50] The "family movies" produced by players of *The Sims* foreshadow this trend, and we can expect to see machinima embedded in Peter Molyneux's upcoming Hollywood studio simulation, The Movies. The rapid technical and artistic progress of machinima in the nearly eight years since the initial trilogy of projects has brought it to the point of becoming a viable threat to traditional frame-based animation.

© 2000 The ILL Clan, Inc.

Figure 7: The ILL Clan, Hardly Workin' *(2001).*

But is machinima art? What are we to make of claims like those made by Katherine Kang, the founder of Fountainhead Software:

> Machinima's the new kid on the block so it has yet to prove itself. If game technology moves forward at the pace I believe it will, machinima will revolutionize animation. Like CGI [computer graphic imagery], machinima will have a place in animation history. We will have CGI, stop motion, claymation, anime, and machinima as the primary styles of creating animated features if you're not into traditional cell animation.[51]

For Kang, machinima is the new art form. Whether computer games can lay the same claim is unimportant, but at the same time it is clear that the progress of game technology will pace the growth of machinima as an art form. Ironically, contemporary machinima projects such as Kang's own *Anna* have made such tremendous strides in graphics and narrative expression that traces of game performance and practice have become difficult to discern. But that is exactly the legacy of computer games in machinima; we can imagine a real-time animation engine without them, but not the same historical culture of modification and experimentation. When a computer game is released today, it is as much a set of design tools as a finished game design. PC game developers are routinely releasing their development tools for experimentation and play; that is, play with technology and play with animation, stories, graphics and movies as much as play with games. With the increasing

popularity of mods, game developers routinely put impressive editing and cinematic tools in the hands of the player community, encouraging everything from the creation of new graphics to initiation into game development as a career. The contemporary game scene pulses with the energy of player communities that use game engines to create something new.

A little over two years ago, in the Wattis Theater of the San Francisco Museum of Modern Art, Benjamin Weil of SF-MOMA hosted an event called ArtCade. A panel of speakers, including Will Wright, spoke about the possibility that video and computer games might be considered an art form. Before the talks, the speakers and attendees gathered in a room equipped with two small installations, the ArtCade itself. The first consisted of a small collection of videogames and the second of digital art inspired by game technology or culture. I learned from this prelude to the ArtCade lectures that the technologies and practices of game design were beginning to have a huge impact on artists, particularly new media artists. But I could not help noticing that while visitors confidently walked up to game screens and immediately immersed themselves in the screen action – even while balancing a drink in one hand – at the other end of the room they stopped and ruminated about what they were seeing, joked about meaning, and puzzled over the intentions of the artists.

It seems to me that too much thinking about the status of games as artistic works, while stimulating and useful, will distract us from what might really be the lead story on the interplay between artistic expression and the new medium of interactive computer and videogames. Perhaps we should stop worrying so much about this question. Rather, it may be worthwhile to shift attention to the technologies and practices emerging out of computer games as a medium, and how they might provide new avenues for cultural, artistic and social expression, including performance art. Perhaps we should not bother too long with the question "are games art?" Instead, we should ask if high-performance play is capable of transforming our notions of how art is created.

Notes

I would like to thank several people for their helpful comments. Galen Davis gave the paper a particularly careful reading and, as always, was generous in sharing his insights about performance theory and machinima. From the How They Got Games Project, Tim Lenoir, Casey Alt, Douglas Wilson and, on *Quake* especially, Rene Patnode have helped me think about games as technology and as performance medium. I am also grateful to Anthony Bailey, Paul "ILL Robinson" Marino, Laura "BahdKo" Herrmann for their comments, time and permission to use screenshots. Finally, thanks to Adrian Carmack of id Software for permission to use screenshots from *DOOM* and *Quake*.

1. I use the term "computer game" as a catch-all phrase for many forms of software-based electronic entertainment, principally videogames, PC games, hand-held games and arcade consoles.
2. Henry Jenkins, "Art Form for the Digital Age", *Technology Review* (Sept.-Oct. 2000). Available here: http://www.techreview.com/articles/oct00/viewpoint.htm.
3. Frank Dellario, "What is Machinima?" Website of the Academy of Machinima Arts and Sciences. http://www.machinima.org. Dellario is Ill Bixby of the machinima team known as the Ill Clan.
4. I am indebted for this line of thinking to Galen Davis of the Stanford How They Got Game Project. He is preparing an article on machinima and performance theory for publication. On camera phones and the emergence of new content, see: Daisuke Okabe and Mizuko Ito, "Camera Phones Changing the Definition of Picture-Worthy," *Japan Media Review* (29 Aug. 2003). URL:

http://www.ojr.org/japan/wireless/1062208524.php, also Justin Hall's reports on weblogging and camera phones in The Feature, such as "Rehearsing the Future: First International Moblogging Conference Report," The Feature (8 July 2003). URL: http://www.thefeature.com/article?articleid= 24815&ref=30721.

5. An outgrowth of this investigation of machinima's history is the newly launched Machinima Archive, hosted by the Internet Archive. URL: http://www.archive.org/movies/collection.php?collection=machinima.

6. "Machinima", *The Word Spy* (posted 9 Aug. 2002). URL: http://www.wordspy.com/words/ machinima.asp.

7. Just as, following the name of Fountainhead Software's recently released machinima software tool, we might be tempted to recast machinima as "machinimation".

8. Examples of pre-rendered games would be Don Bluth's *Dragon's Lair* or the enormously successful *Myst*. But these are truly exceptions that prove the rule.

9. Matthew Mirapaul, "Computer Games as the Tools for Digital Filmmakers", *New York Times 151* (22 July 2002): E2.

10. Celeste Biever, "The Animation Game", 180 *New Scientist* (25 Oct. 2003): 28.

11. On the "player-as-producer," see the chapter on "Games as Open Culture", in Katie Salen and Eric Zimmerman, *Rules of Play: Game Design Fundamentals* (Cambridge, Mass.: MIT Press, 2003): 537–53.

12. In this article, I will refer to the company as id Software and the game as *DOOM*; other versions of capitalization are sometimes used, even by the company.

13. On id Software, Carmack, and *DOOM*, see David Kushner, *Masters of DOOM: How Two Guys Created an Empire and Transformed Pop Culture* (New York: Random House, 2003).

14. *The Book of id*. (Mesquite, Texas: id Software, 1996). This booklet was issued as part of the "id Anthology".

15. *The Book of id*. (Mesquite, Texas: id Software, 1996). This booklet was issued as part of the "id Anthology".

16. "id Software Background." URL: http://www.idsoftware.com/business/home/history/.

17. It should be noted here that the original version of *DOOM* was not released as open-source software, and in fact id's initial stance toward editing of the game code was not as encouraging as it has often been depicted. However, id did issue a "Data Utility License" that allowed modification of the game software under strictly defined conditions. With the release of *DOOM II* in 1994, id (particularly, John Romero) released more information about the structure of the game software. Carmack eventually did release the *DOOM* source code as a Christmas present to the player community in December 1997.

    As Romero pointed out in an e-mail dated 11 Dec. 1997, "... Regarding the reason why *DOOM* is an 'open' game: the reason is because of *Wolf3D* – people figured out how to make maps for it without our help, plus change all the graphics, etc. and we were so impressed that we knew that *DOOM* just *had* to be modifiable. That is the real reason. We never wanted to sue anyone – just protect ourselves a little." See "*DOOM* Editing History", a collection of e-mail documentation on this topic. URL: http://www.johnromero.com/lee_killough/history/edhist.shtml.

18. Randall Packer, "Net Art as Theater of the senses: A HyperTour of Jodi and *Grammatron*", in: *Beyond Interface*. URL: http://www.archimuse.com/mw98/beyond_interface/bi_frpacker.html. This is the introduction to Mark Amerika's Grammatron, a work of hypertext web art.

19. A sense of Carmack's position with regard to an *auteur* notion of game design can be gleaned from one of his posts to slashdot, which elaborated upon comments he made about John Romero's post-id company, Ion Storm (and its motto, "Design is Law"). According to Carmack,

    There is not a hell of a lot of difference between what the best designer in the world produces, and what a quite a few reasonably clued in players would produce at this point. This is the "abstract creativity" aspect. This part just isn't all that valuable. Not worthless, but it isn't the thing to wrap a company around.

> The real value in design is the give and take during implementation and testing. It isn't the couple dozen decisions made at the start, it is the thousands of little decisions made as the product is being brought to life, and constantly modified as things evolve around it. If you took two game designs, one good and one bad, and gave them to two development teams, one good and one bad, the good dev team could make a good, fun product out of a bad design, but the bad dev team could ruin the most clever design. The focus should be on the development process, not the (initial) design.

John Carmack, "Re: Definitions of terms", (2 Jan. 2002). Discussion post to Slashdot. URL: http://slashdot.org/comments.pl?sid=25551&cid=2775698.

20. The term is found in Lev Manovich, "Navigable Space" (1998). URL: http://jupiter.ucsd.edu/~manovich/docs/navigable_space.doc.

21. Prominent recent examples of massively modified games include *Dungeon Siege*, *Neverwinter Nights*, and *Operation Flashpoint*.

22. Manovich, "Navigable Space".

23. On the Spacewar! Olympics, see: Steward Brand, "*SPACEWAR*: Fanatic Life and Symbolic Death Among the Computer Bums", *Rolling Stone* (7 December 1972).

24. "*DOOM* Press Release" (1993), preserved in "Lee Killough's Legendary *DOOM* Archive" by John Romero as part of the "Planet Rome.ro" website. URL: http://www.rome.ro/lee_killough/history/DOOMpr3.shtml. According to *The Book of id*, the release was issued of Jan. 1993, about a month before the alpha release of *DOOM*.

25. E-mail from Laura "BahdKo" Herrmann to Henry Lowood (28 Jan. 2004). Interestingly, it has long been suspected that some star players abstained from the practice of delivering demo movies of their gameplay in order to maintain their competitive edge. However, such reluctance seems to have been unusual and the absence of demo movies from players such as Thresh (whose fame is based on his dominance in *Quake* deathmatch) is now seen as evidence that they were not as active in the *DOOM* scene as word-of-mouth would have it. Thus the importance of spectatorship and community, as well as skill, in achieving the status of a "God-like" player.

26. From "Welcome to the *DOOM* Honorific Titles!" *DOOM* Honorofic Titles website. URL: http://www-lce.eng.cam.ac.uk/~fms27/dht/dht5/#dht5.

27. Technically, demo movie files were not screenshots, but scripts that could reproduce the movements and actions of players in the game, thus re-generating the images. Later, the ability to edit demo movies by moving the camera, "recamming", exploited the main advantage of this format, that the data could be used by the game engine to generate other views. The disadvantages of the method usually had to do with moving the camera to locations the player's character could not "see" in gameplay.

28. "NoSkill Memorial Site, April 22, 1978–Dec. 26, 2001." URL: http://www.DOOM2.net/noskill/index.htm.

29. "By the way."

30. "Re: *DOOM*: NeXTstep's Most Successful App", Posting by John Carmack to comp.sys.next.advocacy, 14 August 1994. Source: Google Groups.

31. John Carmack, "*Quake* Editing Tools Information", 5 April 1996. E-mail to Bernd Kreimeier. URL: http://www.gamers.org/dEngine/Quake/QuakeEd/qedit_info.html.

32. Douglas Thomas, *Hacker Culture*. (Minneapolis: Univ. of Minnesota Press, 2002): 90.

33. Thomas, *Hacker Culture*, 47–52.

34. Hugh Hancock, "Ranger Gone AWOL", machinima.com. URL: http://www.machinima.com/articles/Ranger_Gone_AWOL/index.shtml.

35. Uwe Girlich, "The Unofficial DEM Format Description" Version 1.02 (30 July 1996): 3.2 and 3.4. URL: http://www.gamers.org/dEngine/Quake/Qdem/dem-1.0.2–3.html#ss3.2.

36. Katie Salen, "*Quake*! *DOOM*! *Sims*! Transforming Play: Family Albums and Monster Movies", Walker Art Center, 19 October 2002. URL: http://www.walkerart.org/gallery9/qds/.

37. On transformative or emergent play, see: Katie Salen and Eric Zimmerman, "Games as Open Culture", op. cit.
38. From the *Quake done Quick* website. URL: http://www.planetQuake.com/qdq/news.html.
39. Anthony Bailey, "Zigzagging through a Strange Universe", Planet Quake (12 Oct. 1997). URL: http://www.planetquake.com/qdq/zigzag/.
40. For details on the making of *Quake done Quick*, see "QDQ_1949. *Quake done Quick* the movie, by Yonatan Donner, Matthias Belz, Nolan Pflug and Anthony Bailey, 10 June 1997". URL: http://www.gamers.org/pub/idgames2/demos/j-q/qdq_1949.txt.
41. *Quake done Quicker*, Version History. URL: http://www.planetQuake.com/qdq/qdqr.html.
42. Anthony Bailey, "Zigzagging through a Strange Universe", op. cit.
43. "QDQ_1949. *Quake done Quick* the movie, by Yonatan Donner, Matthias Belz, Nolan Pflug and Anthony Bailey, 10 June 1997." URL: http://www.gamers.org/pub/idgames2/demos/j-q/qdq_1949.txt.
44. ibid.
45. Rice made the award-winning *Quake 2* machinima comedy "Father Frags Best".
46. "Showcase: *Operation Bayshield*", machinima.com. URL: http://www.machinima.com/articles/Featured_Film_Op_Bays. "Interview: Tom 'Paradox' Mustaine", machinima.com. URL: http://www.machinima.com/articles/interview_fakk_2.
47. Jay David Bolter and Richard Grusin, *Remediation: Understanding New Media* (Cambridge: MIT Press, 1999).
48. As announced in Blue's News (13 April 1997) and the Quake Zone (April 1997). URLs: http://www.shugashack.com/archives/a18-a12.htm and http://dooley.ca/QuakeZone/apr_97.htm.
49. It was technically possible for Clan Undead to use keyboard bindings via QuakeC scripting, but I have not yet been able to determine if they used this technique.
50. While this article was in progress, Fountainhead Entertainment did just that by releasing its Machinimation software for use with *Quake III*.
51. "Sidrial: Not Just a Game Anymore", interview with Katherine Kang. URL: http://www.gamers.com/s/feature/001205-sidrial/index.

"Cracking the Maze" Curator's Note

Anne-Marie Schleiner

As any avid gamer quickly discovers, the Internet is not only a free source of computer game cheats and puzzle keys, but the home of numerous game plug-ins and patches available for download. These patches range from a simple repair of a programming bug to intricate new game scenarios, replacing the characters, sounds, architecture and/or game challenges in the original games. The increasing popularity of these once unsanctioned game hacks has led some gaming companies, like the producers of *Quake* and *Marathon*, to capitalize on the trend and subsume this once renegade practice into their marketing strategy, bundling patch-making software with their official games. Certainly the Internet fame of the *Nude Raider* patch for *Tomb Raider*, a patch which strips the protagonist Lara Croft's already scanty attire to reveal sharp nude polygons, is good PR for *Tomb Raider*. Web rumor has it that Eidos Interactive faked and distributed the Nude Raider screenshots as a publicity stunt. Another common application of game patches is in the corporate Silicon Valley workspace, where workers relieve tension by playing networked tunnel shooter games over their local Ethernet network, pasting photographs of themselves onto the games avatars and customizing the architecture to mimic their own corporate habitat.

Other game patches position themselves in a more critical and/or subversive relation to their "hosts", the official game engines. Rather than situating themselves as a hyperbole to the host game or as a customized simulation, the more subversive patches offer alternatives to the often rigidly defined genres of gameplay and sometimes create new genres that are assimilated into the game marketplace. Although the category of "feminist game patches" can be misleading, game patches with female protagonists prefigure the first appearance of female characters in official games like *Tomb Raider*, *Resident Evil*, and *Final Fantasy VII*. The *Marathon Infinity* patch *Tina Shapes and Tina Sounds* replaced the protagonist, "Infinity Bob", with a female Tina. A Japanese *Doom* patch entitled *Otakon Doom* replaced the protagonist with a Japanese animation girlfighter named "Priss". Still another *Doom* patch replaced all the characters with the cast from the movie *Aliens*, including substituting Sigourney Weaver for the male protagonist. Another variety of game patches humorously

undermines the extremely macho codes of interaction in shoot-em-up computer games by substituting the standard adult male characters with androgynous animals and goofy children's fantasy characters. Take for instance the *Marathon* patch that replaced all the characters with different coloured gumby dolls and the *Doom* patch entitled *Barney and his Minions*.

Although some artists have successfully created games as art, producing a game patch as art offers certain advantages over building a game from scratch. On a technical level, of course, the artist(s) avoids having to put in the extensive time required for programming an interactive game engine. But the parasitic game patch is also a means to infiltrate gaming culture and to contribute to the formation of new configurations of game characters, game space and gameplay. Like the sampling rap MC, game hacker artists operate as culture hackers who manipulate existing techno-semiotic structures towards different ends or, as described by artist Brett Stalbaum, "who endeavor to get inside cultural systems and make them do things they were never intended to do." "Cracking the Maze" will exhibit both game patches created by artists and game patch artefacts from the Web produced by the original game hackers, in an attempt to generate an open discourse on art, games, game hacking and gaming culture on the Internet.

Many artists, art critics, new media critics and theoreticians have expressed a disdain for games and game style interactivity, in fact, to describe an interactive computer art piece as "too game-like" is a common pejorative. But considering the increasing popularity of computer games with younger generations, even at the expense of television, it seems perilous to ignore the spread of gaming culture. What sorts of spaces computer games construct, what sorts of gender-subject configurations operate in computer games, what sorts of politics of "the other" computer games employ, what modes of interactivity and addiction computer games invite, how networked online games construct alternate worlds, how gaming culture manifests itself on the Internet – these are all areas ripe for investigation by cultural critics and manipulation by game hacker artists. "Cracking the Maze" will attempt to bring together discourse and activity in these and other areas in relation to the game patch as hacker art.

Section 2: Artists on Art

An Interview with Brody Condon

Andy Clarke

AC: How do you define videogame art?

BC: It's difficult to define as the line between interesting cultural artefacts and intentional artistic production is completely blurry at this point, and projects influenced by or using contemporary gaming have taken on so many forms. Just within the artworld we have seen machinima, online performances, pervasive gaming, console hacks, mods, etc., as well as traditional media like painting and sculpture incorporating elements from games and game culture.

AC: Do you see a distinction between videogame art and digital art in general?

BC: Videogame art was just the niche of the moment in a media art world that is neurotically attached to popular cultural and technological shifts. Thankfully over time, hyped genres like this disintegrate (no more "Game Art" exhibitions) and the good pieces and good (or just ambitious) artists survive, dissolving into and influencing all the arts, as well as culture at large. Prime examples could be net art, or even traditional genres like earth art.

AC: What interests you about videogame art? Are you attracted to certain themes, or to the technology?

BC: There is a strength in the relationship between a visually seductive surface medium with years of aesthetics to mine and manipulate, quickly advancing core technology that allows for expansion and intuitive play with the material, and powerful but raw conceptual themes embedded in the medium and the communities that have built themselves around it. These themes are not always self-referential as with much digital work, and cross over to lived experience on several levels.

AC: One thing which I like about your work is its variety – you have worked with a wide range of games (*Anarchy Online*, *Tribes*, *The Sims*, *Counter-Strike*) and have produced sculptures and interventions as well as levels and patches.

Has this diversity been a conscious decision? What is the starting point for your art? Do you start with a game that you want to work with, a technique that you want to use, or an idea that you want to explore?

BC: The reasoning for the creation of a specific piece is usually unconscious at the time of production. Usually, I work with these visions from the netherworld that hit me during states of relaxed concentration, especially while playing games. I'm playing the game, I get bored, and I start experimenting and some kind of image or action that resonates and makes itself clear. I sort of work for the images, feeding them with reading, entertainment, life experience, or whatever, then when they occur my job is to clean up those images, tighten them, and work out the logistics.

AC: Do you see common themes running through your work, or an evolution in terms of ideas or techniques?

BC: Previous to the game work, I have a buried history of installations that recreate various autobiographical "sites" of trauma. They dealt with physiological issues revolving around the nature of post-traumatic stress and memory, and the fantasy and fabrication that go with it. They tended to include repetitive actions that I would perform within sculptural environments, and many of them included video projection and a sense of obsessive endurance. I felt strongly about the content, but the form it was embodied in was limited and borrowed from installation and performative sculpture from about 1970 to 1990. It was a couple years before I realized that I had to attempt to explore this content in a medium that I had more of an aesthetic relationship and history with – games. Role-playing and digital games were my core support system and escape from a seriously dysfunctional childhood. Work like *Adam Killer*, with its focus on aestheticization of violent physical trauma, and *Worship*'s repetition and endurance performance were really extensions of previous work, just in a new form. Eventually the material itself (games) began to influence and shift the work in more complex and radical directions.

AC: And are there any works that you are most proud of or feel have been the most successful?

BC: *Adam Killer* was extremely useful. It was '99. It was soon after the Columbine massacre, a friend and I were sitting around looking at a list of victims in the newspaper, laughing about who we would have shot were we in the killers' position. The kid who could recite every line from *Star Wars*, yeah, would have shot him, the skater kid, probably not, etc. After a bit I realized that there was this intense separation of media images of trauma from their original context and meaning going on here. Exploring this with a game mod piece, something I was doing already for fun, seemed possible. I had visions of creating a complex fully featured recreation of the event in *Half-Life*. I had about a quarter of it done and realized it was contrived and obvious. It's important to understand that at this point there were no game art

strategies out there that I was aware of, but I knew I needed to learn how to sketch with the engine somehow. I ended up creating a series of tiny mods that stripped any narrative and focused on one very simple action or visual element that took place in one room. Shooting this 3-D portrait of a friend of mine again and again for no reason was not only a visually seductive piece and led to new body of work, but helped me to somehow begin to come to terms with my own unconscious understanding of media images and simulations of traumatic events.

AC: Are there limits to videogame art? Themes that you can't explore through patching videogames or things that you can't make the games do?

BC: Any software limits your production to the periphery of what was intended by the developer. It's not worthwhile to focus on what the tools can't do, or try to make them fit another model of artistic production like film. The industry is constantly trying to do just this. It's important to play with the material and let it find its own logic of production. It will open up ideas and aesthetics that didn't exist before, that don't mimic previous forms of media.

AC: Are there any games which are better or more interesting to modify than others?

BC: The FPS mods are easier, but my *Sims* mods/hacks were interesting because of the limited access you have to the code and art. I ended up spending a lot of time mucking through the hex code and inventing lower tech tricks to alter content. Due to the fact that the whole game is based on a kind of industry-sanctioned consumer content creation, I had to question constantly whether or not what I was doing was useful as an art practice at all, or was I simply consuming a product. This was interesting, this idea that art now could just be a type of creative consumption. It feels like the logical and horrible evolution of pop art and appropriation work.

AC: Are the games becoming easier to modify and more flexible, or are they becoming more restrictive? Are games companies putting in limits to what you can do with them?

BC: The FPS mod tools are only getting better, many games are essentially complex mods built off a leased engine at this point, and the consumer has access to many of the same tools used for development. The consumer still has little access to a newer engine's lower level code, but the art creation systems are much easier to work with, and easily accessible scripting systems are being implemented in more engines. Affordable middleware engines are almost there, if you are willing to take a hit in visual quality and struggle with buggy code.

AC: And are there also problems with copyright or licensing? Does working in game modification restrict your ability to exhibit or sell your artwork?

BC: It is a problem when I am trying to install work in a space and keep it running smoothly. With newer games there is so much extra software junk in the way, restrictions on serial numbers, that don't allow for simple dissemination of the work. In the end it's frustrating. Your audience is also limited, the online community is used to downloading and experiencing

mods, the art world is not. I am not aware of many mods that are being collected in the art market system. There are "fair use" laws for artists, but license issues could still be a problem if a company chose to pursue it. However, all of this can be positive as it forces artists to explore alternatives to conventional dissemination strategies.

AC: The same tools and knowledge is used by game artists and game fans. How much overlap is there between these communities? And is the boundary clear-cut? Are people clear about what side of the line they are on?

BC: The line is blurry, seems like most game artists are game consumers, and many game developers and fans are interested in better "content" and pushing their work into the art or academic world for more cultural validity. Both sides will be interested in the other and continue to cross over as long as there is something to gain. I have been forced to interact with the fan community, I enjoy this new sort of decentralized apprenticeship. In the history of arts training, this has to be a new phenomenon. Almost all the skills, tools, and tutorials (outside of the original game and its included level builders) that I have used to make my work I have gathered from online game subcultures. Outside of tool sharing, there's no doubt that a crossover dialogue is happening on the ground in the online forums, conferences, and mailing lists on both sides, around new possibilities for game development and art.

AC: But if you look at certain genres, such as patches and skins, the work produced by artists and fans is sometimes very similar. Where, then, is the boundary between "art" and "not-art"? Is it self-defined?

BC: I enjoy the fact that traditional notions of "context" that have defined what is and what is not art since Duchamp have begun to break down when faced with this type of phenomenon. I just see a hoard of visual products flowing from some strange whirling cultural bilge product vortex at this point. However, I don't deny that I still exploit the context game (pushing work in galleries and museums) to maintain a career.

AC: The fake screenshot contest that you run is interesting because it seems to get submissions from both artists and game fans.

BC: That's the idea. To put both in the same arena and see what happens. Generally the images by game fans are more raw and interesting.

AC: *Velvet-Strike* is also interesting in terms of this "art/not-art" distinction. This intervention in the game *Counter-Strike* is intended as protest art, but isn't seen that way by the fans of the game and has provoked a strong hostile reaction. Could you comment on this?

BC: For Anne-Marie Schleiner, the core creator, I feel like its intention was a strong political statement. I was attracted to it more as a humorous and disruptive online performance, and approached it that way by creating sprays that depicted the *Counter-Strike* terrorists and counter-terrorists in homoerotic positions. This muddied the water a bit, and just added another layer of ammunition for the community to use to attack us. Soon after the release

we began to receive hate mail based on various issues that didn't seem to connect: anti-peace, anti-feminist, anti-gay, anti-art, and on and on. The work was different things to different people.

Subject: you do such good work
From: [name and address withheld]
Date: Sat, 22 Jun 2002 16:22:19 -0400
To: opensorcery@opensorcery.net
CC: retroyou@retroyou.org, brody@tmpspace.com

You can fuck off hippy. I have no tolerance for people (term used very loosely) like your self whom have nothing better to do than fuck with others just trying to fun. I'd tell you to empty your skull with your choice of 12 gauge 00 buckshot or .44 magnum, but youre probley one of those 'guns are bad' types. So telling you to eat shit and die will have to suffice.

Totalbastard

AC: The *9/11 Survivor* project was produced by your students. I know that the news about this project leaked out and, as a result, was not properly contextualized, but were you surprised by the negative response that it received?

BC: Not surprised at all. There is a type of post-traumatic stress going on in the States on a social level regarding 9/11. It can only be abstractly mentioned in memorial, or as a propaganda tool used by the current administration to whip up nationalism and backing for irresponsible foreign policy.

AC: But people reacted more positively to the 9/11-inspired *Sim* albums, and many regarded them as cathartic. What do you think was the difference between *9/11 Survivor* and the 9/11-inspired *Sim* albums?

BC: I haven't seen the *Sims* 9/11 albums, but I could see the more distinct cartoonish aesthetic, and innocent, sanitary image of *The Sims* heading off any negative criticism.

AC: Were people reacting more to the fact that the work was produced in an FPS, rather than looking at what it was or said? It seems that there a lot of negative baggage that comes from producing an artwork like this from an FPS.

BC: It wasn't the fact they made a visual product dealing with 9/11 that was the problem, it was the ambiguous nature in which they presented it, misunderstandings about the non-commercial nature of the piece, and their focus on the most troubling section of that event for many people – individuals jumping from the towers. The fact it was wrapped in an FPS game, which is a genre with a long history of irresponsibly simulating violence, certainly didn't help.

As a treat, here is an e-mail I received from a local game developer.

Subject: why are you linked to this ? Do you know?
From: [name and address withheld]
Date: Fri, 25 Jul 2003 17:43:43 -0700
To: brody@tmpspace.com

I cant find a link to send your friends at kinimatic.org a mail from their site. They are nice enough to put a link to you from their site. So I'll vent to you....
What the FUCK are you thinking making a "game" of 9–11?.
you should ALL ROT IN HELL, YOU SICK FUCKS.

Mr. Brody,

If you are any kind of compassionate American, Please get your link removed from these IDIOTS site.

[name withheld]
President
[company name withheld]

Or even better.

From: [name and address withheld]
Date: Sun Jul 27, 2003 3:49:43 PM US/Pacific
To: [name withheld]
Subject: What is wrong with you people

You obviously don't live in New York, and obviously have no fucken idea the trauma those people still go through every day. I lived there and I saw first hand those planes crash - the intense sadness that crippled that city for months. Making a game of something that tragic, and then cashing in on other people'slosses and deaths must make you the sickest individuals since Hitler. My only guess is that you must be Muslim related. Probably someAlkeida nut jobs who missed an opportunity at committing the most cowardly crime ever thought off. Here's an idea - How about making a game instead of some American Civilians tracking down Bin Laden and cutting off his dick. Add some cool menus with different torture options. It will sell like hotcakes...You better have those passports ready guys. If you even think about selling this damn game in the US, you will have your hands full with some very angry Americans...

AC: There seems to be a growing trend of videogame art based on real events, such as *Waco Resurrection* and *9/11 Survivor*. Could you comment on this?

BC: I would base part of it on the evolution of the material itself. It wasn't until the late 90s, due to new 3-D environments and characters, and later the fact that new hardware and software could efficiently utilize photorealistic textures and higher polygon counts, that we started to see representations of actual people and environments in games. There were precedents, but none as directly related to portraiture as ID software including a likeness of

John Carmack as one of the deathmatch characters in *Quake III*. With environments, there are precedents, but after *GTA3* it was obvious to the mainstream that real time representations of large scale urban sites that mimic the real were possible, and then along comes *The Getaway* with interactive London. Of course FPS games like *SWAT* had already made scenarios based in actual Los Angeles sites, but still none of these games directly focused on actual events, or were about those spaces. The spaces served only as sets or backdrops for the narrative like the environmental storytelling used at Disney. They rely on satire or generic representations, always avoiding any connection to the real beyond the visual.

I have heard some say that after 9/11, America suddenly had a specific enemy. It was no longer a generic terrorist threat in some random combat simulation game. After an initial test period of reality mods, suddenly it was okay to start publishing games about military conflicts concurrent with their unfolding, and this allowed the outpouring of specificity in commercial games. These Baghdad scenarios like *Desert Storm II: Back to Baghdad* were still generic in the sense they do not deal with any of the political or social realities of the conflict, and *Kuma War* is edging closer with its integration of news footage and specific re-enactment, but it's simply another aesthetic wrapper over the FPS structure.

With these forces in mind, it seems natural and intuitive that individuals, artists or otherwise, would begin to float towards using games to represent specific sites, people and events in more complex ways. Content-based artists, especially those already with game dev skills, are simply in a good position to apply those skills to actual events, but with the addition of a kind of cultural criticism and content generation not available to the industry.

AC: Would you call works such as *Waco Resurrection* and *9/11 Survivor* documentaries, or are they doing something different to a documentary? How does the interactivity make a difference?

BC: *9/11 Survivor* doesn't feel anything like a documentary to me, it has always seemed to be more of emotional and intellectual response to the actual event. In the case of the *Waco* project, we seem to be using the term "subjective documentary". *Waco* uses strategies from documentary practice, but is in my mind not a documentary. All documentary, whether in film or photo, has an amount of creator bias, and will never accurately represent "truth", but the fabrication and bias in *Waco* is intentionally over the top. What's important to me is the fact *Waco* is in a game, this is enough to carry the idea that the events at Waco are uncommonly clouded by convoluted notions of reality and complete fabrication – from both sides.

AC: Certain events such as Waco, Columbine, etc. seem easier to treat in this form (FPS "documentary") because they are about shootings and FPS's are about shooting. Do you think that this documentary trend can be applied to other topics, or will the negative connotations of the FPS prove too problematic?

BC: FPS's are embedded with content that deals directly with these topics of violence, shooting, etc. not just on the surface, but at deep material level in terms of the construction of the engine, the composition of the first-person player viewpoint, etc. It's not nearly as

neutral a lens as a camera. For *Waco*, we chose to emphasize these things. Otherwise it can be extremely limiting, but it's only a problem if you try to stick to traditional notions of FPS gameplay and documentary. There are other ways to use the technology, like interactive architectural visualization works in FPS engines used for event re-enactment, or making documentaries in MMORPG games, for example.

AC: Are there topics which are out of bounds?

BC: I haven't seen any games or mods about molesting or killing children. That one would be smart to avoid. The racist game *Ethnic Cleansing* is also totally outside my ethical limits.

AC: Do you think that the emphasis on FPS patch art is good? Does this detract from more interesting, innovative or conceptual work (both in terms of what artists produce and what curators choose to exhibit)?

BC: I don't think there is an emphasis on FPS game modifications anymore, or ever was. The art world and game fan subcultures have used so many strategies outside of FPS modding. Although I don't deny this occurred in places like the first game art show "Cracking the Maze" or popular online game art archives like selectparks.net.

AC: What do you think about machinima? Are you interested in this field or is interactivity essential to your work? As I understand it, *Worship* was meant to be experienced in-game, rather than as a film loop.

BC: With a few exceptions, most narrative machinima is extremely poor, technically and conceptually. Although there is a distinct lack of interactivity that is common in my work, *Worship* is coming out of a relationship to performance and sculpture more than any link to machinima. Setting up an MMORPG avatar in the game to face outside the screen towards the viewer, and making it *Worship* continuously, is about ritual, endurance, and the projection of the body. I think there are possibilities for an expanded notion of machinima: self-playing games that allow AI or spectator views to operate as a sort of live auto-directed camera, focused collections of game footage, in-game performances and interventions, etc.

AC: What do you think is the future of videogame art? How do you see it developing?

BC: Seems like the race is on to create more ambitious pieces. I am personally a bit tired of modding, and now that middleware is more available, the logical evolution for many game artists is to attempt fully featured, legally distributable 3-D game works. I consistently question this logic, as it's incredibly hard to keep a team full of "artists" together, all of which have their own special art practice, especially without hopes of monetary reimbursement for our time, as well as the fact much of this work could easily just fall into the "novelty games" category. The technology at this level can be an incredible drain on any interesting conceptual momentum. I am also worried that most of the core experimental strategies or methods for working with game dev technology in an art context have already been played out. For example, how many in-game representations of museum/gallery spaces, made for

and displayed in the space they are shown, have you seen? I can count almost ten, including a bad one of my own. Tobius Bernstrup did this back in, like, '96.

AC: And what about your future? Will you continue to work in videogame art or do you see yourself moving beyond this? Do you want to get involved in games production itself, or move into other forms of digital (or non-digital) art?

BC: The game focused work is just one part of an ongoing process that includes various overlapping media and thought processes. I will be working with a medieval re-enactment group, the Society of Creative Anachronism. I'm setting up a show where they will suit up in their armor and beat the shit out of each other in the gallery in an ongoing deathmatch. I also just finished the first of a series of sculptural portraits with a low polygon aesthetic called *650 Polygon John Carmack*. I'm broke right now, so the temptation is always there to jump into the industry. I can do the work, but obviously I'm just not right for it.

In Conversation Fall 2003: An Interview with Joseph DeLappe

Jon Winet

JW: You've been working now for a number or years to address computer gaming through your creative practice. This all seemed to start with the creation and use of *The Artist's Mouse*. I see a strong sense of play connected to this piece and to *The Mouse Series*. I am thinking particularly of *The Mouse Drawings*…there is kind of kinesthetic response to the work, for example, it makes people's hands twitch when they view the pieces, at least that is the reaction I had. Could you talk about the role of play in the production of your work and the introduction of gaming into your creative practice?

JD: The notion of play has become central to my work, particularly with the various experiments engaging with computer gaming. My interest in gaming came just before I invented *The Artist's Mouse*. The first computer game I played came free with a G3 laptop I purchased in 1998 – it was a flight simulator with a helicopter gunship attacking ground targets – very broad two bit graphics as I recall. Around the same time period, many of my students at the university had been involved, fairly intensely, with first-person shooters. Out of curiosity I purchased the game *Marathon* and found myself quite obsessed and absorbed with simply playing the game. I eventually went on to play *Star Wars: Tie Fighter*, *Unreal* and the original *Quake*.

The Mouse Series was started consecutively and partially as a result of my interest in computer gaming. I began to explore the consideration of the very devices of computer interaction as objects for creative sculptural reconfigurations. The result was the first piece of *The Mouse Series*, which was titled *The Vagina Mouse*. I transformed an Apple Desktop mouse into a pink vagina, anatomically correct according to the illustration I used from *Our Bodies, Our Selves*. When first displayed, I connected the mouse to its logical mate and inspiration, the very obviously phallic, unaltered joystick I had used to play the *Tie Fighter* game. This piece was the first to peripherally address computer gaming in my creative work.

By altering the mouse and connecting it to the joystick, I created a sculptural duo that addressed obsessive computing activity through a type of formal re-creation.

The Artist's Mouse came about soon thereafter as an object and functional device. I created a mechanical appendage for my mouse which allowed the attachment of traditional artist's tools to create drawings while using the mouse on my desktop. The notion was to use this device to record, or map, my desktop mouse activity. The first idea for *The Artist's Mouse* was to take it to an extreme, noticing that during the playing of the "first-person shooter" games, the mouse was constantly in motion. There is a totally frenetic play on the mousepad. The experience of playing the games most definitely fed directly into the invention and use of this device. *Playing Unreal* were the first mouse drawings; small, 10"x10" pieces of rag paper replaced my mouse pad. I did a series of five drawings. The gameplay and resulting mouse activity as recorded on the paper created these very unexpected, abstract drawings. I also played chess against the computer using *Chessmaster 2000* with a sumi ink brush connected to the mouse, using India ink on paper, recording multiple sessions of the game. Unfortunately I can't play chess very well – I lost every game. The resulting paintings possessed a unique calligraphic gesture.

Next I created a series of drawings, the *Work/Play* pieces. Three 22"x22" drawings, each piece representing approximately three weeks to a month of all of my mouse activity on my studio computer. For this work, I rotated the paper as an area filled with pencil markings until the surface of the paper was covered with marks in a cyclical pattern. Much of this was, again, gameplay – although with these I also included all my other everyday activities, writing memos, surfing the Internet, etc. I was very interested in making the virtual physical...creating an odd record of computer usage.

The Artist's Mouse combines digital and physical processes to create analog maps. Attaching a pencil to my mouse and then playing computer games for hours became a very basic way of getting down to the core of what the mouse actually is while, at the same time, literally mapping obsessive computing activity. It was also fun to be able to play computer games, guilt free, because, after all, this was research, I was making art. A conceptual process of "play" is central to this work – allowing a time-based, functional or dysfunctional, activity to create complex visual abstractions.

JW: One thing that occurred to me, they partly exist as motion studies, along the lines of Frank Gilbreth's work, the industrial motion study expert that re-designed factories. They end up as a kind of trace of gesture, of being conceptually quite powerful. I also find it somewhat cheeky and funny – that you are taking something that is often perceived to be lacking in touch. That it (i.e. computer-based art, Net.art, electronic art, etc.) is a cold medium. And then you are pointing out that in it's very name – digital – it refers to touch. Digital process is in the hand and then the production ends up being a literal expression of gesture.

JD: I remember being fascinated by Gilbreth's work in the History of Photography course I took years ago in college. The images really stuck with me. The idea of recording mouse activity as physical gesture became a way of reifying the very nature of these devices and

games that have become a way to play, work and simply use up vast quantities of our time. The intent is to create works that lead to, perhaps, a moment of recognition.

JW: I think that all artists work toward the moment of recognition, both for themselves and for their participating viewers. A perfect circle of different coloured mouse balls, both is all about mouse balls, but is also a recontextualization towards a hundred different associations that suddenly make perfect sense.

JD: When I started making the more formalist, sculptural pieces, like the *Mouse Balls* or the *Genesis* piece out of videogame controllers, or the *Joystick Ball*, these works were collectively a revelation. These were very much about a sense of play, both literally in terms of where the original devices came from, being used and broken game controllers, mice and joysticks, and in regards to how they were re-created as art objects. Much of my earlier work had more of a clear intent to it. I would pre-visualize making the work, saying, "okay, it is going to be this", then do it. With these works, there is definitely that emerging sense of play that we spoke about earlier. My working methodology has evolved to a much more process oriented approach since engaging in *The Mouse Drawings*. I believe I have moved further into experimentation that holds onto a conceptual grounding yet allows for an interactive engagement with materials and processes. Engaging with physical devices, directly related to computer usage and, more specifically gaming, in order to explore, to make a formalist structure that begins to speak on some other levels. These sculptures exist as accessible art objects functioning well within the tradition of found object, or, ready-made art.

JW: Certainly I am guessing that the most accessible works to a broad audience, at least to a broad audience of boys under the age of 25, are the game screens. I would like to hear about *The Professor*, in particular.

JD: These are quite recent. *The Professor* is a new series of images that are essentially self-portraits taken in game environments. They have come about as the result of engaging in an ongoing series of creative activities in online game spaces. I've gone from making *The Mouse Drawings*, through performing poetry and television scripts in game spaces online, to now using these games to create self-portraits. Whenever I am online playing games, I have chosen as my moniker The Professor. It is a funny thing…a poke at myself.

I've been going online with a student assistant – we each log on as The Professor, find each other in the space and take hundreds of screenshots, literally taking turns as subject or camera. He/I becomes a physical representation of myself in the game environment. As in my more performance-oriented work, we are usurping the purpose of these spaces as imaginary killing fields. Instead we are taking snapshots as if we were visiting a tourist spot. The result is the creation of an image bank of The Professor as personal avatar. So far, we've been in *Quake Arena*, *Unreal Tournament*, *Star Trek: Elite Force Voyager*, *Medal of Honor* and *Star Wars Jedi Knight II*.

JW: There are a number of ways we could characterize this subject/object relationship, artist/model, artist/viewer. These screens put the viewer behind the gun or behind the console. I'm then curious to know, for example, when looking at *Self-Portrait as The*

Professor, Seven of Nine – are we experiencing The Professor's point of view, what he is seeing, or is the implication that The Professor is able to assume the role of Seven of Nine in this particular shot?

JD: It is as if your view becomes the camera and at the same time you are holding the gun – the gun is in all of the pictures – the weapon intrudes on the bottom right side of the image, placing you as the photographer. The Professor becomes a complicated fusion of Seven of Nine as subject/viewer. These are photographs of simulated identities in an alternate reality. They are like stepping into a very violent cartoon – they are photographic portraits, of a type.

JW: Is this work gendered?

JD: It is and it isn't. I think however you want to look at the images, the title The Professor is likely to be read as very male in this context. The whole thing with becoming Seven of Nine, this is a way of codifying the odd transgender activities that take place on the Web. There has been a functional aspect to the gender issue online over the last decade or so, with people in muds or chat rooms. Sherry Turkle's book, *Life on the Screen*, addresses the phenomenon of how many female characters in these spaces are actually men. The safety and anonymity of the Internet allows one to play out, in a virtual setting, fantasies of gender swapping. The portraits are, perhaps, visually concretizing that kind of activity. The use of Seven of Nine came about in a curious way. In my first online performance work in 2001, I connected into the *Star Trek: Elite Force Voyager Online* game as Allen Ginsberg. This particular game, *Elite Force Voyager*, is based on one of the knock-off *Star Trek* TV series – one of many derivatives from the classic 60s original. The piece involved performing, in its entirety, Ginsberg's seminal beat poem, *Howl*, while connected into the gamespace. While performing this work, *Howl: Elite Force Voyager Online*, at a certain point my computer, of course, crashed. After restarting, and connecting back into the game, the computer had switched my character, which was originally selected as The Doctor, to Seven of Nine without my intention....

JW: Destiny...

JD: Yeah, this was one of those interesting occurrences. I said to myself, "well, okay," as I had no intention at the time of posing as a female. Initially I had chosen The Doctor, this very professorial type of character, the nerdy, eccentric, holographic character from the TV show – arguably the least exciting character in this particular *Star Trek* game. Through the computer crashing, I was involuntarily switched to Seven of Nine, the sexpot, one of the most exciting on the show – I found that kind of fun.

JW: Also an extremely rational, calculating, sentient being in Seven of Nine. There is so much in this work, the implication of the performed gesture. You make performances, stand alone or specific, and they've been like these other virtual works. Can you talk to me a little bit about that?

JD: When the online shooters became available, I began to use these for the creation of drawings using *The Artist's Mouse* (*Unreal Tournament*, *Quake Arena*, etc.). Immediately I

was struck by the text messaging going on during these online game sessions. The dialogue is generally typical in any game setting: "lol" (laugh out loud), "gg" (good game), and for the purposes of insulting your opponents. It just seemed natural to appropriate the text message interaction for artistic, interventionist purposes. My first inclination was to bring in the most unlikely literary form one might be expected to find in such hyper violent online spaces – poetry. Poetry was also ideally suited as the lines were generally short – thus fitting well into the limited text area available in these types of gamespaces.

From the start, I was considering the poetry readings in the games as being a new kind of street theater. They also connect directly to *The Mouse Drawings* in that they are really about a conceptual process – in this case a performative act that exists as long as it takes to type in a particular poem. When I first started doing these performances online they were also very private. The idea of doing these before an audience came later. I was in my basement on my computer going into the *Star Trek* game doing the *Howl* piece. It was the same experience for doing the *War Poets Online* in the *Medal of Honor* Game where I recited/typed the poetry of Siegfried Sassoon and Wilfred Owen, the great British poets from World War I.

These were quite individual encounters in an online server where there might be twenty other gamers who may or may not be paying attention to the fact that there was somebody typing these odd texts into the gamespace. The strategy was to exist as a neutral visitor – I did not engage in the gameplay – at least not in the prescribed manner. There was also something quite curious about performing poetry, only to be killed and reincarnated again, and again. Bringing the performative aspect into these hyper violent spaces was, in a way, an intervention, an aesthetic protest. There is a level of wry, satirical humor to it as well. It was also very poignant, particularly doing *The War Poets*. I started doing these after September 11th when we were invading Afganistan and on into the present as we were heading into Gulf War 2.

JW: I'm guessing that when the history of interactive media gets written, the initial moments of "one bit" interaction – pull the trigger and the gun goes off, hit the toggle you jump or move left to right – will have been primitive forms of a much richer, evolving literature. The literal introduction of the literature of Allen Ginsberg, Siegfried Sassoon, Wilfred Owen, some of the best antiwar poets of the last century, begins to push in that direction. It seems funny, and healthy, and a kind of protest. At the same time I also see you honoring the environment as it exists now in your work.

JD: It is also that sense of constantly trying to find other ways of utilizing the materials before me. Thinking of these Web game spaces as a material, as an art space. In a way, it is about expanding the potential of what these spaces could be about. After all, I bought the game, I own the CD, I have rights to do whatever I want to do in that space. And yet, there is a really didactic, very conservative attitude of most of the gamers. They get so angry. You are invading their space. It was as if I was coming to their house and spray-painting on their front door. There is a passionate, controlling aspect to these spaces and the people who inhabit them. Coming in to do poetry, it is this rarefied activity that just adds a level, as you say, a literary quality to these spaces, which really interests me.

JW: Well, I think the person who objects is right, you are bringing new colours to the palette. How that gets sorted out, I think, is part of the performance. I see it very much as you insisting on gesture in electronic space and in virtual production.

JD: There is definitely a gestural quality in trying to capture, when I am typing, doing the poetry, and I see somebody coming that is about to kill me, I'll try and hit the key that records the screenshot at that instant. When my body is flying through the air…. that becomes a staged, performative act or the traditional photographic "decisive moment", like being an online war correspondent…

JW: I think you've opened that proverbial can of worms: is this performance, is this a video, is this a photograph, is it documentation…

JD: It is all those things. Part "cyber" documentary, staged photography, part video art, part performance. It is ultimately a hybrid form.

JW: Regarding *Quake/Friends*. I think this work is again very culturally laden and quite complex in the operation required of its viewer. Could you lay out that terrain? Also, I understand that you actually received some unwanted attention from Warner Brothers regarding this project?

JD: *Quake/Friends* came about after spending roughly two years doing the solo online poetry readings. I began to consider, what if I came into the space with other co-conspirators or actors? A group of performers rather than the solo approach. If we all went to the same server in the same game and performed something coordinated, this might be really interesting. I mentioned before, I like to take ideas to their logical extreme. The prototypical violent game is *Quake Arena* – one of the most violent shooters with blood splattering, severed heads bouncing across the floor, etc. I began to look for content to perform that would involve multiple performers and raise the stakes, so to speak. I had initial thoughts of doing a play, say *Death of a Salesman*, but it seemed a bit pretentious… this led towards choosing a television sitcom. I started thinking, what is the most insipid, popular, culturally vacant yet operative sitcom out there today – *Friends* was the logical choice. Choosing *Friends* and *Quake* was a logical combination of hard-core, online violence with the extremes of American pop TV culture. I recorded a recent episode of *Friends*, then transcribed the entire episode, including notations of the laugh track. I gathered a group of five gamers/performers and myself in the Digital Media Studio at the University of Nevada for one night in the fall of 2002.

We found a server that had enough room for all of us, I believe it was the Hulk Server UK, logged on, then performed, word for word, in character, the episode in its entirety. Phoebe, Ross, Joey, Rachel, Monica and Chandler, appeared as *Quake* characters – the performance took about two and a half hours to do the half-hour episode. It was a totally insane experience. Ridiculously over the top and under the radar – a guerilla art event.

Matt Mirapaul, the Arts Online Writer from the New York Times became aware of the work through a posting on Rhizome.org. He sent me an e-mail and we started a dialogue about

the piece. The first incarnation of *Quake/Friends* was an experiment carried out in the confines of our computer laboratory. Performing the piece in front of an audience was of great interest to me. For the original presentation we had two LCD projectors showing two of the six points of view during the game. I organized *Quake/Friends.2* to take place in the Sheppard Fine Arts Gallery at the University in the spring of 2003. We used six projections, one for each character, six workstations, an audience, the whole bit. Matt wrote an extensive article about the project for *The New York Times*, which came out a week or so before the performance. In that week word about the project was spread all over the Web.

Two or three days before the performance, I received a phone call from an attorney from Warner Brothers Television. The producers of *Friends* were quite upset about what he asserted was copyright infringement. For *Quake/Friends.2* I had planned on doing a different *Friends* episode. We were slated to do what was the series pilot from years ago. WB objected; their thinking was that moving on and doing another episode went beyond the margin of "fair use". They would allow me to do it this one time, but then I had to promise never to use any *Friends* material in the future. They also demanded that I remove all *Friends* imagery and dialogue from my website – very serious demands backed up by the threat of legal action if I did not cooperate. I met with the legal counsel at the university to try to figure out how best to respond to these demands.

It really didn't matter to me whether I did a new episode or the same one from before. So I went back to them and said, here is the deal, we are going to do the same one we did for the original *Quake/Friends*. I also refused to remove anything from my website. My argument being that the work is indeed within the margin of "fair use" being so clearly critical satire. There is no likeness of any of the characters on my website or in the performance. It is a creative and critical interpretation. They eventually backed off with the proviso that I would let them know of any future performances of *Quake/Friends* and that they would reserve their right to take legal action in the future.

JW: I think it is interesting that the piece ends up coming from the art world into the media. We live in such a strange universe now where the most successful movie in 2003, *Pirates of the Caribbean*, is a film based on a Disneyland theme ride. Lara Croft has her first life as a computer game and then goes on to become a 3-D person on the silver screen. There is this interesting resonance between the "real spectacle" and the "virtual spectacle". In this case, a resonance that results in you getting that aforementioned, "unwanted attention". Curious. I am going to guess that as a new-media artist there was likelihood that, having exhausted the *Friends* research, you weren't going to be returning to it anyway?

JD: Precisely...I told WB as much. I was moving on to other things, but I would not give up my rights as an artist to perform the work in the future. This experience, this legal tussle with an entertainment lawyer from Hollywood, became a benchmark in my work. I was extremely thrilled that the producers, and perhaps the actors of *Friends*, were likely aware of this project. The idea of the work, of *Quake/Friends* or of the poetry online, receiving this kind of exposure is actually perhaps more important, in the end, than the actual execution of the work. What was exciting was that there was a cross-pollination of a contemporary

artist's modest project that fed into the consciousness of many thousands, perhaps millions of people. Even the producers of that original content – that was just...

JW: In that way one could almost look at an antecedent, like the Rtmark/Barbie Liberation Organization switching the voice boxes of talking GI Joes and talking Barbies and returning them to retail stores. I think the conceptual power of that piece is in the power of telling the tale. It doesn't matter if they did it once or to twenty boxes or if they never did it at all – it lives as an authentic urban myth. That again suggests this sort of odd interventionist's relation that a new-media artist can have. Another work that comes to mind, video artist Anne McGuire's *Strain Andromeda The* in which she re-cut *The Andromeda Strain* by putting the last shot first and the first shot last. This inversion of time and cinematic conventions generates, as with all good art, a conversation among artists and with the broader culture.

JD: On a more popular level, your comments bring to mind the instance where a hard-core *Star Wars* fan re-edited *Star Wars: Episode 1* to take out Jar Jar Binks – the nearly universally loathed animated character from the film. I believe it was online and George Lucas and company got really upset. This is what excites me about the Web and what this technology could be pointing towards. On an honest, logical level, though, I think we as artists rarely put ourselves into a position to compete with Lucasarts, Disney, or WB...the intense power and reach of popular media is... we are like little ants. If our gestures, at certain times, can insert themselves into the larger public consciousness, this is a good thing.

JW: The utopian view of emerging technologies, empowering more people, more "other" people. A utopian dream worth holding on to. Just a minor point – I think the biggest issue perhaps for WB is that their sacred cow, *Friends*, in its depth and warmth, was being likened to the very superficial, less popularly accepted videogame. I think that may have been the bite that they could not stand.

JD: That gets to something else...it was more than just throwing these two cultural icons together. The structure and content of a situation comedy and a first-person shooter game session online are oddly similar. *Friends* starts with a conflict, works towards a simplistic resolution, some laughs, and in the end, everyone is okay. A *Quake Arena* game lasts from 12 to 30 minutes, there is conflict, competition – the primary text message being "lol" [laugh out loud], in the end, everyone is okay. I suppose one could argue that in the online game you are at least interacting and could alter the outcome of the session, depending upon your virtuosity in the game, while with a sitcom you are a passive viewer. All the same, there is a parallel track of escapist entertainment that both of these modes of entertainment involve. Colliding these two modes together perhaps helped to magnify that insipid quality that they both possess and maybe create something entirely new.

JW: There is a funny kind of way in which either one can be valued or devalued. Again, when the history of interactive media is written, I think that it will recognize the computer, Internet-based games, the *tamagotchi*, smart apps, and other early interactive media as having made important contributions to a repositioning of the reader to the writer. And that in fact *Quake* may have far more depth and far more cultural significance than something

more akin to a conventional 27-minute sitcom. In your work and the work of many new media artists, these are pioneering trials of an imagined future in which motion pictures and interactivity are ubiquitous as the screen becomes an increasingly dominant delivery system for "truth" and "fiction".

JD: We are also just scratching the surface in terms of the games – we haven't talked about the fascinating culture of gamers making their own "skins", their own gaming environments, actually hacking into the structure of the game to create their own characters and spaces. Albeit, they use the same structure of running around and killing each other but there are some amazing, essentially virtual installation spaces.

JW: Just underneath the skin of that, is arguably this profoundly positive, activist idea about shaping the environment that we live in, giving meaning and new interpretations of what is out there. It does put us in the active role of producer rather than that of a passive consumer. I think it is this research that you are poking at in a variety of ways, through all of this work we've been talking about for the last couple of hours, that matters. In conjunction with your recent exhibition at the Nevada Museum of Art you created some new real-time performance pieces extending earlier work. Could you talk about that work and how you see your work evolving?

JD: For the performance at NMA, which took place in November of 2003, I was very interested in taking the work to a new place. I had gone through performances as a group for *Quake/Friends* as well as the online poetry – as I tend to like to move on in my research – coming up with something that would take this work to the next level was of great importance. Lately I have fixated on the story of Merhan Karimi Nasseri, who has been living in the Paris airport as a homeless refugee for the past fifteen years. My thoughts originally went towards somehow telling his story, that of a traveller stranded without papers, without a country, in the enclosed confinement of airport architecture, in the context of an online game.

Mr. Nasseri, believed to hail originally from Iran, is also known as "Sir Alfred" – his self-proclaimed nickname after receiving a letter from British immigration officials addressed to, "Dear Sir, Alfred". Merhan's situation immediately resonated in my thinking about performative game activities. Here is this man, trapped within an enclosed architectural environment, functioning with a self-assigned alias, unable to exit this space for a very long period of time. An airport environment is very similar to the type of gamespaces featured in online shooters; confined spaces that give an illusion of more space, more openness than actually exists. Game spaces are actually quite secure, closed environments. I became really interested in somehow incorporating Sir Alfred's story into a performance. There was also a curious resonance with the fact that he chose a floating identifier – much like he might do if he were to visit an online game.

Recently Sir Alfred's story has been in the news as he is being used as the inspiration for the next Steven Spielberg project. The film is to be called *The Terminal*, featuring mega-star Tom Hanks as a hapless refugee from some Eastern European country – he won't be an Iranian stuck in Paris – he'll be stuck in an airport in the United States. It seems a typical gesture of American culture to take a story and insert it into our own, comfortable space.

I began thinking of Steven Spielberg, his films, and how this might all tie together into the next performance. I was wondering through a local thrift shop some months ago when I came upon a grainy colour television that just happened to be tuned to a channel showing Speilberg's *ET: The Extraterrestrial*. It was one of those moments of serendipitous clarity. ET and Sir Alfred have so much in common. They are both prisoners in a foreign landscape with seemingly no way to escape. They seemed to provide what would be a perfect, cyclical union of Hollywood fantasy and worldly reality. I watched *ET* and wrote down selected dialogue from the film – primarily discussions between the children and ET. I then went through myriad sources both online and in print of stories about Sir Alfred and clipped any direct quotes I could find. Sir Alfred in his own words. I eventually created a new work, which is titled *ET tu, Sir Alfred?*

What resulted is a performance event that involves a combination of dialogue from *ET* and Merhan's own words, a bipolar mixing of the two sources. It was virtually every other line but at certain points I intentionally mixed up the sources so it becomes confused – you are not quite sure who is saying what. It could be Elliot, the young boy in the film, *ET*, or Sir Alfred. The question of voice becomes suspect. The game of choice for performing this piece was readily apparent. *Aliens vs. Predator*, originally in comic book form some years ago, is now a popular computer game featuring the archetypal Alien creature from the *Alien* films battling with the Predator from the movie *Predator* with some Marines thrown into the mix. It is as if Sir Alfred were telling his story while auditioning for a part in *ET* yet had mistakenly walked on to the set of *Alien*. There was further subtext in using this game as Predator was an early vehicle for Arnold Schwarzenegger. Arguably our most famous immigrant whose meteoric rise to celebrity and politics is in itself an odd mix of fantasy and reality.

I entered the game, *Aliens vs. Predator*, choosing as my moniker "Sir Alfred", then proceeded to type in the prepared text. The quotes from "Sir Alfred" very oddly mixed with the quotes from *ET*. This particular game has a very readable design to its dialogue console. The words appear across the top quarter of the screen, on a solid colour, in the center – many games you read the text directly over the game action which is sometimes difficult to comprehend as it scrolls by. Immediately upon commencing this performance there was text reaction from the other gamers, which was actually quite humorous to the audience in the theater and added a whole new layer to the experience of the event.

JW: One thing that comes to mind is the caper a few years ago where a couple of agents submitted the script for *Casablanca* to a number of different studios. I believe only one person recognized it as *Casablanca* and wanted to consider creating the film, the others rejected it. I'm curious to know if any of the other gamers recognized the *ET* story?

JD: Eventually, yes. I did not notice much during the piece as I was concentrating on typing. After the performance, audience members informed me of some of the interaction taking place in reaction to my texts. I had, of course, included the line from the film where one brother insults his sibling with the words "penis breath". That immediately drew in several reactions which, after more typing, led one gamer to type in something along the lines of "hey, this is stuff from *ET*". Then later, "would you stop with the inane quotes already!", that sort of thing. There was definitely some recognition of the source material.

JW: Just to pinpoint your interest in how you see this as "moving beyond" or moving to the next phase of the research – could you define further where the move forward is taking place?

JD: In the earlier works I was utilizing entirely appropriated text, input verbatim. My initial idea, when I focused in on Merhan's story, was to actually create original text material. A monologue of sorts. Which is something I am still interested in and intend to explore in the future. This piece, *ET tu, Sir Alfred*?, though, became about expressing his voice, in a gamespace, in opposition to, or connected to, the *ET* dialogue. This being the perfect route for meshing two worlds together – the hyper, perhaps culturally imperialistic world of American film, into this very real, yet mythologized story of this individual. I was also keenly aware that whatever I created regarding "Sir Alfred's" story would be another in a long line of "others" telling his tale. As such, it seemed only fair to do so as much as possible using his own words in this context.

JW: I think both with this and the earlier pieces you are taking what are essentially seen as a kind of dynamic, visual, animation-driven environment and then trumping it by foregrounding the text. I think you mentioned previously that you had received inquiries or feedback about why it is that your research is pushing in this area and not in the direction of some other artists who are actually changing the skins, going in beneath the graphical user interface to re-code the game. I'd like to hear your thoughts on this?

JD: There was this wonderful discussion forum started on a website called "Planetcrap.com" that is indicative of the type of feedback I received. This was a discussion thread based on *Quake/Friends*. It was quite interesting as this is a gamer's discussion forum where they address the latest releases and various issues surrounding the online gaming community. The dialogue begins with near unanimous condemnation of the work. Several of the comments went towards discussing that they thought it might have been interesting had I gone in and changed all the skins to *Friends* characters and actually re-created the set from the TV series.

The discussion went on to close to 500 responses – I lost track as the dialogue devolved into an argument over Shania Twain's fashion choices. The e-mails I received were primarily from very angry gamers. One individual, his e-mail was simply vitriolic. "How would you like it if I came into your art exhibition in a gallery and started playing soccer!"

When I started performing online, I had actually thought quite a bit about the notion of actually remodeling the spaces and the characters. In the end, though, I intentionally decided that this was not particularly a direction I needed to go in my work. I tend to find myself challenged and excited with working on the surface of things in a highly conceptual fashion. Not just in games but in my other, more object and installation oriented work as well. On so many levels, you can consider this as a very specific aspect of my working methodology as an artist. I believe that the notion of "surface' is key to so much of what our digital moment is really about.

It is completely valid to go into those spaces to intervene on almost a purely conceptual level. One could consider, for example, *The Artist's Mouse* as being an art object that also

functions on the surface of the technology in a similar fashion as typing text into a computer game. I think the criticisms of this approach, working on the surface, as opposed to those working within the structure of the technology, misses a basic point. We are all working on the surface. Doing so, in my work, in such a blatant, simple way, re-inforces that notion. There is still a basic structure there of code and programming – the actual foundation of these gamespaces which is essential. We are all playing around above a basic foundation that is a media creation. Media in the largest sense of the word. That map of reality, replacing reality, that Baudrillard speaks of so eloquently, exists. The notion of playing upon the surface is key to understanding and appreciating this work.

JW: I think there is a nice way that an argument could be made as well that text being the most abstract element of a game environment. That, in fact, in terms of user interaction, it is right on the top and it is easy to input and monitor the game with it. Also, by its very abstract and fluid nature allows for great depth. Pushing at the game and pushing at the game environment.

JD: Exactly. In my thinking it also heads towards a notion that it is all based on code that is, through the computer, abstracted to create a simulation of an activity or process. One could say that putting text back on top of these games is essentially honoring, in a way, their very structure. The most effective means for basic communication is very straightforward. It also says something about the basic notion of celebrating the act of reading literature. Reading creates imaginary spaces in your head as opposed to those created for you on a computer. That, in fact, represents a basic contradiction between traditional poetry and online gaming.

JW: Well, and you may find yourself, with some of the unhappy gamers, perhaps not wanting the deeper meaning of the surface of their activity to be revealed. That may be a bit more judgmental than I would like to be actually. Since I don't operate in these environments, I can't pretend to understand them beyond a kind of basic theoretical way.

JD: Fair enough. Although I believe there is a very strong undercurrent in these spaces, if I may speculate, of people desiring some environment to control and belong within. Consider all the "clans" functioning in the world of gaming, for instance. A new type of tribalism?

JW: In fact, if I may suggest, it is really a bit of poetic analogy of one of your objectors. Aren't you, in some way going into the museum and playing soccer in an exhibition setting...

JD: Oh yeah, exactly.

JW: I think the best new media work challenges shared assumptions about what is to be expected and what constitutes the art object and the viewing experience. Part of that changing the level of expectation is recognizing that text is now different and image is now different. That the hypertext experience, in which I would include computer games – I'd like for you to give more precision to that train of thought. Can you explore or describe the role of hypertext in the environments that you are working in?

JD: If one considers the notion of hypertext as being linked abstractions that lead to another and another and so on, computer games are very much based upon this basic non-linear

interactive structure. Engaging in some type of selection, in this instance, shooting or moving or jumping or typing text and then going on to the next thing. That creates an experience within a programmatic environment. In relation to my work, I think that my performances actually work, in part, counter to the notion of hypertext. The texts that I am placing into these games, are, in fact, quite linear. It gets back, again, to a conceptual notion that functions with *The Artist's Mouse*, forcing the analog gesture back into the digital. I am interested in working to insinuate analog text into this hypertextual, interactive environment as a way of perhaps re-identifying or re-framing what is going on in these spaces.

JW: It may be too that the work answers the question, and in some ways it is about very basic shared assumptions about redefining the role of the viewer which occurs in a number of your works. Redefining the role of image and text, or linking text and image.

JD: This all gets back to that question of the "why" of all this work. I saw something on television a few weeks ago, it was a short sequence reporting on the dedication of a bridge that was being reopened after having been repaired in Baghdad. There was a US military band playing on the bridge during the re-dedication ceremony. What struck me was the song that they were playing – the Storm Troopers Theme from the film *Star Wars*. It was one of those extraordinary moments where the bizarre confluence of reality creates something that is ultimately quite revealing.

The Idea of Doing Nothing: An Interview with Tobias Bernstrup

Francis Hunger

Museum Meltdown by Tobias Bernstrup and his collegue Palle Torsson can be received as a game or in more classical terms as a virtual reality. Both rebuild several Museums (Arken Museum of Modern Art, Copenhagen 1996/Contemporary Art Centre, Vilnius 1997/Moderna Museet, Stockholm 1999) as virtual spaces based on classical computer games. Ego Shooters like *Doom* or *Unreal Tournament*, that basically let you run through endless 3-D corridors and shoot everything that is defined as a target, often provide a special editor program to make own game levels. In *Museum Meltdown* the horrible scenario takes place in museums and the target is art. That art can be a target of destruction is shown amongst others by the action of the Russian artist Alexander Brener who "destroyed" in 1997 at the Stedelijk Museum Amsterdam the Malevich painting *Suprematism 1922–1927* (a white cross on white background) through spraying a new layer of colour on it – a green dollar sign. What can be understood as destruction can also be read as applying another value to the original work. The same could be said of the virtual shooting in *Museum Meltdown*.

When I met with Tobias Bernstrup for the interview in a café in Berlin Prenzlauer Berg, we began the talk with one of his more recent works. We agreed not to dive into a discussion on the pedagogical impetus of playing Ego Shooters and tried to concentrate on how the production process of the pieces is structured.

TB: The piece is called *Potsdamer Platz Unreal Edit* and it's based on the first *Unreal Tournament* engine, and I made this piece for the Lyon Biennale in 2001; actually, I never showed it in Germany, I showed it a couple of times in France. In showing this piece I tried to come away from the computer screen – I'm using a kind of black box and then project it on a very large scale, and then you have a mouse and speakers and it forms a much stronger atmosphere.

Figure 1: Tobias Bernstrup: Potsdamer Platz (Unreal Edit) *(modification of computer game. 2001), Courtesy: Cosmic Galerie/Andréhn-schiptjenko © 2002 Tobias Bernstrup.*

It was also one of the first pieces that I did when I moved from Stockholm to Berlin, and I was really fascinated by the artificial architecture and also that kind of abandoned space that suddenly started to grow up. Another piece that I did was the Friedrichstrasse Passage. That's where you would find all the fancy stores, with just not enough customers because a lot of people may not usually go there and so they closed it down. It was easy to go there and collect textures, because usually if I go out with the camera, there are people walking in front of the camera and I can't take a picture and I have to make a lot of Photoshop editing.

And then I started with *Potsdamer Platz* during the night. And parallel to it, I also work with sound, so music is almost 50 per cent of what I do and it is an important part of the pieces.

FH: Is it music in the sense of popmusik or is it more a soundscape?

TB: Well it's more inspired a lot by the 70s, like by John Carpenter, for instance. You could almost call it pop music. Its kind of dark pop music with influences from European synth pop and goth stuff and a bit of heavy metal.

FH: What is the role of music in your pieces?

TB: It is very much about having a whole experience, so I like the idea of being able to combine all the things which is really like an important thing to me...

FH: So *Potsdamer Platz* is a night view...

TB: Yes, everything happens during the night.

FH: And what actually happens?

TB: So at this point, what interested me, was the aspect of the unreal in this environment. The place tries to look like a typical skyscraper scenario but the buildings are maximum 100 meter and it looks like a Disney World, and I figured out that everyone looked like a tourist to me, even people that live in Berlin. And in terms of a game, it's not really a game, there is no goal, it's very much about just being lost.

FH: So one just can walk around alone?

TB: Yeah, there are a couple of things that you can do but it is not so important. When I play games, I'm in general more interested in the graphical experience, the way that reality is produced. At the point, when I made the *Museum Meltdown* piece, that was more like an

Figure 2: Tobias Bernstrup: Potsdamer Platz *(Unreal Edit) (modification of computer game. 2001), Courtesy: Cosmic Galerie/Andréhn-schiptjenko © 2002 Tobias Bernstrup.*

action game, I realized that I was more interested in the environment itself than in the game aspect. So, I more and more started to leave the game aspect out, because usually when you play the game, you don't really see the environment – you're really focused on the goal and on staying alive.

[Returning to the screen, he shows the *Potsdamer Platz* scenario. We walk through the towers and wannabe-skyscrapers and move towards the entrance of the subway station.]

TB: This is a teleport so you can go up here.

FH: Ah, okay, so we are on the top of the building now.

TB: Yes, and this is actually the only action that you can do.

[He moves the viewer to the edge of the roof and jumps down. The viewer sees the ground coming near and hears himself cry when hitting the ground.]

FH: So the only action is to jump. How did people in general react in it? Would they complain that there would not be enough interactivity in it?

TB: I think you have two different kind of audiences. One of them, usually the gamer people, they ask "Where are the guns? Can I kill someone?" and actually I figured out, that those people are really scared when they play. They always expect something to show up behind the corner, so they are always super concentrated and tense. And I think the people who are not familiar with games, they are just kind of excited or confused or sometimes they get lost, and I think it's a nice thing that they feel alienated in a way.

FH: I would like to follow another thread. Since the piece *Museum Meltdown: Arken* from 1996 which was based on the *Duke Nukem*–engine the technical possibilities became better towards a higher realism of the scenes.

TB: I think that's one interesting aspects of games today that strive towards realism. For example, when it was possible to have realistic colour palettes, which you hadn't, e.g., with *Doom* in 1993, that had its own special colour palette to save memory, it increased "realism", but still it is dependent on the limitations, like the amount of polygons. So it creates this kind of deformed reality which I find interesting. It's almost perfect but still it's this deformed reality. And I think the first games like *Pong* or *Space Invaders* in a way were more real then *Unreal II* or *Doom III*, the very high 3-D games of today. These old games are so abstract, their only reality is abstraction in a way like pixels on screen. It's so minimal and in a way it becomes real.

FH: All these games, the older and the newer ones, can be conceived as architectural spaces, so what is making your work being art while maybe a model made by an architect is still an architectural model?

TB: That is a very old question. Like in the beginning of the century. Today we don't ask, if it

is art or not, we've already seen the ready-mades. Today I don't even bother with the question: Is it art or not? You can do whatever you feel you want to do.

FH: To turn the question around: What is the interest of the art world in this, I mean why do they invite you to rebuild the museum in the *Museum Meltdown* or invite you to show the *Potsdamer Platz* piece?

TB: For me it was like this: I spend five years in the art academy and after the first year of painting I realized that I was not interested in pushing the idea of painting any further, although still there are some painters today whose work I like. For me, and also in general, I think, painting today is very very difficult in terms of art because it has such a long tradition. You can do very conceptual pieces today and you can also do storytelling today. But painting is too heavy in terms of its tradition.

I used to be a gamer when I was a kid using Commodore C64 writing things in the BASIC programming language, and making these small games. So much later, when I came across *Doom*, I felt like: Wow! And I was told that you can modify it. It was actually one of our guest teachers who told me about it. For one exhibition in Copenhagen that I was invited together

Figure 3: Tobias Bernstrup & Palle Torsson: Museum Meltdown Moderna Museet *(modification of computer game, Courtesy: Andréhn-Schiptjenko © 2002 Tobias Bernstrup.*

with my colleague Palle Torsson, we were invited to show an Internet piece that we made in 1995 and we said: "Oh, we don't see the point to show it in a museum, it was just meant for Internet."

So we came up with another idea and we said to the curator that we could redo his museum in a game and he found that interesting. So we started to build the museum, the *Museum Meltdown: Arken* and from that point we continued. And I felt actually that the culture of game was more contemporary than painting – as a part of the culture that we are living in today.

At that point there was only a couple of people who were doing it. And now it is almost like eight years. There are so many people who are into it now. It's a bit like the boom of video art. I remember, when we started, there were many people who wouldn't get it. And it's always like that. If you want to be a pioneer, you have to accept the fact that no one will understand it or even they would say that this is just a stupid game or a childish joke.

FH: And do you feel like a pioneer?

TB: Yeah, I think so, there weren't so many people at that time. I mean there was this stuff of virtual reality, but using things from pop culture like games, at that point it was something new. After we did a couple of these museum pieces, we got a lot of request of curators to do it for their museums. And we felt that we had to stop giving something that they wanted…

FH: So what was in your opinion the interest of the curators in it?

TB: I think it was just that they felt, wow, that's something new, we must be part of this new movement. And also I think the fact that it always needs some years so that people get used to things and accept that. It doesn't mean still having to stick to these ideas. I don't feel that I have to please the people demanding "Oh why don't you build our museum". Because in the beginning it was more interesting, they were not sure what they would get and we would propose the idea and it was something new and now we still show the old pieces, and to me it's very much like a document, since the technology is a couple of years old. So it became a document of that time and I like to see it from this perspective. So right now we are actually showing in Wien Kunsthalle the last piece that we made for the Moderna Musejet in Stockholm. And now it's funny with this piece because they had to close down the Museum in Stockholm, so our piece for two years was the only possibility to see the museum, because they had merged like fungus in it, so people got sick and they had to close the museum for renovation.

FH: Did you do something to preserve your works in a technical way?

TB: Well, we bought a lot of old computers with Windows98, because on those the games are running best, and the newer computers are getting really warm, because the processors generate so much heat.

FH: When speaking about the operation system it raises the question of which software you use exactly to manipulate the data or to program a new mod.

Figure 4: Tobias Bernstrup: Friedrichstrasse Passage *(computer animation, 6:30 min DVD-loop. 2001), Courtesy: Cosmic Galerie/Andréhn-schiptjenko © 2002 Tobias Bernstrup.*

TB: Usually the game platforms that I was using all had an editor coming with the program on CD. So the editor is the main part in the process and then there is the second part of textures. For the textures we took a digital camera and made pictures and then I use Photoshop to make all the textures repeatable. Usually you can't take a completely straight shot from the object so you have to stretch it in Photoshop to make it plane.

FH: How much time do you put into one texture?

TB: It's hard to tell. There are some textures that I spend four hours with, and on other just ten minutes. I really like "Fummelarbeit". When it comes to working with textures, I really like to get the most out of it with the most minimal memory use, and to make it really sharp and distinct.

So beside the game editor and Photoshop for the textures, I use another software for animations. It's made by some people from Switzerland and called Milkshape which is really a powerful program. You can do low-polygon modelling and it actually supports nearly every format like *Half-Life*, *Unreal Tournament* and so on.

FH: As I understood you put the textures with the 3-D models into a kind of database which is called mod or patch. You also can change the variables of the objects, that determine their behaviour, like being visible or invisible or being open or closed, or if you can pick up something or not and so on. How the objects interact with each other, is determined by the engine that actually does the calculations if there is a collision of objects, for instance. So there is a kind of database – the mod – and on the other hand the engine…

TB: Usually when I do research for finding a new game, I do that usually by luck, and there are maybe five or six games a year that I play through. It's not so many games that are good for mods. Still a lot of people use *Half-Life*, which had a really good editor, it was really easy and there was a lot of supporting programs for making new models, and also for making music and so on. But there was one problem with this program, that it needed to render the map before you could see what you actually had done. So you had to wait eventually during the night if it was complicated, with a lot of light. So I changed into *Unreal* because it's actually more open in terms of the programming. In the editor you can open a script while you working and import sound and graphics, but in *Half-Life* or *Quake* editor you had to use separate programs to make the textures or sound and to convert it specially. In *Unreal* it will do it all automatically, the editor does all the conversions. In the end it writes its own format, but you can do it in one program.

It's based usually on two different kind of entities, the basic architecture usually needs shadow rendering while the other, the animated objects like chairs or persons are threaded a bit differently, they don't respond to light in the same way. In the most recent versions even the animated objects have shadows and, also, you can generate particles like fog or smoke, so it's getting more and more complex. It is more and more comparable to 3-D Max in terms of complexity, but the procedure is still pretty much the same: you work with this three-dimensional object and then you insert the light and put the textures on it.

FH: Do you also need to program yourself or is it all done in the editor?

TB: Usually you don't have to do scripting at all.

FH: So you don't touch the engine itself?

TB: No. I don't really hack the engine. For some of the mods you need to really dive into it, like with *Half-Life*, where people turned the shooter into a football game. For me, it's almost not nescessary. If you want to make an enemy, for instance, you work within the already given category "bots" that is part of the "animated objects", and it will have all that behaviour that I need for an enemy, and I only have to tell what animations to use, what sounds to use, in a very small script. So if you take another category like a weapon, it is another object, but it is also part of the animated objects. The 3-D program writes the script automatically and then you have to change certain values for instance in which frame the animation should start and when it will end for instance.

FH: And it has its own scripting language…

TB: Well among the different ego-shooters it looks pretty much the same, it is some scripting language but on a higher level it comes to C programming. I never have read manuals and it was very easy to understand and I found some manuals online…

FH: So it's a more explorative way of learning.

TB: Yeah – I mean – I learn what I have to learn, and if I had a real serious problem then I would go online and ask someone. I was never interested in learning programming because I feel also that if I should spend time, working on programming, I could spend less time on the more artistic concepts. So I would rather ask someone professional for programming.

FH: So, basically, you edit the given variables, but don't create it as a whole. The engine and also parts of the mods is already pre-produced. How do you see that in terms of artistic creation?

TB: Well, I could say that the outcome is important. I'm in a way changing the behaviour because I don't add all the weapons so in that sense it is not comparable to a game-mod that would have monsters and guns and so. And also with the animations, when you take all that away, it's very hard to tell sometimes what kind of game engine you're using and it's not even clear that it was based on a game. I mean, I didn't change the engine, but I changed a lot of the concept of game. For example, the idea of doing nothing, just walking around, no interaction so you are really left alone and sometimes you even feel lost. Sometimes you have that experience in games too but they deal much more with keeping you busy. I think here you can spend a lot of time, thinking, like, "What am I doing?", "Who am I?"

(Berlin July 2003)

THE ISOMETRIC MUSEUM: THE *SIMGALLERY* ONLINE PROJECT

An Interview with Curators Katherine Isbister and Rainey Straus

Jane Pinckard

The gallery was empty, except for the co-curator, Raingirl, and the artist's assistant, Rory. Raingirl wore a strapless mauve top and a long black skirt. Rory wore a headless polar bear suit. I watched through the blown-away roof while Rory began to build the installation. The floor fell away to a vertigo-inducing carpet of stars against a night sky. The wall was papered with tastefully muted skulls. All the while Rory stood calmly to the side, while the installation seemed to continue without his effort. "I need a train set," he told Raingirl.

"The big one?" Raingirl immediately provided it for him. It blinked into existence in the center of the room. Rory flipped it around a few times to place it. From the other side of the screen three humans watched his work in progress.

The two-dimensional image on the computer screen reminded me of a peaceful, aristocratic domestic panorama on a medieval Japanese folding screen. The walls and roof are cut away to reveal details of the interior space. It's odd to me that this isometric view – the primary visual mode for architectural landscapes for hundreds of years in Japan – should also become the dominant visual characteristic for videogames with avatars in the late twentieth century. There is a simplicity about the view: unlike a physical architectural space, one does not need to be "in the room" to view it. We are already "in the room". We humans, controlling the avatar, the virtual space, and the means to navigate it, are in all rooms. We own the eye of God. We are part of the space through our virtual puppet. We can "walk" around the gallery, "read" the captions, even "sit" and "play" with some of the interactive pieces. Through the shared non-corporeal form, we've become part of the piece.

A few minutes after he had started, Rory was done. Dyerbrook's installation was in place, and the Rory character disappeared. The room he created is now part of SimGallery, a virtual gallery in the game The Sims Online.

Sculptor Rainey Straus and social scientist Katherine Isbister, intrigued by a talk they both attended on the art of machinima, animation based on videogame engines, decided to experiment with art removed to a virtual space, with the body at a distance, through a layer of interactive technology. They created a virtual reconstruction of the Yerba Buena Center for the Arts in San Francisco in the online game *The Sims Online*. Then, working with the curators of the physical Yerba Buena Center, they arranged to have an installation at the Center for real-world museum-goers to experience virtual in-game work. The virtual space bleeds into the physical with recreations of other elements, such as the black-and-white tile floor and the textured red walls which are decorative motifs found in the game. The pieces are part of the Center's Bang the Machine exhibit, bringing together art and videogame technologies.

This sort of project might seem to be a radical departure for Straus, whose earlier work insistently confronts the organic in viscerally tactile work that is fleshy, oozing mounds of organs or egg sacs, sensual and creepy. For Isbister, who teaches and consults on constructing digital characters, the project of an entirely online gallery with online artists seems a more natural extension of her work on designing interactivity. But a central question in Straus's work seems to be around the place of the body in the artistic experience, which she confounds through layers of interactive technologies.

Because the game mechanics are referred to fluidly and casually in the interview, I will spend a moment to describe *The Sims Online*. The game is particularly apt for participation and play because it is a modeling of banal suburban life, as was its famous predecessor, *The Sims*. The original game was for a single player – a management resource game in which the player manipulated a handful of virtual puppets and constructed their lives for them. The creator, Will Wright, often called it "a dollhouse for boys". In 2003, the online version of the game was released. While much of the mechanic was unchanged, the fact that the player only took care of one avatar at a time and that every other character in the world was now operated by a human rather than a computer AI radically changed the nature of play. Suddenly the player is no longer a megalomaniacal ruler of a tiny digital kingdom, but merely one hapless subject trying to make friends and buy items.

The essential management principle of the avatar's statistics is the same in both *The Sims* and *The Sims Online*. The player creates an avatar and must manage her avatar's comfort level in various metrics such as Hunger, Energy and, amusingly, Bladder. As the Hunger bar drops, the player instructs her Sim to feed itself; when Energy drops, she makes sure the Sim gets enough sleep. And to take care of Bladder she must guide her Sim to the bathroom or suffer the embarrassing consequences. These simple actions will take care of the Sim's physical needs – termed "greening" in the slang of the game because the high bar is green while a low one is a dangerous red. But there are also emotional and social needs coded into the game, which must be minded or the Sim will become dysfunctional. The "Social" bar reflects the fact that *The Sims Online* is an almost aggressively multiplayer game – it is set up to practically force the player to socialize, through her digital puppet, with other players' puppets. To raise her Social score the player must interact with other Sims by choosing to talk, hug, dance or kiss. The "Fun" score can sometimes simultaneously be raised by dancing, but also by engaging in fun-coded activities like watching television, listening to music and playing pool.

Avatars are controlled by people, but you can only know the people through their puppets. Thus it is clearly impossible to tell the true sex, age, appearance, or any physical fact about the player behind the avatar. The avatars are customizable to an astonishing degree – and some players admit to having more than one avatar in game simultaneously. One can imagine all the gender-bending, personality-warping play that can take place – a well-documented phenomenon, and one that seems to come naturally to players in an online environment. Some of the spirit of play expresses itself, in some gamers, as a creative drive. These players are online artists. They have a mailing list, they have an in-game community and out-of-game websites with pictures of their work and discussions of upcoming events. They contributed their work to the *SimGallery*.

The multiple layers – of screen, of keyboard, of verisimilitude, and of identity – become tools of perception that the art lover uses to bring herself closer to the art, but they also remain the devices that eternally separate her. The *SimGallery* explores this relationship playfully and spontaneously while simultaneously interrogating notions of art in two very different arenas. The parameters of the project emerge in the conversation I had with them on a rainy San Francisco afternoon at Straus's studio.

JP: What is your object for the show? What do you want people to understand or absorb about this project?

RS: Katherine and I have some similar, overlapping ideas, but also some different ideas. Initially we talked about having it be just an investigation of what's possible within the constraints of the game, in the online space, what art can be in this really specific form. And then personally for me I'm interested in what is art without the senses, without the body. What does that look like?

KI: What's got me really intrigued about the project is the collision between the two cultures. And maybe that's because I came at it more from the game side, from teaching the class, playing games and also doing some research on these communities in graduate school and getting involved in these communities and seeing how people inside those places see themselves. What I hadn't realized when we started the project was that there were already this thriving art scene in the game. The way that the game world works is you sell these games, hundreds of thousands of copies, to people all across the spectrum. And I have this feeling – I don't know anything about these people – their vision of what art is is really different from the vision of what the people who curate art at Yerba Buena think art is.

RS: Oh yeah. I think this goes back to the initial meeting we had with Yerba Buena. Their initial perception of what this project was, based on a description we thought was very clear –

KI: Found objects and textures in the world, and how people bring them together.

RS: But they didn't really get that. The first meeting we had with them we brought the game with us and gave them a tour. They kept saying, "Well, how are people going to get work into the game?"

KI: I think even more than that is that gaming is suddenly really hip in the art world. And in the mass culture too, people are trying to understand what is this gaming thing about, how does this fit in, and what's going on here? I feel that there's a culture within the game that has to do with creating things, and being playful, and then people are taking their – naïve isn't the right word, but – they are taking their everyday understanding of what it means to make art, and that comes from a very mainstream area.

RS: It is a form of a folk art, I think.

KI: But on the other hand, somebody like Paul Neruda [an online artist in the game] had very sophisticated things to say within the context of the game culture, what he's doing artistically. There is the whole context of the game world, the art the people are making comments on that world as well. What I'm very excited for is that it may be a chance for people who may never have played one of these games, because there's also a generation gap – people below 35, 30 haven't played games since they were kids and are curious about it but don't know much, and never really get close enough to the artefact of playing – so it will be really interesting to see what happens once those people sit down and experience the game, and then layer onto that what people in the game think art is.

RS: I think there are a couple things in there. One is the discovery of this as an alternative medium to make work with. And then I'm having an interesting experience in talking to people about it. I mean my mother absolutely has no idea what this show is. And I'm having this experience with a lot of people I talk to – I mean, I'm 40, but I'm immersed in this culture because I work in it, and still I'm not a gamer. But I start to tell people what the show is and I see they start to check out.

KI: Right, they glaze over.

RS: Yeah, and it's not like I say, "I make sculpture" – which I do, but that's not the only thing that this piece is. It's much more narrative in terms of talking about what the piece is, and people get lost. They get lost. It will be interesting to see what happens when they are physically confronted with the game. For a lot of people that in itself is going to blow them away so much that getting to what the piece actually is may not even happen for some people.

KI: Right. But that is a big part of what the piece is. It's about bringing these two cultures together and letting people cross that boundary and experience that. Even if it's as simple as somebody for the first time having a fairly realistic avatar in a game, performing some simple activities and experiencing that. And being in the company of others in a context like that – as much as we take that for granted, people haven't had those experiences.

JP: Why this context – *The Sims Online* and not another online game like *Everquest* or *Anarchy Online*?

KI: Well, because you can actually create the gallery. The toolset that *The Sims* provides is very friendly to what we want to do. And the game metaphor isn't about going on quests. I

think there are a lot of game projects right now that are about subverting the primary game drive, and that's not really what this piece is. One thing that's interesting about *The Sims Online* is that it is a domestic metaphor. You create spaces like this, you're encouraged to create social and creative spaces like this.

RS: It's a game that is trying to map to everyday life.

JP: And that is more attractive to you?

KI: The other games are more about other activities – adventures. They are packaged with these medieval metaphors, or these fantasy metaphors. They already have this extra layer of story in them, while *The Sims* is more domestic, it's just about visiting other people's spaces.

JP: What about the rather aggressive consumerist aspect of *The Sims*? You spend more money and you get better things, for example – is that something that affected you at all?

KI: It's an interesting question. I mean, art galleries are commercial spaces. So it doesn't fight that metaphor. It's not like the built-in artists' loft at Emeryville! We are building something that has an economic foundation.

RS: From my personal experience, I don't really consider the economy of the game that much because we're not hooked into it. Because essentially if we needed to be we would be funded. In a sense I am only partially participating in the structure.

KI: That is something to be clear about. We're on the boundary.

RS: We're taking from it what we need.

KI: Neither of us has been a completely avid *Sims Online* player with a stake like these people who've been there since the beginning. We try to make that clear.

RS: It's kind of mercenary, actually. That it's specific to this piece, to wanting to explore this and to create this experience.

KI: I don't know that that's mercenary, necessarily. We're playing the game to –

RS: Well, I guess I feel that way because I don't think I would be there were it not for this project.

KI: But don't you think you're vitalizing that world too? Who cares why you come into the game? People have fun and hang out in the space and they're participating and creating – I feel like we're playing it! We have this other thing going on, but we're playing it. But I see what you're saying.

JP: You're setting up a physical space [at the Yerba Buena Center for the Arts] where people can come and see the game. But you're also setting up a virtual space. And what's the reaction to that in the game?

KI: It's great.

RS: They love it.

KI: People have fun. We have art talks. I feel like we're being a cultural institution.

RS: We are. There are also so many different groups in the game. There's a group of people who have been drawn into what we're doing because they've already been thinking along those lines within the game dynamic. But then we have random visitors.

KI: People just float around. It's a very transient culture.

RS: But I think they have a different experience coming to see us. That's what I'm getting at. But it's like the mercenary thing – they're like, "I need to green and where are the snacks." [Laughter] Which, you know, is just like the real world.

KI: Yeah, a little bit. That's an interesting question because in the game, because you can hop so easily among places, there aren't these sort of contextual barriers that help inform you about what you're going to go see. And that's the weird thing about this game, because you just hop in the space with no context, it's very low stakes, and you can just wander around. The norm is that it's okay to just ask, "What the heck's going on here?" I think the captions are going to be very important there, because you'll have these people at Yerba Buena will be logging in, playing the game, and visitors [in the game] will come by and say, "Oh, look that thing's open, I'll stop in", and then all of a sudden you have a collision of two people who only marginally know what's going on. And then hopefully the Sim who actually "lives" there will click on the visitor's user profile and read that "This person is logged in live from Yerba Buena museum, it's probably their first time ever being online so please be helpful and nice."

RS: I think you're right. The juice is going to be in those collisions. We can't even know yet what's going to be so great. And there are going to be wonderful things that happen.

KI: We will get play from the performance aspect too. That will be a way to condense that energy, and see how that vibe happens. You're right that our meetings with Yerba Buena were a precursor to that feeling. And it's happening in the world at large as more people get exposed to this stuff. It's like watching people connect to it.

RA: And also going back to the idea that it really is a huge cultural force and a new medium. Kids growing up now, the way I think I want to make sculpture out of some traditional material, this is going to be something that they don't even – I mean, it's seamless for them in terms of wanting to utilize it.

JP: Have you changed your ideas conceptually since you began the project? Have they developed or evolved?

KI: Well, I think the sculptural stuff really evolved out of Rainey's background. She started thinking that way – let's extend the space into the museum.

JP: Oh, so that wasn't part of the concept from the beginning?

KI: No. Well, we knew we were going to have a station, we were going to mirror the station within the game, but we hadn't started to think how is it going to – well, that sort of rolled out of it, and once she got the ball rolling, it was like –

RS: "We could do this, and do that!" If we had a chance to do this show again with more money, we could really build so many more – it would be really cool to have job objects. I was thinking we could set up a pool table in the gallery, which is for Fun, and the whole idea that now the humans are playing pool in the gallery, like *The Sims* play pool for Fun greening. To start to look at the normal activity you do in your human physical life and map it to the game and have them happen in the same space and – it's again, it's that collision. That would be really fun. I definitely think that whole metaphor could be further and further extended into the idea that we're thinking about for our next piece, which is bringing the game back out to the world. What happens when it goes through all those layers of translation back and forth?

JP: The next thing you want to do – bring the game out into the world – is also based around *The Sims*?

RS: Not necessarily *The Sims*.

KI: To distribute it and create that experience we were thinking of hand-helds or cellphones. And hooking it into the body. I think that's one of the intriguing things you can start to think about, the feedback loop between game and the person's everyday experience and how there is so much territory there to explore. And if it was not tethered to a PC what would that be like?

RS: And also just playing with the layers of simulation that start to happen in a process like that. Like a game of Telephone, where does that end up back in physical space?

KI: And there are just the smallest things being done that way, but not really focusing on the experience *per se*. It's more like these goal-games or technology experiments where these companies are driving that stuff forward but not necessarily from an experiential point of view.

JP: To get back a little to the game itself, *The Sims Online* wasn't very commercially successful at first. It had a lot of criticism leveled against it because it was too open-ended – in many ways these are the very qualities that attracted this sort of project to it. But you had to describe to someone what the goal of the game is, or what's the point of being in the game, how would you? How would you extend that to what you're doing?

KI: That's a great question.

RS: I usually describe it as a life-simulation game, especially when I'm talking to people who have no concept of what it is. And I say, you get an avatar – which sometimes I have to explain

– and you have to make sure it gets fed and goes to sleep and goes to the bathroom, and it needs social time or it gets depressed, and you're in that space with other people, who are participating in the same way.

JP: Do people think that's fun?

RS: I think they're perplexed!

KI: I think of the game as an extension of chat space with a body that tethers you. It's chat space in the sense that you talk from all these different places, from place to place really easily. It's all text-driven. But because you have to maintain your avatar, and it has needs, it imposes social rhythms that have to do with physiological rhythms. So I think it's actually really cool. It's weird and I understand why it didn't do very well, but it's cool because it reminds you, you get intimate with people. Because they sleep in your house, they pee with you. [Laughter] You have to feed them! And these are very intimate social relations!

And actually we found a little nest of people we hooked up with in there who are very close. Not just close in that chat way, but close in the way of supporting one another that I think actually that game tapped into. I don't think it fits the normal Massively Multiplayer audience, and I don't think it fits the normal *Sims* audience, which was "I want to be God and manipulate all my little creatures". But it captured something really cool which a lot of people really enjoy.

And as far as how it affects our project – it can actually thwart our project because those biorhythms can get in the way.

JP: Like peeing at the artist's talk. [Earlier they had told me of an incident in which a Sim experienced incontinence during a lecture. What in physical space would have been an appalling and shocking moment was in *The Sims Online* a lively part of the whole performance.]

KI: Exactly!

RS: For example we had that random visitor yesterday while we were giving the tour, and feeling the need to be appropriately social and – was I rude? The fact that people can just show up unannounced, just walk into your house! Sleep in your bed!

KI: The weirdest thing was – one of my students came to visit. And we're talking, and all of a sudden he strips down to his pajamas and gets in bed in game. And I had a total teacher moment! "Oh my god, that's my student!" [Laughter] I felt really – just – stunned. And he kept talking from the bed, and I hadn't realized that you could keep talking while your Sim was in bed, and he had a suit and a Mohawk, and I was just like – okay, this is freaking me out.

JP: Sounds like you're mapping yourself closely to your avatar. You're just YOU in the game.

KI: Yes.

JP: Rainey, how do you feel?

RS: Yeah, I'm pretty much me.

KI: But you feel more free to be silly more than I do.

RS: But I'm sort of like that in life!

KI: Mmm, I don't know, cage-dancing? I've never seen you do that in life!

RS: Well, I haven't had the opportunity. I don't have a cage in my house. [Laughter]

But I've had some very funny moments. Like when we were building the second space. I spent the whole afternoon working on it, and I had to go get some social greening. Because your character can't be alone forever. I can't remember where I went, but somewhere open, and I ended up having a long conversation with this guy. We talked about our real life ages – he was nineteen and I was thirty-nine – and we started talking about, what's her name, Demi Moore and her new squeeze, twenty years younger than she is, [Laughter] and he even wanted to meet me in real life! And at the time I was playing at my boyfriend's house and I said, "Well, I'm at my boyfriend's now" and he said, "You should dump him!" And it was such a – I mean, I was totally me – and I almost felt like – we were smooching – I mean, our Sims were getting down and I felt like I was cheating on my boyfriend! [Laughter] It was so weird.

KI: See, that's what I mean. She feels more free to explore.

JP: This idea of identity is so interesting to me. You mentioned that many of the artists submitting work to the *SimGallery* don't want to be identified with real names. There's an unspoken rule about that in some online cultures, it's slightly rude to ask personal questions about real life.

RS: I ask those questions all the time about people's real lives. I guess because I'm fascinated. Like Mia Mau, the woman who did those contemporary artists' pieces we showed you the other day – we were chatting the other day, and she works in the film industry – or she says she does –

KI: Right, I know! That's the thing. But if you think about it, it's no different from crafting a persona as a public figure at all. How people pick a –

RS: – a story.

KI: You go to a conference and you present yourself a certain way. How close is that persona to yourself? Is there any difference and where is that difference?

[The final questions were discussed in a follow-up e-mail.]

JP: And, similarly, what exactly is the difference between the installation at the physical space and that in the virtual? What are the boundaries there? How are people absorbing art differently?

KI: The two parallels between the physical and virtual space are: (1) we've recreated the architecture of YB pretty closely within the game constraints. (2) the station for our art piece that is in the real-world gallery is recreated in the *The Sims Online* gallery.

But that's where the similarity ends.

In the *The Sims Online* gallery, we have installed Sim art in all the main gallery spaces as well as outdoors. We also created living spaces for Sims where the real-world museum has storage and office spaces.

In the real-world Yerba Buena, we have the main station with the two PCs where you can log into the game, and the clocks showing Sim time and real-world time. And then we also are installing signs around the museum showing the greening value of objects (such as toilets or benches). And there will be a sculpture in the bathrooms. If you step on a pad that we've installed, this will trigger the sounds of a Sim skilling charisma (Sims do this in the game by standing and talking in front of a mirror). The idea of these other interventions in the physical gallery is to invoke the feeling of being in the game for people (greening, skilling) and to get them thinking about their bodies and their experience of the art and how/if/when this maps to the experience of art and of museum-going in general in the game.

So far as absorbing art, personally I think of physical museum-going as similar to church – people act as if they are in a sacred space – reverent and cautious. Though it is a rich visual experience, touching is usually taboo and so people approach even interactive pieces very cautiously. In the game, like we were saying earlier, there's a different set of norms – folks feel free to wander and use other people's stuff, and so they quickly investigate and interact with anything they see that isn't "tied down". As in a physical museum, they read the signage to see what a piece is about, but they also interact much more freely. I'm imagining this will be the case even for museum visitors to YB, but it will be interesting to see how much of the physical art-viewing culture and behaviors linger in their in-game behavior.

RI: I think Katherine covered this pretty well. As for "how" people will be absorbing the art differently – the public knows how to function in a physical gallery space – they know how to move their bodies through space and what is socially acceptable public behavior. Within the *SimGallery* many patrons will be confronted not only by works that don't fit their preconceived ideas about art but also faced with learning how to move their digital bodies/avatars and navigate through an unfamiliar system. They will be forced to explore/create a new language of viewing.

JP: *The Sims* and *The Sims Online* are games of simulation. Is there such a thing as simulated art?

KI: Phew. That's a stumper. There's Walter Benjamin's whole argument about how reproduction changes the nature of the artifact... the art in *The Sims Online* that our artists have created, as it is assembled, could be reassembled in an identical fashion at a later time, and will be viewed from myriad monitors with subtly different color adjustment... maybe we have simulated an art gallery but one of the neat things about the piece is that the art in our simulated gallery is "real" *The Sims Online* art, responding to and evolving out of that world and its concerns and constraints. Maybe you can try to simulate art but you often end up creating the real danged thing?

RS: I think the piece does bring this idea full circle. Take the objects included (shipped) in the game world such as the "Mondrian" painting. Yes, initially they are simulations/copies but once an Artist such as Paul Neruda uses them as part as a sim installation/assemblage they once again reenter the world of "real art". This is just a more specific example of what Katherine was saying. I guess in this case *Sim*ulation ends up activating and giving the power back to the work as opposed to diluting it.

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THE EVOLUTION OF A GBA ARTIST

Paul Catanese

I had not set out to create artwork by appropriating the technology of videogames. My use of the Game Boy Advance (GBA) as a framework for artistic expression evolved as an almost incidental result of an experience I had with a single-channel video installation I created in 2000 entitled *Come Hither*. This installation incorporated a short video loop of a beckoning finger displayed on a 3" LCD screen – an intimate format that forced the viewer to come within inches of the screen to experience the work one on one. While the realization of this project accomplished what I had hoped, the technical solution was far from adequate. In order to keep the video loop in constant motion I was required to rig a series of long cables that snaked through walls and over ceilings leading to remote VCR or DVD decks that only ensured a troublesome, laborious and inflexible installation. I came away from that piece with a question: can I create a compact device without any moving parts that can play short loops of video on a relatively small, flat screen? The best case would be a simple, self-contained unit that could be installed consistently and with a minimum of destruction to the gallery. This quest was met with many helpful and inventive suggestions, but it was increasingly obvious at the time that almost all of the solutions would require me to become an engineer to solve.

The answer came months later in an unrelated conversation. A close friend and game developer told me that he was creating custom videogames for the GBA without a licensed

Figure 1: Super Ichthyologist Advance (2003).

development kit. Since I have some experience with game development from a professional standpoint, the implications of this were not opaque. As we discussed some of the difficulties of developing for the GBA it became clear that this device could potentially provide an answer to the technical issues raised in *Come Hither*. Clearly, a pre-existing and professionally engineered solution would be more stable than any device I might create on my own. The widespread availability and relatively inexpensive cost per unit also factored in as strengths in favor of experimenting with the device. Additionally, the fact that home-brew game developers had already reverse-engineered the device and were freely distributing development kits meant that I could begin exploring the artistic capacities in a tangible way in a matter of days, rather than months. I felt that the most difficult barriers that might stop me were out of the way. As with many experiments, this did not turn out to be entirely true, but I had already decided that it was worth pursuing to see what turned up.

At the time, I had several aquariums in my studio where I recorded the creatures with web-cams, listened to the sound of the tanks and generally pondered the world inside the glass. Aquatic creatures have long been a source of inspiration to me: the alien forms, vacant or invisible facial expressions imply internal dialogues, imaginary cultures and mythologies that percolate within my work. From my observations and experiments arose the interest to create virtual fish tanks. Not simulations of aquariums, but enclosures that housed trapped fish or at least their lingering digital ghosts. The installation that resulted from these explorations became Super Ichthyologist Advance. Drawn to parallels with the collection of Pokémon, I felt that the device itself provided interesting associations – although I have since been looking for ways to distance my ideas from the GBA as purely a game device. In practice, the GBA offers a flexible solution to the technical issues raised in *Come Hither*, evidenced by *Super Ichthyologist Advance*, a flexible installation that can be set up in under ten minutes, regardless of venue.

In addition to sparking new areas of personal exploration, creating and exhibiting *Super Ichthyologist Advance* brought into focus for me several emerging artistic movements utilizing videogame aesthetics, technology and culture as a jumping off point for creative discourse. The Gameboy Advance is just one device in a vast sea of gaming appliances that litter living rooms, dormitories and backpacks. Whether home consoles or portable devices, these appliances hold an iconic status to a generation of game players. Perhaps for this reason alone, there are a growing number of artists, researchers and experimentalists who are reinventing the conceptual boundaries for which these devices were first envisioned. Many are using the language, aesthetics and technology of videogames to critique popular culture. Others have used them to create musical instruments, audio-visual noise generators or used the aesthetics of videogame culture as a jumping-off point for reflection within completely unrelated media forms.

I myself became interested in the idea of approaching game appliances in a state pre-literate of the aesthetic and cultural baggage of which they are commonly associated. This approach toward the subject matter is not mirrored in the other movements mentioned, where the aesthetics and culture of videogames are often critiqued or commented upon. For me, the appropriation of technology is about rethinking its use, creating hybrids that are not so easily contained, explained or pigeonholed. This is precisely what is attractive about working on

hybrids to me: they defy classification and must be met on their own terms. Without a lexicon or prior conceptual framework to draw upon, the ideas must hold themselves up all on their own.

There are critical issues raised by this approach toward rethinking the use for a technology so heavily burdened by itself. In contrast to *Come Hither*, where the device is a neutral vessel for my ideas that implies none of the conceptual baggage from its previous existence, the use of the GBA in *Super Ichthyologist Advance* is a different story. One idea kicked about involved reducing down to the essential electronics and building custom housing that would not appear to be a GBA at first glance – but the disembodied device would still show the inescapable Nintendo logo when starting up. Therefore I find myself at odds with my own purposes: to approach the game appliance in a state pre-literate of games themselves, using a device that inherently references games.

Intrinsic to any game appliance is the ability to accept and respond to user input, an aspect of the GBA that I had not considered exploring in *Super Ichthyologist Advance*. After gaining experience working with the GBA for displaying short video loops it became obvious that the inherent interactive aspects of the device were equally accessible on a technical level. What began as a solution for multi-channel video installations has grown into a wellspring of inspiration whereupon I find myself imagining galleries that fit in your pocket, personal hand-held theatres, digital Cornell boxes and electronic books imbued with the intimacy of Chinese scroll paintings.

From *Fictional Videogame Stills* to *Time Travelling with Rosalind Brodsky* 1991–2005

Suzanne Treister

From the mid to late 1980s I spent several nights a week hanging out in amusement arcades in London's Soho with my boyfriend who was hooked on videogames. Over time, waiting around for him to finish so we could go and eat or see a film, I started to think about the games, their structures, their objectives, their themes, their addictiveness. I started to consider their cultural subtexts, antecedents, the effect they may have on society and how they might develop and connect to other mechanisms, developments and fantasies or projections of the future.

At the time I was a painter working with appropriated imagery from history and popular culture to describe hypothetical narratives, or possible ways of reading the world. An early series had used themes and imagery relating to the USSR/Russia whilst later works related to other geographies, referencing literature, art history, war and religion in the mapping of imaginary scenarios, intentionally open to interpretation by the viewer. On one level much of this work originated from a desire to negotiate my family history, specifically the issues and historical events surrounding the relocation of my father from Poland/France to the UK during WWII.

The art world context I was working in at the time was that of high postmodernism and much of my work was included in exhibitions which denied the possibility of subjectivity or narrativity, its strategies of re-presentation and appropriation deriving instead from, for example, Roland Barthes' ideas of the death of the author. Many artists were wary of working outside the framework of this and other postmodern theoretical discourses. This is obviously an oversimplification and also may say more about the critical writing of the time than the attitudes of individual artists who are far too numerous to mention in this essay. Most of

them seemed to be based either in London or New York, the Germans and Italians having been mostly thrown out with the demise of the new expressionist movement of the early 1980s and everyone else seemed to be in the category of "other", waiting in line for the effects of post-colonial theory, other more inclusive discourses and a new global paradigm.

My own relationship to all this theory was complex. Since my rebellious membership of a politically extreme youth group in the 1970s I had been wary of subscribing wholeheartedly to any ideology or doctrine, although much of this I found fascinating, especially that related to psychoanalysis and paranoias of the future. So although I found my work contextualized with much of this often illustrative theory driven work, I never felt comfortable within those parameters and would say so, feeling more at home with the work of artists who (I assume) wanted their work to also investigate the world more directly – in the UK, artists such as Susan Hiller and Mark Wallinger, for example, who seemed to be able to see outside of the box.

By the end of 1987 my paintings had begun to develop a more repetitive visual structure, images such as book spines, candles, metal bolts and fluorescent lights were repeated in rows, blocks or mazes, housing other images or scenes. These works sometimes referenced ludic structures as ways of mapping space and encouraging the viewer's interaction in a psychological sense.

Given the nature of my painting practice it felt natural for me to pick up on a new cultural development such as videogames as reference material for my work and in turn for this work to begin to comment on the phenomenon of videogames themselves.

In 1988 I made the first videogame paintings, substituting the characters or forms found in arcade games for historical characters or living persons and everyday objects. *Koons Kiefer Videogame* (fig 1.) made in 1989 represented the US artist Jeff Koons as a kitsch toy horse about to enter the space of German artist Anselm Kiefer, depicted as a virtual forest of birch trees made up of end to end painted book spines. The inclusion of "Videogame" in the title aimed to provoke an anticipation of a goal oriented narrative at play, and in the case of the painting, and other related works to come, the development and outcome of this narrative was to be projected by the viewer.

The second painting in the series was titled, *Videogame for Primo Levi* (fig.2). Levi was an author I admired, writing about his survival of the Holocaust. I set up the structure of the painting/game as a maze of bolts and hinges through which clusters of green light bulbs had to make their way. The painting was stylistically overtly kitsch, but monumental in scale and reference, highlighting the problematics of artistic representations of history in relation to the corresponding horrific actuality of events, and in turn commenting on the anaesthetizing effect of the videogame narratives, which were based for the most part on the idea of continuous killing or destruction in the pursuit of an ultimate and singular goal.

Over the next couple of years I continued to develop these works which became more abstracted and more often used objects rather than figures to investigate and re-present a diverse range of propositions. Soon I was beginning to feel that the medium was not

Figure 1: *Koons Kiefer* Videogame *(1989).* © Suzanne Treister
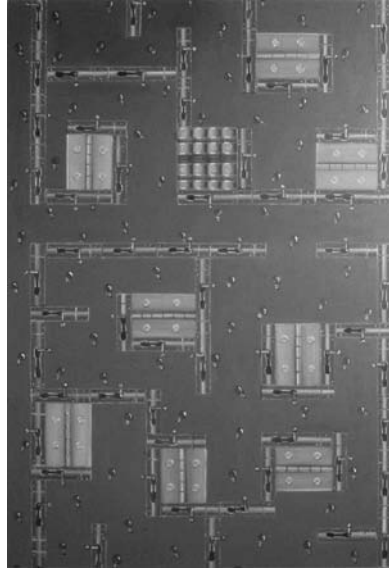
Figure 2: *Videogame for* Primo Levi *(1989).* © Suzanne Treister

appropriate for the language I was developing and that I needed to experiment working directly with the medium of the games themselves, i.e. the computer, rather than one burdened with the entire history of art, or more specifically with the baggage of painting. This was not an easy decision to make, but a necessary and exciting risk I felt at the time.

One Saturday morning in 1991 while I was halfway through reading William Gibson's *Neuromancer*, I finally made up my mind and rushed into town, to the cut-price electronic shops of Tottenham Court Road to buy an Amiga computer. It came with no internal hard drive and half a megabyte of RAM.

Over the following six months I made a series of fictional videogame stills using Deluxe Paint II software. They were similar to the recent paintings but now incorporated digital effects, text and inevitably resembled far more closely the games themselves.

Below is a list of titles of the early Amiga works:

Are you Dreaming?
Dream Monster. (fig.3)
Easyworld 5.
Examine the Evidence.
Have you been sentenced to a fate worse than death? (fig.4)
You have reached the Gates of Wisdom – Tell us what you have seen. (fig.5)
Incidents reported.
Do you know?
Lost in Space.
Blinded by the Text.

Monster Visions/Song Titles.
Identify the Murder Weapon. (fig.6)
Mutant Territories-Grand Prix.
Quiz 2.
No Quiz.
Quiz – 10 Questions.

Some works contained only text instructions, e.g. in *Easyworld 5* in front of a royal blue curtain appeared the words:

> Determine your position on the screen and proceed at an even pace. So long as you know where you are you will be ok. Wait until you have decided where you want to go first. When you have made your decision move player 1 into a vacant box. Then the curtain will open slowly to reveal the object of your dreams. Wait for a few seconds and then press "EXIT". You will have arrived at the scene of a crime. Welcome to Easyworld 5.

Figure 3: Dream Monster *(1991).* © Suzanne Treister

Figure 4: Have you been sentenced to a fate worse than death? *(1991).* © Suzanne Treister

Figure 5: You have reached the Gates of Wisdom – Tell us what you have seen. © Suzanne Treister
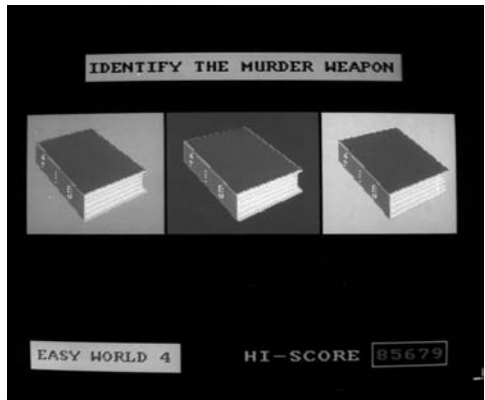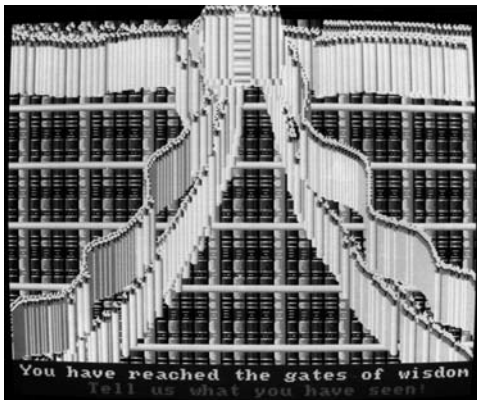
Figure 6: Identify the Murder Weapon. © Suzanne Treister

Text was able to enter the works in an organic sense, in that the computer screen was a natural site of text; word processing, text messages, programming. All these manifest text on the screen and I could play on this directly in the works whilst intimating broader subtextual narratives and readings.

I photographed these early Amiga works straight from the screen, the effect of the photographs perfectly reproducing the highly pixilated, raised needlepoint effect of the Amiga screen image. Conceptually this means of presentation was appropriate in that it made it seem like I had gone into a videogame arcade and photographed the games there, lending authenticity to the fictions.

I showed this series of photographs in a solo show at the Edward Totah Gallery in London in 1992, printed up as 20″ x 24″ cibachromes mounted on aluminium, floating out from the wall in a line running around the whole of one floor of the gallery. The floppy discs I had stored the works on became corrupted a few years later but scans of the photographs are online at http://ensemble.va.com.au/Treister/Ampages/Amenu.html

On the other floor of the gallery, I also showed a series of paintings I had made after spending six months solely on the computer. The transition back and forwards to painting had been extremely stressful but necessary for my practice. I needed to see what implications the transition to digital media would have on my approach to painting. The main issues were the increased speed of working on a computer, especially in duplicating repeat images, which had made the laboriousness of the painting process feel ever more redundant. The other issue was output, I was used to making paintings on a large scale which had an automatic (subjective of course) authority based on their art historical lineage, whilst the Amiga works were small and more graphic looking. Although this made sense in terms of their referencing the videogame console screen it reduced their sense of presence on the wall which is often a quality valued by painters and a hard thing to face the possibility of losing when switching media.

I decided to just go with the flow, do whatever I felt like and these new works marked a radical shift away from my previous paintings. Having enjoyed working with text in the Amiga works I decided to explore different ways of working with painted text, utilizing paint's inherent potential rather than worrying about its limitations. This resulted in a series of large works of composed phrases similar to those I had written for the computer works but rendered mostly in expressive brushstrokes calling upon a wide variety of typographical styles and cultural references. The background to the texts was either monochrome flat colour or a hybrid of textured abstract repeated marks, somewhere between Jasper Johns' criss-crosses and the kind of effect you could get on the computer in Deluxe Paint II if you drew with a "brush" made of a small cropped pixellated area from an image.

There was a mixed audience reaction to the show. Feedback from the gallery suggested that art students were flocking in droves and very excited by the new digital videogame works, as were people from the music industry, whereas older generations seemed unsure how to read them. No one seemed to know what to make of the new direction in my paintings, especially in relation to the computer work, except the British writer/curator Andrew Renton

who wrote a great review for *Flash Art* (May/June 1992), but over the following years I detected (maybe coincidentally) their influence in younger artists' work.

At the time of making these first digital works I felt quite alone. In 1991 when fellow artists came to my studio and I showed them for the first time my Amiga computer humming on the paint-stained workbench they would ask worriedly, "Of course you'll only be using it to work out your paintings, won't you?" I was severely warned by many artists of the dangers of being "taken over" by the machine, not that they had been near anything more complex than a fax machine to know, but we had all watched the movies.

I was conscious of where else this attitude was coming from; there seemed to be a couple of artists around who had made work on computers and it was either illustrative work or the early kind of 3-D special effects slick fractal-looking stuff, low on content as we knew it. But there was also this misconception that the computer actually made the work rather than the artist and this could be blamed on the term "computer generated" which seemed to have mysteriously entered the language.

I would explain that I'd be going in there armed with a knowledge of art, art history and the experience of my own art practice, I wouldn't be getting seduced by the gimmickry and be using the slick effects programmed in by software designers. The idea was to engage with technology to talk about the here and now, where we were at, where we were going and in doing so not forget where we've been, so history and literature and ideas and all these things would of course be incorporated into the new language to become a commentary both on the future and on the past.

I wasn't particularly seduced by videogames or computers at the time, but I felt I had to deal with them as they were not going to go away. I had been, however, since childhood, seduced by science fiction, from the British TV series *Doctor Who*, *The Tomorrow People*, *Adam Adamant Lives*, to the writing of George Orwell, H. G. Wells and J. G. Ballard. These, along with writers who interested me several years later, for example, Bulgakov, Bassani, Umberto Eco, Borges, Bruno Schulz and William Gibson, plus my interest in psychoanalytic theory and obsession with the Holocaust and Eastern Europe, all these I would say in one way or another, however oblique, contributed to my move into the new media world, and within that, more explicitly, to a belief in the idea that narrativity and "reality" were becoming fluid and mutable within these new technologies and to a suspicion that somehow the "interactive" videogame was an early embodiment of a whole new paradigm which needed to be interrogated.

From the time of my first involvement in videogames – from 1988, until 1992 – I was not aware of any other artists using them as a medium or as source material, nor did there seem to be any interest in the subject from within academia, although this changed abruptly a few years later alongside the expansion of the cultural studies industry. There was also, at the time, no "new media" art scene in the UK to speak of; in London the notion of using computers to make art was considered with disdain and even currently the term new media often translates solely as video. Now, at the time of writing, the Arts Council of England has a new media funding board and has recently produced a book, just at a time when

"mainstream" artists have begun (often oblivious to politicized new media discourses) to incorporate all forms of technology into their hybrid practices, merging the distinction between fields and rendering the category in many ways redundant.

It wasn't until I moved, for personal reasons, to Adelaide in South Australia in early 1992 that I came upon a community of artists engaged in digital media: Francesca da Rimini, Julianne Pierce, Josie Starrs and Virginia Barratt of "VNS Matrix", who revolved within the orbit of ANAT (the Australian Network of Art and Technology) which had been set up in 1984 by da Rimini under the umbrella of Adelaide's Experimental Art Foundation. These artists were engaged in a form of techno gender war using accusatory phrases in their work such as *Big Daddy Mainframe* in attempts to subvert the male-dominated technosphere and the boysy shoot-em-up mentality of videogames. Although I didn't share the overtly feminist focus of this group I was encouraged by their energy and drive and by the realization that Australia was way ahead of the UK in the field. There was already a discourse going on from Adelaide to Sydney and all around the country with workshops set up by ANAT twice a year training artists in new skills. Reasons for this may have been partly due to the distance/exclusion factor of being an artist in Australia but would also have been encouraged by the combination of a lack of art market and highly developed alternative culture in Adelaide, aided by forward thinking attitudes and processes of constant reinvention prevalent in the country at the time.

Throughout my first six months in Australia I continued working largely on text paintings as I had no computer access and also developed a collaborative project (a fictional detective agency) with local artists and writers. In late 1992 I returned to London for three months where I produced a series of paintings describing a route though a virtual castle. I also worked on a new Amiga-based series which presented stills from a single imaginary videogame. This piece played on the phenomenon of computer system messages counterpoised with the cultural fear/fantasy of a technological future paradise. Individual texts read in sequential order:

Would you recognise a Virtual Paradise? (fig.7)
Not enough Memory for Operation (fig.8)
Presume Virtual Breakdown
You have entered a Virtual Wilderness
Software Failure...
Error finding Question
No Message – Proceed

Between 1993 and 1994 in Adelaide was spent largely working on an extensive series of fictional software boxes, each cardboard box and disc label painted to describe an imaginary game or piece of software where various things may happen, where a whole range of virtual experiences could be possible. (fig.9) These can be seen online at: http://ensemble.va.com.au/Treister/paintpages/Software1.html

On my regular return trips to the UK, I noticed the occasional development in the field, in particular the advent in 1993 of *Mute* magazine (http://www.metamute.com) founded by
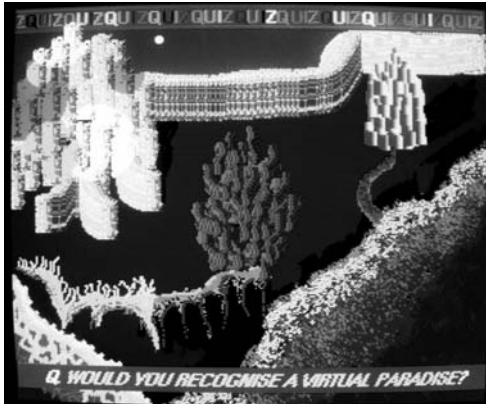
Figure 7: Would you recognise a Virtual Paradise? *(1992).* © Suzanne Treister

Figure 8: Not enough Memory for Operation *(1992).* © Suzanne Treister

Figure 9: Fictional software series *(1993).* © Suzanne Treister

Simon Worthington and Pauline van Mourik Broekman, whose highly engaged relationship with digital media and later on with the politics of the net was on the front line alongside international cultural developments in the area, As with many new media-based organizations the move into politics by the mid 1990s went hand in hand with the expansion of the Internet and a disappointment for the most part in the art produced in the name of technology, although the rhetoric remained important.

In terms of videogame–based work in the UK, later on in the 1990s the driving-game works of Julian Opie gained some attention in the mainstream art world and an ex-student of mine, John Paul Bichard, artist and videogames writer for *Mute*, began to work with the medium. In 1996 Bichard invited me, along with half a dozen UK artists, to contribute to a videogame style CD-ROM, *On a Clear Day*, which was largely produced by himself as most of the participants had no computer experience but were selected for their work and ideas. It featured a navigable landscape where one entered each artist's zone through, for example, a helicopter (Fiona Banner), a caravan (Georgina Starr), a forest (Clio Barnard), a barn (Adam Chodzko, Matthew Higgs and Keith Tyson), a road sign (Peter Anderson) and in my case a castle. The CD-ROM, housed in an arcade-sized plain MDF videogame console, toured from the bar of the ICA in London to regional venues in Cambridge, Southampton, Colchester, Southend, Oldham and Middlesborough.

A year earlier in 1995 in Australia I had had the opportunity to make my first Web project. It consisted of a tour through a series of interconnected rooms in a distorted and paranoid version of King Ludwig's castle, Schloss Neuschwanstein, in Bavaria. In the same year I began working on a new project, currently ongoing, entitled *Time Travelling with Rosalind Brodsky*. This project had its origin in the castle in this website, in that Brodsky – who could be considered as an alter ego, avatar or heteronymic identity – had made her home in Schloss Neuschwanstein, in 2005.

The *Brodsky* project, preceded by imaginary videogame stills, works negotiating ideas of a technological paradise, hypothetical software packages suggesting possible functions and paintings describing scenes through virtual spaces and scenarios, went on to inhabit those spaces, to create a subject and histories inside them.

Rosalind Brodsky, with whom I share Anglo/Eastern European/Jewish roots, was born in London in 1970 and survived until 2058. Her first "delusional" experience of time travel supposedly occurred while she was in the middle of a session with the pyschoanalyst Julia Kristeva in Paris, at the moment she noticed the similarity of Kristeva's face to the photographic portrait of her Polish-Jewish grandmother who had been murdered in the Holocaust. By 1995 Brodsky is a delusional time traveller who believes herself to be working in London at the Institute of Militronics and Advanced Time Interventionality (IMATI) in the twenty-first century. IMATI is a "controversial" government-funded organization which develops equipment and carries out time travel research projects whose results are for use primarily by the military and other government research organizations. Established in 2004 its mission is to carry out interventional historical, anthropological and scientific research through means of time travel. Working with virtual technologies which render the users' bodies invisible in their own time and space, the institute develops virtual simulations of key

moments in history. Researchers at the institute then carry out simulated interventions/ experiments within these virtual times/worlds. In academic circles there is controversy as to the validity of this form of "anthropological" research, but there are many who suspect that IMATI has actually found the secret of authentic time travel.

I began in 1995 by constructing three of Brodsky's time travel costumes (to visit respectively the Russian Revolution, the 1960s and the Holocaust) (fig.10) and a group of time travel attaché cases. In 1996 the work expanded onto a website, http://ensemble.va.com.au/ tableau/suzy/, where I developed an extensive time travelling diary which documented many of Brodsky's journeys.[1]

This is a text about a semi-autobiographical film supposedly made by Rosalind Brodsky, about an incident at the institute.

In 2017 the Institute celebrated the centenary of the Russian Revolution by sending all its employees, including Brodsky, to a virtual simulation of Moscow in the year 1917. Due to overloading of the equipment there is a technological dysfunction and Brodsky's body rematerialises in the year 1995. Her body, aged forty seven, walks around in a seemingly trance like state, passing easily through cars, people and architecture within a certain area of London. Brodsky is unaware of being in London as her eyes are reading digital information which tells her she is moving around a simulation of Moscow in the year 1917. This drifting body is inevitably sighted and photographed by journalists and members of the public, one of whom turns out to be Rosalind Brodsky aged twenty five. Brodsky stalks this/her own body and maps the paths taken, noting abrupt turns, the mounting and descending of stairs where there are none, the places of interaction with invisible others, the "opening" of doors, the boundaries of the area traversed. Brodsky is in no doubt that there is a parallel space being negotiated. She constructs a map of this parallel space and after much research identifies it as the space within the Kremlin at the time of the Russian Revolution.

From 1997 to 1999 I developed, in line with the developing games industry and with major funding from the Australian Film Commission, an interactive CD-ROM which in many ways echoed the structure of quest games such as *Myst*. The CD-ROM journey takes the form of a tour organized by IMATI in memory of Brodsky's contribution to time travel research. In the introduction to the CD-ROM there is an announcement of a demonstration of armed academics taking place outside the institute, threatening the building, staff and visitors within. You the player now risk remaining in suspended time travel for the rest of your life. The aim is to survive by navigating the space of Rosalind Brodsky, with escape eventually only possible via her satellite spy probe from where a shuttle transports you back to Earth, to an underground home in the mining town of Coober Pedy in South Australia, in the present day.

The tour uncovers biographical and historical data focussing on much of her life, work and personal interests. During her lifetime Brodsky carried out major research in areas of film, TV, music, architecture, genetics, the history of Eastern Europe, the Holocaust (fig.11), the 1960s and the Russian Revolution as well as contributing to the research and design of a range of time travel equipment. From Brodsky's study, concealed behind a memorial wall,

you are able to travel to her home in Bavaria, journey from there to her satellite in outer space (constructed from Christo's wrapped Reichstag teleported by IMATI from Berlin in 1995), access her electronic time travelling diary, her feature vibrators and discover the time travelling costumes and attaché cases in her wardrobe. The wardrobe conceals the entrance to a lift which takes you down to the Clinics (fig.12). The Clinics is an underground laboratory where stressed time travellers, due to the decline of psychoanalysis in the twenty-first

Time Travelling with Rosalind Brodsky. © Suzanne Treister

Figure 10. © Suzanne Treister

Figure 11. © Suzanne Treister

Figure 12. © Suzanne Treister

Figure 13. © Suzanne Treister

century, can travel to the homes of Jung, Klein, Lacan and Kristeva for analysis in the twentieth century. Brodsky's case histories with these analysts are documented as are recordings of her time travelling cookery TV show and the music videos of her band (fig.13), who were popular in Eastern Europe in the 2030s.

I wrote at the time, "This work attempts to negotiate issues of insanity and humour, fetishism and sexuality, identity and technology, in relation to personal histories/fictions and histories of the twentieth century...Brodsky fetishizes history. She becomes a necrophiliac invader of spaces containing the deaths of her ancestors, through the privileged violence of technology."

In 1995 I had visited Los Angeles for the first time. I stayed with friends for a week and barely left the house. I spent almost the whole time killing and escaping from the Nazis and their dogs in the videogame *Castle Wolfenstein*.

The CD-ROM was completed and published with a book in 1999.[2] After the launch at the Freud Museum in London I began work on a video called *Sightings* in which people I knew around the world imagined/revealed their meeting and interaction with the fictional Brodsky. I also started developing the range of IMATI time travel equipment and worked on a series of Brodsky's delusional watercolours and stamp designs. Various other projects and installations developed after the CD-ROM and these led me to realize what was still missing from the project.

In 2001 I began working on the first of a series of projects documenting and displaying, in installation, Web and DVD form, the IMATI Time Travel Research Projects which had supposedly been carried out by Brodsky at the institute.[3]

This first project entitled *Golem/Loew – Artificial Life* (fig.14) explores the myth of the Golem, an artificial man made out of clay, created in sixteenth-century Prague by Rabbi Yehuda Loew (1520–1609). Tracing the descendants of the Loew dynasty alongside manifestations of the Golem name/legend through history to the present day and into the future, the intention of this project is to test whether an ability and/or desire to create artificial life is a function carried in the DNA.

The second IMATI time travel research project was titled *Operation Swanlake*.

Utilizing the harnessed energy of a black hole located in the constellation Cygnus (the Swan), *Operation Swanlake* began in 2028 as an attempt to develop a language capable of communicating with the universe. Hypothesizing a connection, sonic components were developed using retrieved recordings of swans from specific historical periods and global locations and from first performances of Wagner's *Lohengrin* at the Hoftheatre, Weimar, in 1850 and Tchaikovsky's *Swan Lake* in 1895 at the Mariinsky Theatre, St Petersburg. Renamed the Kirov Theatre in 1935, after Sergei Kirov, the murdered rival of Stalin, the name was also given to a series of Soviet missile cruisers. In 2028 the last of these ships, the Pyotr Velikiy Kirov Class Project 1144.2 Heavy Missile Cruiser, was decommissioned and purchased by IMATI as spare parts for the sonic missile Swanlake which in 2029 was

Figure 14: Golem/Loew. © Suzanne Treister

constructed at Cape Canaveral, Florida. In November of the same year Swanlake transmitted a series of complex audio frequencies into outer space. (fig.15)

Often people ask me if I have a problem living with two identities. This always surprises me as the Brodsky project is just a means of expressing how I feel and think about the world, through stories, just like a writer would, and using narrative to explore new ideas and possible ways of looking at the world. Ultimately I see it as commentary, in the sense that first there was the law and then there was commentary, in the biblical sense. Mostly I don't see it as art at all, or videogames.

In 2004 Jean Wainwright wrote of *Operation Swanlake*:

Operation Swanlake is a multilayered installation – its references lie in the extraordinary relationship between Treister's past work such

Figure 15: Operation Swanlake. © Suzanne Treister

as *No Other Symptoms: Time Travelling with Rosalind Brodsky* (Treister's alter-ego) looped with her desire to unravel contemporary digital culture with a layered visual marriage between various referents both past and present. In our hyper-digital age different worlds can clash semantically and it seems to be that this is the model that fits Treister's work: like following a complex computer game, Treister's fantasy trip challenges viewers, propelling them into associations which will take them as far as they are hypothetically prepared to travel.[4]

Notes

1. The early stages of the project were shown in the exhibition "Pretext Heteronyms" in 1995 (curated by Rear Window) in London at Clink St. Studios, at "Heteronymous" in Rome (curated by Achille Bonito Oliva and Anna Maria Nassisi) at San Michele a Ripa and at the ICA in 1996 as part of the "ICA/Toshiba Art and Innovation Commission" exhibition. From 1997 onwards it was shown in various stages of completion at new media festivals around the world and upon completion as part of installations alongside more recent Brodsky projects in museums and galleries. In 2002 the entire project to date was shown at the 2002 Biennale of Sydney. Recent time travel research projects have been shown in London at Annely Juda Fine Art; Künstlerhaus Bethanien, Berlin; Gallery Skuc, Ljubljana; Magazin4 Vorarlberger Kunstverein, Künstlerhaus Palais Thurn & Taxis, Bregenz, Austria, as well as new media festivals in Germany, Russia and Brazil.
2. Treister, S., *No Other Symptoms - Time Travelling with Rosalind Brodsky*, 1st ed., London, Black Dog Publishing, 1999.
3. See: http://ensemble.va.com.au/tableau/suzy/TT_ResearchProjects/TTRP_menu.html for Web versions and further projects.
4. Jean Wainwright, Suzanne Treister, Annely Juda Fine Art, London. *Art Monthly* No 278 July-August 2004.

Virtual Retrofit (or What Makes Computer Gaming so Damn Racy?)

M. A. Greenstein

> We might remember that as soon as life began, the race has been an eliminating heat: eliminating for the predator to able to catch up with its prey the fastest; eliminating equally for human societies unable to speed up their production and distribution processes. In this race, in this savage competition, the adversary (the animal that is too slow) is not the only one to be eliminated. Bits of one's own body also go. *One loses weight*, for example, to be in shape; one slims down to improve reflexes, synapses. Only in so doing, one also eliminates natural territory by making it more "conductive", more streamlined. This is where INFRASTRUCTURES, such as the stadium, hippodrome, or aerodrome come in, *the real space of the race is held suddenly becoming a product of the real time of a route*.

Paul Virilio, The Art of the Motor[1]

Introduction

Recently, a student of mine exploring Italian Futurism relayed a hilarious point about Mussolini's pre-WWII obsession with removing pasta from the daily Italian diet. It seems the Italian military leader was not just concerned about the speed of trains, but about the habits of his culture that could in anyway impede its competitive edge in producing a technologically driven, social and political future. Whether the story is true or not, one can hardly argue with a common cosmopolitan traveller's fact: Linguini and tortellini remain on Italian menus far and wide and have hardly stopped Italian designers from competing in the hyperbolic global market of twenty-first-century culture.

While this essay is neither about diet nor Italian Futurism *per se*, it will consider the robust state of health that American modernist aesthetics of speed enjoys in propelling twenty-first-century artistic thinking into new futuristic arenas. In particular, we will concern ourselves with a spunky computer gaming critique put forth by two Los Angeles–based

artists who reconsider how bodies can and should move, especially bodies moving in the spatial dimension and frame of a computer game.

To address the artistic consideration of speed in computer game aesthetics, we need first to return to the subject of Italian Futurism, specifically Paul Virilio's previously noted remarks regarding the Futurist's dream of bodies energized by technology. Cautious to the point of paranoid where the histories of technology and society are concerned, Virilio reminds us that early on in the twentieth century, the body as an object was reconstituted, reconceptualized and revalued by speed. Focused upon the catastrophes that result from high- rather than low-tech processes, Virilio posits the aestheticizing of technologically induced movement as a case necessarily involving "absolute speed of microphysical transmission".[2] The human corporeal adaptation to high-tech tools, in other words, constitutes a competitive race against the movements of basic physical properties, namely, light and sound. Hardly the one to subject himself to the Futurist fever, Virilio zeroes in on an otherwise overlooked issue: In the dauntless effort to establish an absolute degree of movement in timespace, modern society insists upon rooting and cultivating its economic, political and aesthetic in a competitive spatio-temporal landscape, wherein the speed of racing necessarily involves a process of transmutation.

The 2003 computer video gaming piece *Mario's Furniture: A Mushkin-Barnet Game For Ages 2 To 200* resituates Virilio's argument in a site that ironically toys with our inherited, unchecked, ideological mandate on speed.[3] Conceived and produced in Los Angeles by artists Hillary Mushkin and S. E. Barnet, *Mario's Furniture* displays a large-screen video projection of two harried characters or "players" (the artists) engaged in a furious race against each other and a roving camera eye: Driven by dual contingencies of speed and spectacle, the players must shove and schlep domestic furniture – a long, low sofa, two butterfly chairs, a streamline coffee table, and two free-standing lamps – in an effort to form a "sitting down, conversational arrangement", all the while staying within the perspectival frame of a relentlessly panning camera. The domain in which the frenzied action takes place has all of the marks of an otherwise banal, clubroom space – a suffocating rectangular enclosure decorated with aging brown wood paneling and harsh fluorescent lighting.[4] As characters inhabiting in a virtual world, the two women don the ever ubiquitous, questionably androgynous, post-1960s uniform, namely, blue jeans, T-shirt and headscarf. "We're wearing that *schmata* headscarf to complete the less-than-perfect hostess look for prepping before the party", claim the artists. To the viewer of the videogame, it is clear that the tweaked hostess outfit is also well designed to capture beads of competitive sweat.

Less one thinks this is another case of S&M *kisakae* doll role play, Mario's off-screen gamers learn that points are assigned to the player whose movements stay well within the eye of the ever-changing camera angle. Each piece of furniture also tallies to particular points, e.g. moving the couch is worth 100 points, while the entire conversational arrangement racks up to a whopping 500. Anxiety and aggression prevail. The construct of a race insures that players's movements will appear quick, choppy and sudden. The artists exaggerate the kinesthetics by speeding up the digital time frame to simulate at once the technological gawkiness of early cinema and the youthful stages of digital movement programs. With antics so amped up as to infer a predicatable pratfall, one can only imagine
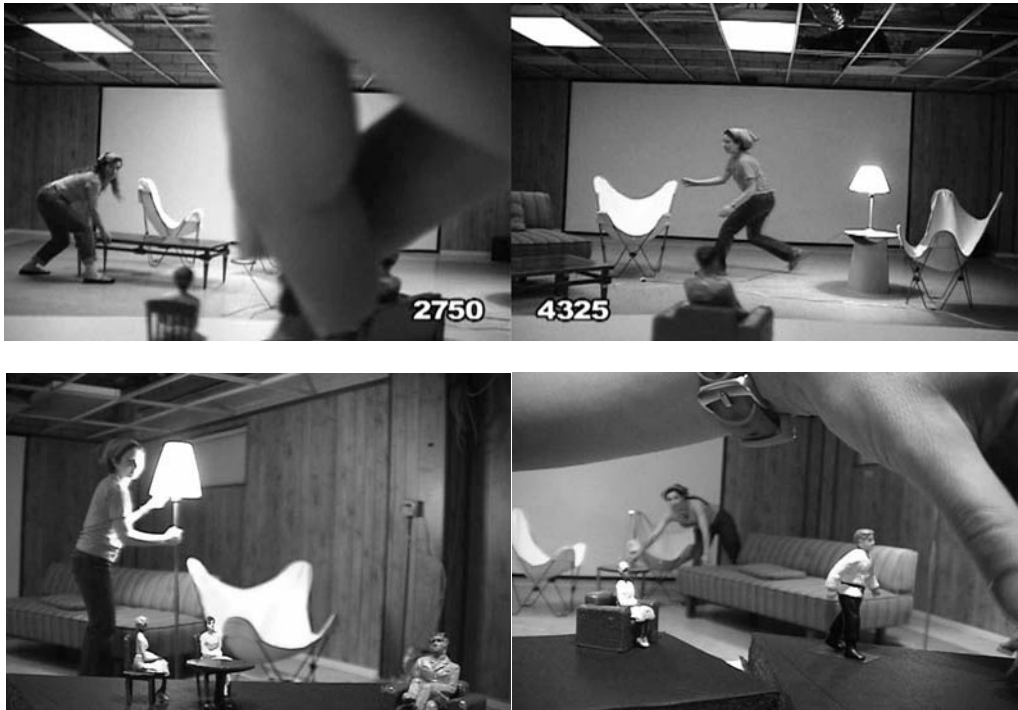
Mario's Furniture, *Hillary Mushkin and S. E. Barnet (2003).*

Mushkin and Barnet thinking as much about the filmic gestures of Chaplin, Keaton and Lloyd as the gestural qualities notable in the first generations of Nintendo and Atari.

Unlike most games that simulate the theatrical fourth wall of stage and audience separation, *Mario's Furniture* pushes its audience members to consider a Brechtian viewing experience: As off-screen gamers, the viewing audience is presented with two options: First, to inspect the video performance from a point of view that is reiterated by an on-screen viewer, who happens to be enacted by one of the competing players guiding the ambulant camera eye, and further accompanied by two seated miniature figurines; the second opportunity is to sit on, or rearrange the very furniture that is otherwise at the mercy of player competition going in the gaming space.

As a viable computer game, *Mario's Furniture* offers an "immersive" experience but departs from the market norm insofar as the gamers do not manipulate a joystick nor a computer keyboard to "work" the game. Instead, their point of view is determined, in part, by the random position they take in the purposely installed site-specific space, one which the artists Mushkin and Barnet regard as yet another virtual domain. In a moment of doubled spectatorship and doubled virtuality, *Mario's Furniture* manages to "transmute" into a "platform" that at once exploits the cinematic aesthetics of frame and speed, and gives room to overturning ontological presumptions germane to producing normative computer game narrative.

Absolute Speed, Modernist Style

It should not be hard then, to think of *Mario's Furniture* as a wayward child of the contemporary computer game industry that is said to be radically transforming the social behaviour and learning aptitudes of teenagers throughout the States (and one assumes, throughout the techno-consuming world.) A hip and economically powerful stimulus to the exploding field of entertainment media, computer gaming can easily torque the human central nervous to such a degree, that the future of hand/eye coordination catapults rapidly towards the posthuman.

Social queasiness over "the hyperactive man", as Virilio calls its, reminds some of us that the meter of technologically driven, posthuman speed was set early on by the rhythms of twentieth-century modern life: Plastics, automotive engines, bebop jazz, fast-food takeout, Superman and atomic military science all ushered in a social imaginary hypnotized to believe in objects that become subjects who move "faster than the speed of light".

As a twenty-first-century answer to speed and design culture, *Mario's Furniture* describes an off-the-wall gaming space that allows the artists to play out their conflicted attraction to the techno-inspired aesthetics of "So. Cal." modernist design, i.e., a late 1950s and 1960s southern California suburban sun worshipper's answer to retro-Bauhaus domestic decor. The interior palette is desert- and beach-hued, with domestic objects drenched in tonalities of orange, ochre, blue, white and brown. The corporeal frames and materials of the furniture all show the signs of freeway speeding attenuation, recording a necessity of survival in a market addicted to the fast-paced. Make no sci-fi mistake: In the modernist epoch, it is the tools and technologies that preside over the aesthetics of the "NOW". And they come with a (failed) promise: Simpler lines for utopian times.

Today, despite Victoria Postrel's call for aesthetic relativism, industrial and electronic codes of efficiency continue to model a less-is-more aesthetics for American middle-class domestic design.[5] From Breuer chair culture to Moholy-Nagy lighting concepts, we are witnessing a populist resuscitation of Bauhaus expanding modernity beyond the reaches of *Mario's Furniture*: We need only consider the impact of the lean, mean International style promoted by IKEA across the broad urban and suburban landscapes and governed on US cable TV by queer fashion police, to recognize the ethos of reinvented modernism for a cybernetic age. Hardly the likes of Gropius or the five hip TV culture-meisters who constitute "the queer eye for the straight guy", Barnet and Mushkin produce a dubious game of designer stylism, intending instead to undermine the boy logic (gay or straight) of virtual world constructions taken for granted by normative gaming markets.

Undermining, of course, is limited to taking place in a conceptual arts arena and this is where the style-conscious, LA parody on computer gaming competition jacks up gaming narrative and speed to a sardonic "hyper-real" notch in order to place art in the service of interrogating the history of computer game innovations. Thus, for two artists who spent the early part of their careers looking at the technological and narrative ways in which video has been deployed to unfold and complicate "meaning", Mushkin and Barnet regard *Mario's Furniture* as a refreshing opportunity to have a deep think about the old input output aesthetics of computer games, especially those like Atari that would have used a TV monitor

as a screening device. Now working in an era when computer game input media is output to digital media, the two artists use videogame imagery in a tongue-in-cheek manner, revealing at least some of the slippery moves made between film, video and computer modes of "input" and "transfer". And with these moves, the transmutation of the human body is thoroughly reduced to and enacted by means of code and harnessing the speed of light.

Frame the Image: The Camera Rules!

Accepting the status of the human as a mere "flickering signifier", to quote author N. Katherine Hayles, is to fail to reckon with the complexity of being an "embodied" human.[6] *Mario's Furniture* does not so much argue against the human-machine interface as it does question the unconscious gaze directed at the human, presumed by computer gaming camera angles. The artwork is not without apparent grounds for inquiry: Take a moment to surf any number of computer gaming "how-to" sites and one quickly sees a common axiom running through rudimentary protocols prescribed by the computer gaming trade: the camera angle is arbitrary. Narrative drives point of view.

Arbitrary? Hardly. If anything, *Mario's Furniture* is a testimony to the optical prejudice that pervades gaming narratives. The artists start by presuming a politics of representation and pictorial illusion and then collaboratively send up a silly yet deadpan challenge to adolescent themes of medieval combat or alien invasion: A race to decorate rather than to death.[7] The criticality and silliness extend as well to technical strategies exercised in the process of production. The artwork is the love child of two artists who share an affection for the era of old input/output aesthetics of computer videogames: *Mario's Furniture* does not appear on a sleek Sony Vaio or within a top-rated PDF frame, but instead materializes as a "virtual" image upon a large format screen, reminiscent of analog video (and cinematic) projection. Casting digital input/digital output technology inside a self-reflexive visual frame, Mushkin and Barnet cunningly jockey with the act of gazing as well as the historical presumptions that infect and determine input/output transference between film, video and digital formats. The result? A computer videogame that parades absolute subjectivity as forever non-arbitrary.

The subject of format drops the discussion of *Mario's Furniture* down into richer, more complex layers of considering how the artists manage to bring the subject of competitive speed, modern product design and narratives of female role playing upon the issue of spectatorship in the newest generation of computer gaming. By that I mean, for Barnet and Mushkin, the roving camera eye that directs our spectating opticality is a Big Brother eye, a modified panopticon that captures the totality of action in an absolutely determined space. Under the probing camera eye, humans perform for the machine, just as they do in "real time" World Cup football games or on the virtual playing field of *Madden NFL*. But in *Mario's Furniture*, the spectacle of competing players is not the only image that is revealed by the photograhic aperture: The previously noted toy figurines placed inside the camera frame complicate the real-time viewing experience by inferring a spectating audience: We see no WAVE, no panning picture of big bosomed cheerleaders leaping into full splits – just redundant, continuous shots of a Lilliputian deadlock gaze holding tight to the image of the battling hostesses charging throughout this limited gaming universe. Barnet and Mushkin concur: Even in computer gaming, the twenty-first-century fear of machine takeover is

amplified by the regime of photographic perspective. Subjectivity of gamer/art viewer is decidedly determined insofar as we are sceptically pushed to identify with the players and the miniatures that are placed inside the view of the continuously moving camera angle. Reflecting upon the broader technological implications of *Mario's Furniture*, we can now come to appreciate Virilio's prescient assessment of competitive territory, recognizing his small but eye-opening truth: Infrastructures for the race, no longer the real-time stadium nor the hippodrome but rather the real spatio-temporal virtuality delimited by electronic and photographic fields of light.

The Narrative of Competition

Despite its *Big Brother* inferences, *Mario's Furniture*'s slapstick premise relieves the gamer/viewer of thinking he or she has walked into a reality TV program focusing on digital surveillance. And yet, the work succinctly seizes upon the competitive genre of computer gaming entertainment engineered to set new records of financial gain for a now emerged entertainment industry. Hardly looking to join rank-and-file programming units saturated with hormone surging tweens, Barnet and Mushkin belong to a new generation of video artists who recognize the formidable and uncertain consequences of a culture economically and psychologically drunk on digital entertainment.[8] By appropriating the narrative motif of digital sports competition and exploiting retro modernist design aesthetics, the collaborative team presents a caricature of a gaming narrative that skews futuristic virtuosity and athleticism toward the feverous and clumsy performative plots that anchored the popular American TV program *I Love Lucy*.

Yes, with *Mario's Furniture* the two artists pay homage to the irrepressible characters Lucy and Ethel, who presented post-WWII American audiences with a distinctly idiosyncratic view of the entertaining housewife glorified in late 1950s, early 1960s American television and advertisement (and now, in 2004, by way of reruns). Reared within an intellectual environs rife with both cranky and celebratory assessments of Lucy and Ethel's female burlesque, Barnet and Mushkin emulate the riotous television duo, by offering a sweaty, down-to-earth view of laboring female competitors, struggling but succumbing to the inevitable failure of being unable to arrange the perfect, modernist conversational space. In a twenty-first-century videogame market that has capitalized on Sailor Moon's sudden corporeal transformations and Lara Croft's agile kick-butt approach to martial arts, Barnet and Mushkin's farcical enactment encroaches upon a virtual space otherwise filled with tits and ass, good-versus-evil fantasies imposed upon female simulacra.

Mocking the social imagination that gives birth to and bonds with normative values is the standard stuff of comic fodder. One should not be too surprised then to realize how difficult it is for the artists to leap quickly or even smoothly from uncomfortable thoughts on entrained gender role playing to those that detail the specificity of how human spatio-temporal perception in the modern age, necessarily conforms to calibrations of high-tech speed. And yet, by bringing the normative computer gaming narrative of competing characters under the rein of contemporary video art practice, Barnet and Mushkin succeed in exposing the marriage between a cultural ideology of speed and a cultural ideology that relegates the female to idealized service positions. With no intended reference to Donna Haraway's cyborg manifesto nor to the crazed Maria in Fritz Lang's

Metropolis, *Mario's Furniture* fills out the virtual fleshiness of a still ironic mythos assigning the female to the technological – only this time proving Virilio right: Technologies of speed forever dazzle us into thinking social or any other aspect of reality is constituted as a near breathless race.

Conclusion

Caught in the net of our current techno-imaginary, we come to *Mario's Furniture* programmed, if you will, to presume speed as necessarily functional and aesthetically guaranteed. And yet we and the artists know the Fascist consequences of turning functionality and design platforms into idealized ethical regimes. Thus, rather than indulge minimalist longing for streamline efficiency, Mushkin and Barnet lay bear their pathos, rendered in parody, before us. To enter into their virtual universe is to negotiate an unwieldy matrix of social and technological complexity that only bees and computation-crunching geeks might fathom. When speed defines the meter of life, racing rather than resting seems to count as a primary metaphor of survival in a society out of control.

Only a perverse sense of evolutionary biologics or Virilio's brand of paranoia fully accepts the above premise – a bet made by Barnet and Mushkin who push the perversity and paranoia into a zone of the ludicrous. And they do so with two questions in mind: Why, with so much information at our clicking fingertips, has no Web surfing gamer bothered to think outside the box, so to speak, of his or her visual protocol syntax? Why, as the 2004 Christmas season rolls around, do we once again see ads hawking computer games that transform reigning competitive sport and military narrative into algorithms of digital play? The artists know the answer and so do we: Our forms of play are not separate from our other forms of cultural and biological life. Speed and power, two kinesthetic expressions of military-corporate and electronic efficiency, stimulate the primal brain (and the economy) in ways that are seductive, addictive and, at worst (and at present), design the course of our own destruction.

This is the dark side of *Mario's Furniture*.

A lighter side of the video play (we are talking about complexity after all) implies that gaming could expand into stories of success and failure where no one is hurt, no one dies, no nation is destroyed, not even in the cosmological structures that manifest the virtual. Competition, when freed to roam in spaces unchecked by surveillance cameras and the eye of the State, could return to (supposed) halcyon days when sack races and pie baking were the ways in which young Americans developed and deflated their collective and individual egos. Those days are gone and, in their place, we find our children and ourselves plugged into Xbox platforms, fighting new Faustian demons while our artists are busy designing decorative space stations for the future.

Notes

1. Virilio, Paul (trans. Julie Rose) *The Art of the Motor*, The University of Minnesota Press, 1995, p. 10.
2. ibid.
3. For images of the installation see the following webpages: http://dma_d.occ.cccd.edu/ ~mushkin/; http://www.sebarnet.net.

4. The "actual" space in which the videoed performance activity took place was the stripped down, Mario's Furniture store now closed to business.
5. Postrel, Virginia, *The Substance of Style*, Harper Collins, 2003.
6. Hayles, N. Katherine, *How We Became Post Human*, The University of Chicago Press, 1999.
7. Here, too, with respect to video art history, Mushkin and Barnet put forth the computer game imagery as a rejoinder to the art protocols set by the self-consciously dour (Bill Viola) and weighty feminist gestures (Shirin Neshat) that dominated internationally recognized video installation produced in and shown throughout the 1990s.
8. Consider, for instance, the 2003 exhibition entitled "Killer Instinct", produced at the New Museum in NYC. The show focused upon artists who use computer game imagery as the basis of creative venture as well as social and economic critique.

Perspective Engines: An Interview with JODI

Francis Hunger

FH: After "net.art" and "hacktivism" in the last years there seems to appear some kind of new trend in digital art which is to work with ego-shooter modifications. The rotation of the different trends in the yet not established field of computer-based art seems to be pretty fast. Maybe you can describe a bit how you see yourself in the current situation.

JODI: Since two years most of these games come with an editor when you buy them commercially. I've read an article somewhere, where the games industry and the game makers explained that it was better business to include the audience in the creative process than to just release their finished games. They know that most of the public of these games are in general young boys and the boys just like to play with their toys. The industries know that a big part of the public more then just playing also likes to add to the game their own face or their own building or their own monster or their own car. So it does become normal that a game becomes modified.

When we made our modification five years ago we had a total different idea and reason to change the games. There were two games – the first production was the patch *SOD* for *Castle Wolfenstein* and during the next three years we worked on the twelve modifications of *Quake* which we named all together *Untitled Games*. What our interest in modifying the game was, was that we always worked in the style of abstraction. Games in general are the total opposite from that. They have a narrative and they are very figurative, for example, *Quake* monsters they are like caricatures. They are so figurative to have some dramatic impact on the audience – let's say, a screaming monster with a lot of fire and shooting beasts or meat or blood. So they are very explicit graphically and what we wanted to do was in general to erase the story and the figurative site of these games. The starting idea was to find very basic forms like just a line or a square, just black and white, and attach these forms to the behaviour of the code so that we would have a better view on how such a game is
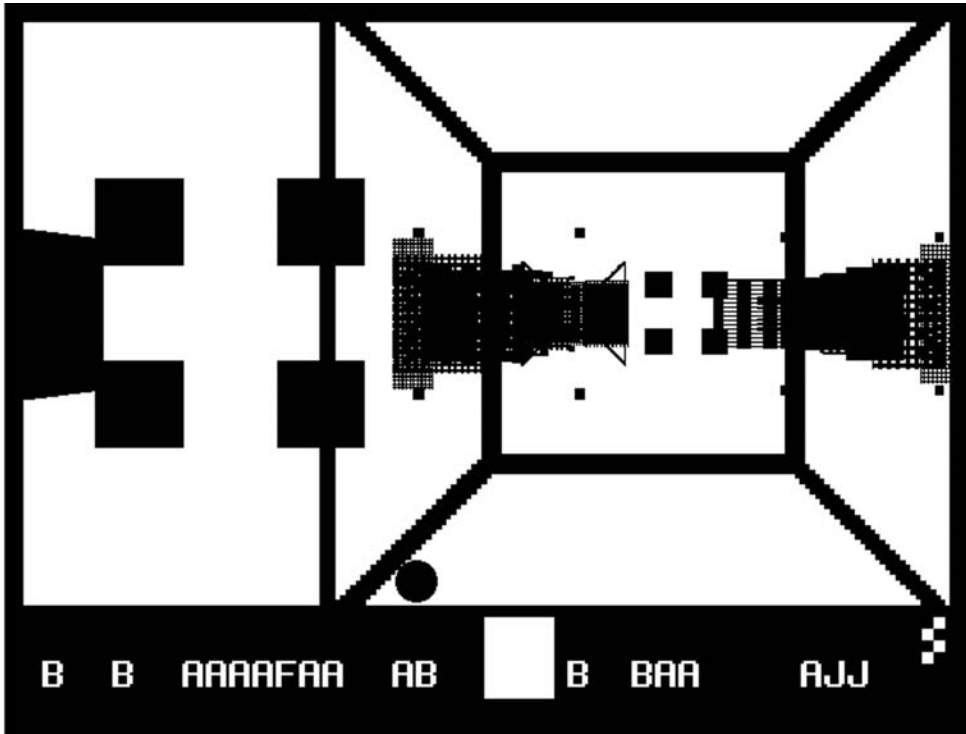
Joan Heemskerk and Dirk Paesmans (JODI): SOD. *(Screenshot).*
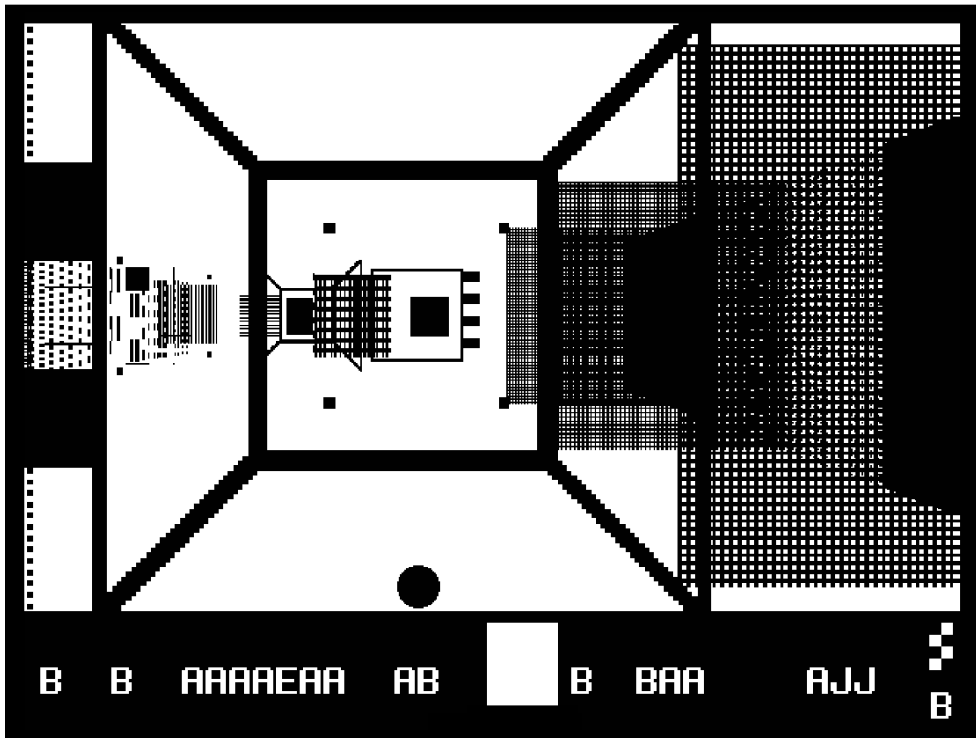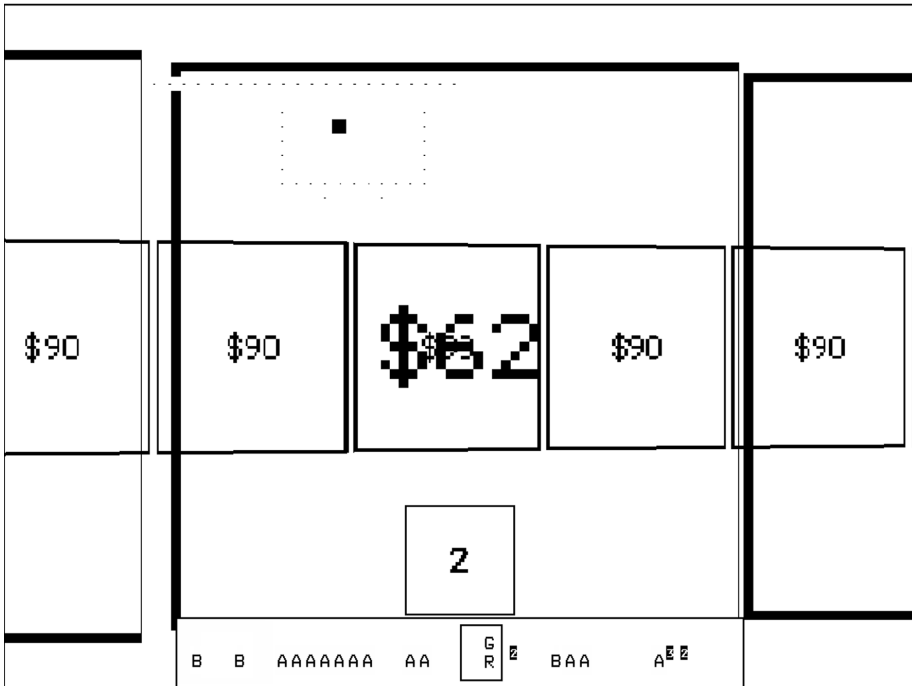
Joan Heemskerk and Dirk Paesmans (JODI): SOD. *(Screenshot).*
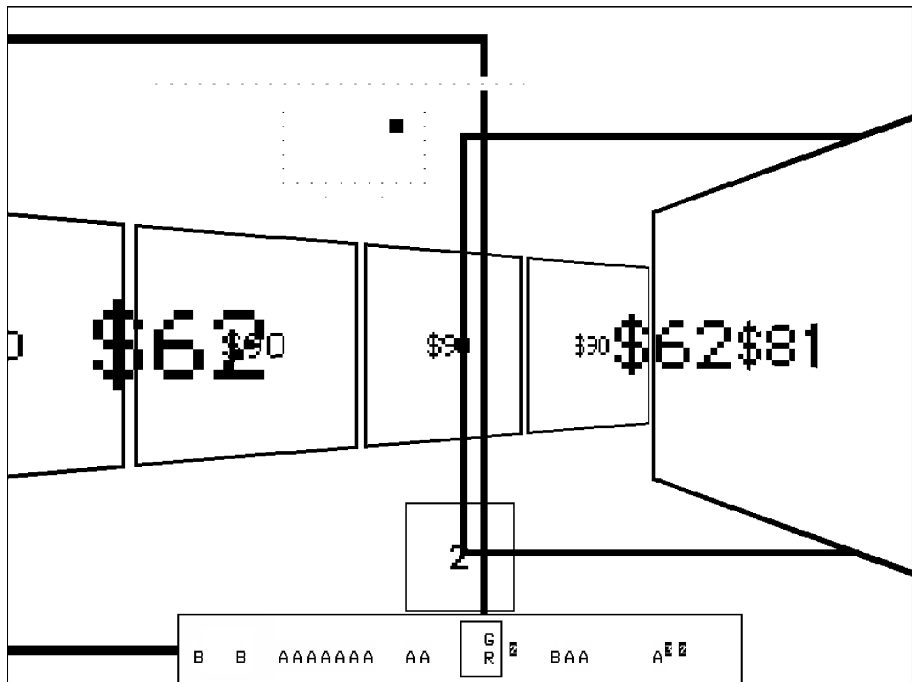
Joan Heemskerk and Dirk Paesmans (JODI): Untitled Games. *(Screenshot).*
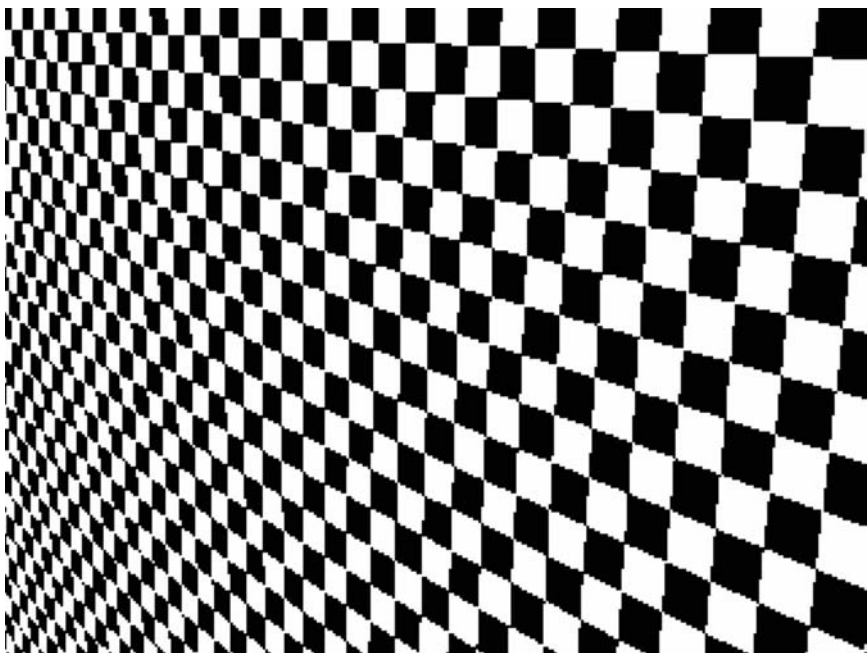
driven, what are the dynamics of the game. So it's bringing those games back to the abstract dynamics of it and we were also trying to find out a little bit, how they do create the so-called 3-D space. That's the whole trick of these games, that they are *perspective engines*. All the time they create tunnels and illusions of a 3-D space and that's part of the "kick" you have as the user, that you think you explore and you enter and you move into. In fact, the only thing which is happening, is a perspective which just is drawn all the time – so it's always about graphical tricks.

FH: So you would see these kind of games as architectural illusions and you just reduce the architecture. To what did you reduce it then?

JODI: We reduce it to the combination of the code and the dynamics of the code. A monster, for example, or an enemy are in general programmed to recognize you when you enter into a corridor and come close in a certain radius. So in the whole made-up scenario of figurative illusion all these coded "behaviours" are not so obvious to the person who plays the game. But when you have a white space and there's just a black square and you see that it is not moving for a while and when you come close to it, it comes up to you then you start to understand the simple dynamics, the simple tricks of such a code. On the one side, what we wanted to do was to undress *Quake* from all the skins, the graphics and on the other side we dress up the code a little bit. The code gets "something" so you – as the user – get some kind of idea of what this code is doing. It did not work all the time through this formula, of course. In *SOD* – the *Castle Wolfenstein* modification – it is more or less exactly that. The elements are replaced by simple forms, for every object we made its own very basic icon. Through the graphics in *SOD*, I think you have the feeling that you are inside a perspective engine like a drawing machine, so you really feel that your movements together with the code is drawing all the time according to your movements. We made a big separation between sound and vision and code. We tried to keep those three elements in mind all the time, how they work together. So the sound is not changed and that was just to keep the contrast to our aesthetic, which is like very typical abstraction. You cannot escape the fact that it is related a bit to op art or constructivist type of aesthetics, the typical modern art of the last century. We wanted to keep that in contrast with the horror soundtrack, so this soundtrack is still constantly running.

FH: You mentioned already two threads to art history – op art and constructivism. There is another thread that I would like to follow which is appropriation. I mean the appropriation of code...

JODI: Three-quarters of the work was on the graphics and let's say one-quarter of the work was on the code, because the *Quake* code luckily became open source, so there is a lot of documentation about it online, how to change it and how to recompile it. We are not master programmers, so we need the documentation all the time. For example, to make the total black-and-white version of the game would not be possible without changing the code because the shading effects or the shooting explosions are implemented there. So you cannot just change the pictures. So we had to literally erase a lot in the code. I prefer the word "erase" than "change" because with *Untitled Games* we were taking away all the time. The most extreme version in that sense is the white version, where everything is erased and

this, of course, is just a conceptual statement. But on the other hand we wanted to try other things as well, without putting much graphical décor. That is the big difference between most of the game modifications being done by artist that you see now: That is, that, in general, they put a lot of new graphical elements, so that you are just pleased with the beauty of the new creation, or they work in the existing narrative of the game and they add a subversive narrative to it.

FH: You would not agree to the idea that a subversive narrative overcomes the original narrative of the game?

JODI: I mean it's the choice of the artist to make his point. I cannot speak for the other artists. For example, in the last Documenta there was the *Quake* modification called *Q4U* by Feng Mengbo. There he replaced the soldier with his own face and then put video cameras instead of a weapon. I mean, I cannot judge the quality of this work, but there are a lot of modifications that work in that way. I don't know…

Our approach to the code is – I would say – singular, because when you undress the game and try to dress the code or even keep the code naked – the action of the code becomes a very minimal aesthetic. That why it is important to keep the soundtrack so it becomes another comment on this type of aesthetics and it becomes a type of funky, modernist caricature. It is also almost like making abstract film art with the *Quake* engine.

FH: The media theoretician Claus Pias pointed out the thesis that ego-shooters cannot be understood from their visual representation of violent action, but should be seen more in the sense of optimization of the users' interaction with the machine.

JODI: I've heard a lecture by Claus Pias, so I know his theses. Firstly, I kind of agree with it, to see games as a kind of skills tests. They test your reaction time and your optical skill and recognition. This is already in the direction of the military application of those games which of course exists, because all these shooter games are used for training in the armies. But it is also true that you don't become a better shooter or killer but I'm sure that you become dumb, so that your nervous system is more responsive. Your impulse follows directly to what you see with your eyes. There is no time to think about something. And in this way we understand games being part of the entertainment industry.

And this is another reason why we use abstraction in connection to the mathematics of the code. We are interested in how code does represent an illusion – be it a 3-D illusion or an aggressive illusion or a movement illusion. What I absolutely dislike in modifications are the ones that make beautiful abstraction. There you end up with colours and abstraction and movements, and it overwhelms you. The interpretation must be like "Look what beauty we can make with this ugly software!" I don't trust that too much.

In a different way I like the subversive narrative approach quite a lot. It's not our "style" but I like it in a way more, when it's well done. I think one of the better modifications that were made in this "genre" are made by the Swedish artist Tobias Bernstrup and Palle Torsson five years ago, which is called *Museum Meltdown*. I think it's a good version of this narrative

although of course it's also a cliché to rebuild a museum and to do dirty things inside it – for instance, shooting on artworks – but I think the version they made is beyond suspicion. There are many, many others who did the same and I think it's one of the first reactions of the artist when they think about, what they could do with a modification. Then they make some kind of gallery or museum or art school which they know, and they are shooting or destroying the walls and the art. That's a genre in itself, I guess, but *Museum Meltdown* is more than that.

FH: Let's talk about the art system a bit.

JODI: You know, we come out of the net.art and we never really made the big crossing to the "real" art scene. We are very much on the bridge. We are not regularly invited to make a new work just because we "belong to the crowd" of the artists. So I think the whole digital art scene is in-between. Somehow the time of credits, the time of when it was hip and new, especially with net.art, and now it's more and more focusing on software, but the time of its attraction, through its pure existence, is over. No one really knows what it is now – you cannot take all the people who make digital works and bring them to the art scene. You cannot give all these people money to make new works, not even talking about buying, just talking about giving them a commission or inviting them. On the other hand, the "specialized digital art system" which runs more in festivals and competitions is also still oriented towards a more spectacular type of setting – interaction with the public or technological innovations. So I think the most interesting digital art is not belonging to any of these two support systems. I see some kind of analogy much more to experimental film than to video art. I think that the moment is still growing when a typical digital art will arrive. And it will make its own criteria and standards, which is not about technology or interaction with the public and also not about being viewed as a subdirectory of fine arts. Also it is too big to fit clearly into something and it needs its own sphere. I think the problem is that there is no concentrated critics and curators, but I expect that it will grow very fast during the next few years. As long as you keep in mind that you don't have to choose between the two families, of the big art family and of the big technology family, as long as we the artist who make it can contribute independently to this digital "thing", then I think it will work. It will become something new. Otherwise you'll be included in the already existing, and you start to think about selling and buying and react in it. I don't want to be only in the art world and also not into only technological innovation. I think this will change in the next ten or twenty years – I hope.

FH: So, given the chance to widen the context and not only act as "media-artist", which other persons or artist would you like to include into a hypothetic exhibition of your own works? In what context would you like to put your own works?

JODI: The temptation is always big to just name all the preferred artists I know. I mean, I don't have a direct answer to this. Of course there is an artist that both Joan and I like. But not in the way of being exhibited with, because this is a cliché artist. I just recently saw it in a survey of artists, he is also the number one of many, many artists, so this "choice" is absolutely not original: We like Bruce Naumann. We like him because he made a lot of film work and also the emotional content of the video pieces. But I don't think it is very smart of us to have an exhibit with him, because he uses a lot of strong dramatic elements.

And another film artist Joan and I recently looked at is Stan Brakhage, who seems to be a very important person in experimental film. That's a whole different subject. Experimental film and video art – the way that they went into different directions. Video art by the name itself directed to the fine arts while experimental underground film has stayed this weird category in itself, more or less with its high point in the 60s and 70s and of absolutely no value to the art commerce. Our sympathy goes to experimental film, because they managed to stay in their own medium. We use both these fields quite a lot to think about what we are doing or what would net.art or digital art be. The history of the experimental film and the history of net.art both have similar threads, there are lot of crossovers but they end up differently.

FH: Understanding the past as a key to future developments...

JODI: At the moment we do a lot of efforts to make exhibitions, because we more or less don't have the concentration time anymore to really work on the Net as much as we would want. Also because we've been through the first period of what we wanted, we more or less bled out, we "had it". We don't know what to say anymore since almost three or four years. That was one of the reasons why we started with the game modifications, we wanted to do something different. Installing exhibitions is another way of trying something different.

Independent Game Development: Two Views from Australia

Melanie Swalwell

This is an edited transcript of an interview with game artists Julian Oliver and "Kipper", recorded at the selectparks studio in Melbourne on 6th December 2002. Oliver is the founder of the Melbourne games studio selectparks, commissioned by the Australian Centre for the Moving Image to create the game installation *acmipark*, a centrepiece of the ACMI Games Lab. "Kipper" is a member of the team that developed the independent game project *Escape from Woomera*. This project addressed the situation of refugees who, arriving in Australia without the relevant visa, are locked up in detention centres. As well as these game projects, the interview touched on a range of other topics relevant to independent games and game development, including some of the barriers that exist to making independent games, seminal works in the field, definitional challenges, the nexus between games art and political content, and the question of support for independent game development.

MS: I wonder if we could start by talking about what the situation is of independent game development and production – how you see it at least – at the present moment?

JO: Well, to start with, I would say that there is a huge bottleneck, one which isn't initially easy to see. From the development perspective, the tools are proprietary, expensive and rarified. Therefore, would-be independent studios not working for largest market share are immediately disabled from being able to participate with the technology.

MS: By tools, what are you talking about?

JO: Code, largely code, and things like, for instance, games take a tremendous amount of time to make. That time can be greatly reduced if you have some or quite a bit of technical ability and lots and lots and lots of money. You can buy existing code, existing source code, and most people have compiled libraries of binaries that you can use in plug 'n' play fashion

to make a new kind of game. For instance, the software that we use in our project – the code – is very expensive. We got sponsorship for it. That sponsorship comes with a price: we can only work with it for a year, we can't re-engineer the code in any way, it's not actually given to us as code anyway, it's given to us as these compiled binaries – you can't open them up and change them. So we're making a particular kind of game because of the libraries themselves, the very fabric of our software, lends itself to a certain kind of game: it's very first person, and it has certain light effects etc., and it's very difficult to change those.

We can't buy that stuff for ourselves, we can't use it in future projects, we can only use it once. We're using it under another company's terms, and we're very lucky to be using it at all in the first place. It would cost us a few million dollars, and a team four times the size, to be able to make that stuff. And that's just a first-person game. In an ideal universe, we'd like to walk away from all this owning our current project. So I would say that aside from the inability to have a sustainable, working relationship with these multinationals, you really are on your own. Open source software is the only way to go. A developer's community for the little guys definitely involves a segregation, purely on the level of production (among many other things, but certainly on the level of production initially), a segregation from the marketplace, developing your own tools and code base, to be distributed internally and freely amongst developers. It's really important. It actually would be impossible for us to continue at all, unless we go overseas.

Acmipark

Acmipark

Acmipark

MS: Could you just explain what that means, open source for developers?

JO: General Public License is one such copyleft license which enables public access to code, the public in the very widest sense, and that's in fact its most massively generalized global sense. The public, as in people of the world, have access to that code and may modify it, as long as their modifications are then also made publicly available. So the code is open, it's free, and under the terms of the GPL, you develop it and then contribute that back to the pool. A huge chunk of the Internet runs on open source software, that's Linux, Apache and BSD and much more. I run five open source systems myself, and am actively working to develop and working with existing, open source gaming engines, because they *are* currently getting really good. The next few projects that we are currently drafting will all be open source. At the end of the project, we can give it back to the community and they can take that work and develop it where they will.

MS: It sounds like you're saying that the independent games development community is in its infancy, because people don't even have the tools as yet with which to work?

JO: That's right. Absolutely. Unfortunately. I mean you've got the modification community, which works off existing proprietary games, like the ones on the shelf here, and if you're lucky, you can get a software developer's kit that ships with the game.

It's generally part of their marketing strategy to give the product some longevity by making it modifiable, therefore the community will take it on, and develop it iteratively and distribute those iterations amongst themselves, which is great. But the moment you want to present it, you have to present it within the context of the game; anyone else out there who wants to enjoy your work, they need a copy of the game. It's in the best interests of the company to do this, so that you have to have the base of the engine, and the modified art assets that you've actually made are loaded on top. So the independent gaming community is quite exciting at the moment – sure – just with modifications, like mods for *Quake 3*, whatever. But if you want to do your own whole thing, really reinvent and manipulate abstractly and extraneously the medium like, say, in film, well then the film stock itself needs to be achieveably, economically available and with games it's not. It takes massive budgets to make a game. Secondly, you can't sell a mod without licensing the engine, which costs more than any small studio can afford.

MS: What's your view, Kipper, on the state of independent game development at present?

K: With regard to what Julian is saying, modding really shows how the production of games in particular, as opposed to film, can be democratized, because the property is intellectual property. The means of production can be very easily shared around; you don't have to have plant; you don't have to have tangible factories and really expensive machinery and stuff. That's the frustrating thing, that these intangible things – these intellectual properties – are in the hands of powerful capitalists. Capital controls this means of production. It's not even land, it's not even tangible property, and we could just so easily take that from them; and modding shows how ridiculous the separation is, because people are making whole games as mods. You know *Counter-Strike* – great example – because it's a total conversion modification, where it's a totally new game, more or less, but it can never be... Okay, that's

a bad example, because it was eventually bought by Valve; but it shows an example of how you can make something for a low cost compared to film, for example.

The film industry is comparatively well supported in Australia. But the Australian state takes what I see as two insulting attitudes towards game development. One (which I've just witnessed today again at the AGDC (Australian Game Developers' Conference) is: "I'm a politician and this is how much money my Labor or Liberal government or whatever is ploughing into the industry and these are the incubator programmes we've set up, and these are the trade shows that we let you go to and give you money for." So they see it as a way to create jobs and attract investment into Australia. On the one hand, it's about making money, "for the good of society", and, on the other hand, the state comes along and censors games. The level of responsibility it feels towards games is incredibly limited. It's like they're saying, "We're going to make money out of your games, and the people who play your games, but the games we don't like we're going to censor." There's no positive, no *cultural* investment, because it's not film, and it's not some trashy nineteenth-century opera staged at the State Theatre or something (laughing), with very little artistic merit, in my view...

JO: And tonnes of sex and violence.

K: Well, yes. You know, if there was a painting of some nineteenth-century nude in the National Gallery of Victoria or something and you put that in a game, then it's going to be censored because you can't have nudity in a game. Games are for children, supposedly.

When you look at the funding opportunities, Julian's team was very hard-working but lucky in one sense because the funding stream that they managed to be successful with has been cut. And there's no Australian Games Commission like there's an Australian Film Commission (AFC).

MS: You just mentioned some of the barriers that face the commercial industry. Is your point in doing that to say that it's even harder if you're independent?

K: I actually mean...The commercial industry is doing fine. They're being supported by the state fine. We make games for the mass market and that's fine. But the issues for an independent developer are what Julian said, like access to basic materials to make the game with, and that needs community support. It's basically the attitude that's the problem.

JO: A great example of this is that the Australia Council, which is probably the best shot you've got at making an independent game, funded externally, they'll offer you $25,000 to make your game. If you wanted to make a short film well then they'd just palm you off to the AFC and they'll give you tens of thousands or even one hundred thousand or more to make your film, like a mini-feature or something like that. Something of equivalent work, arguably equivalent if not more critical merit as far as really transforming the medium and pushing things around, gets a tenth or a hundredth of the budget. There isn't actually any state- or federally based representation for the scene. It's a severe bottleneck. I know lots and lots and lots of people who want to make an independent game right now and can't.

MS: I know you're both involved in initiatives to try and foster an independent games scene. Can you tell me what your aims are, what you're hoping to achieve?

JO: Go, Kipper, you're the mover and shaker.

K: He's actually making it up. I'm not doing anything at the moment. I've been trying to do something, but I haven't succeeded.

MS: You put on a panel at the electrofringe festival to talk about some of the issues faced by independent game developers, didn't you?

K: Yes, I wanted to see who was out there. I also wanted to because at electrofringe the theme was game art (art using gaming technology), but I wanted to turn it around the other way: what about games as art? What about people who are primarily focussed on games? There are game artists and that raises the question of independent game development. I know that the new media art scene in Australia is looking at games, but it's mostly from a fine arts perspective. I guess I'm coming at it from the other way around. Some of my friends who are film-makers, independent film-makers, they think of themselves as artists, but as film-makers primarily. So I wanted to draw out those people who I didn't know and think of how we could have some sort of visibility and voice. I invited reps from the AFC (Australian Film Commission) and the Australia Council to come. And someone from the Australia Council actually came.

JO: It was a good start. But if games are going to have the cultural influence of feature films...If independent games are going to be to mass market games what short films are to feature films, then we need our *Dogme*.[1] We need to be able to take our handycam out into the field and make a film. We don't really have that. We also, however, need a public that has the ability and interest to access this work.

The charter of the Australian Centre for the Moving Image is pretty amazing. Their seven-word slogan that follows the ACMI includes the word "game" or "games". The fact that they have that there makes the future feel bright.

MS: Are you thinking that it's time to work toward, and support, and bring into being more of an independent development scene rather than a game art scene?

JO: I would have to say that I am.

K: Well (pause).

MS: I'm not suggesting so much that we get into definitions of what is art and what is not, but it sounds like you're thinking about it more in those terms?

K: Well, when I read all that early 90s VR hype, I just assumed that games would be the next big art form. And I love novels and I love films, but I assumed that when I grew up, games would be my generation's art form, and when I got a job in a games company, I would be working in some niche on independent games. But it hasn't happened. I mean there are

small companies doing really interesting stuff and I wish I worked for them. But most of them are still aiming for the same thing, they just have different ideas about how to do it. They're aiming for the same sort of games. Saying, you know, "we've found some great strategy to make our game even more popular".

JO: Or in some ways even worse. You know, making small little niche markets. Independent game development houses – independent, of course, meaning that you publish it yourself, you put it out yourself, and you produce it yourself, which is the dis-ease of that word. They're putting out these games, they're a small company, small budgets for sure. But they're dividing it up into niches. It's still about "stimulating" the mass marketplace, which initially sounds kind of okay, but the thing's still got to sell. I would like the freedom to be able to make really big, extremely unpopular games. I have those sorts of fantasies, as an artist, to take the medium out of an obligation to "entertain".

K: My general impression is that people often go out on their own because they want to be the next big thing, but they can't do it within the constraints of their current company.

JO: They want to do it differently, but they wind up doing the same thing. It's a boring problem, but it's very real.

MS: What are some of the problems that you see with this term "independent"? You've mentioned people misusing it to mean self-publishing...

JO: Well it's been eaten up. I mean you go to the Independent Game Developer's Association and essentially it's a massive corporate hub, bringing together a number of different industries and platform developers and companies with the idea that they'll share information and knowledge and really topicalize game development. But it's for increased market share. It's a great thing, IGDA do some neat stuff, for sure. But it's still looking the wrong way.

K: People from the outside look towards the commercial world – "how do we get into the big pond?" Often "independent" and "unsigned" games mean to some people the same thing. It's like, "oh independent games, that means you don't have a publisher yet".

MS: What are the problems of publishing something yourself? Are they to do with distribution, like the age-old problems of distribution in book publishing?

JO: Well, if I want to put out my own CD, then I have to start up my own company, to become a registered CD manufacturer. I would need to have the various publishing rights and on content regulation, make sure that my product was not violating state distribution legislations. Regarding the global market, you'd want to make sure that every country out there could see it, at least the big ones. You've got all the money involved there, you have to have contacts with distributors, set up good distributor relations, you have to make the thing, employing staff, licensing and legalities. You have to know what you're doing.

K: Like independent films, you can never have a flourishing public art scene that isn't supported by the public purse. It's like saying that you can have opera that is self-financing

(even Handel couldn't do it), or a health system that is, or that you can have user-pays education. I mean people do say these things, of course (laughing), but you can't really have an art gallery that isn't a glorified interior decorator for corporate boardrooms and make it turn a profit, you know? You are always going to have to have state support for anything that is not primarily commercial. And, no, philanthropy doesn't count. If anyone has enough spare cash for art patronage they should pay more tax. Why the hell should they be society's arbiters of culture?

MS: Do you expect that as an independent game development community comes into being, there will be a diversification of the types of games being made?

K: I suppose that would occur by virtue of where you're getting your material from, who's making the game and where you're getting the funding from.

MS: I was thinking of something that Julian said earlier – about the tools restricting the type of game it's possible to make.

K: I'm particularly concerned with not just aesthetic diversity, but with bringing in new content. If you go to the AGDC, people are saying, "What's a new element of gameplay we can bring in?" or "How can we make the gameplay experience more compelling?" and there's heaps of experimentation in that field, but it's all still very shallow in terms of content. Games are such a vibrant new medium, still emerging. And they are where the consciousness of a lot of the "younger generation" is at; it's through games that they express themselves.

JO: And even almost whole populations of older generations, like in South Korea at the moment. They've got 2.5 million people playing *Lineage*. Whole families are playing, it's the family thing to do. That is the reality, like it or not. I've heard it referred to as the "third place". It's very real and a lot of people like it and are doing it.

MS: Can you tell me about some of the game art or hacks or mods or independent games that you each find inspiring and exciting?

JO: One of the first ones that I saw that I really, really, really liked was probably Fuchs-Eckermann's *Expositur*. It is pretty fantastic because it's a bringing together of a number of different Austrian museums, all in the context of the *Unreal Tournament* engine. Essentially it's a virtual knowledge space which uses the game as an interface for accessing the content of a huge number of museums. Passage through the work often means that you're walking into a different space, or the physics will change, and you'll be swimming and touching a fish, and that will transport you to another place, and you'll find yourself in Freud's maze. You're actively accessing it, reading it through play, which works really well.

There's also *Velvet-Strike* by Schleiner, Brody and Leandre. There's a thing you can do in *Counter-Strike* where you can make tags, you can tag around the walls. They've turned that into a critical exercise and distribute tags as political messages that you can use in massive public arenas, such as in the middle of *Counter-Strike*'s terrorist vs counter-terrorist battlefield.

And here, I've got a DVD…(rummaging around)

MS: Clearly, there's lots of interesting and original work being done. What about you, Kipper?

K: I've been somewhat slower on the uptake. I have seen some of this stuff. But I recently discovered, long after the rest of the world, *Under Ash*, by a group of Syrian developers, who wanted to make something in solidarity with their brothers and sisters of the new Intifada. I'm not a pacifist, so I prefer *Under Ash* to the *Velvet-Strike* idea. Before I found this I'd actually been thinking about the possibility of making first-person shooters (based on current military shooters, like *Ghost Recon*, or *Operation Flashpoint* or *Counter-Strike*), based on contemporary conflict scenarios, but acknowledging a war that is called terrorism by most of the world, the war against the occupation of Palestine. I think just that simple idea of switching the roles around – who is the enemy and who are the good guys – is, in itself, unprecedented and just brilliant. It's not just a piece of conceptual art, it's actually a playable game.

JO: I find that really interesting too. The US Army now has a game, *America's Army*, where you can try out for the army and graduate with points. Hit the ground and crawl over the barbed wire, and you can choose which side you're on, interestingly enough. A game like *Under Ash* goes the other way, saying there is a very real enemy and it relates to a very real situation. Naturally it's controversial that you can participate representatively in this way.

K: The significance of it for me, also, is that if Palestinian national liberationists think games are politically useful, if they think that games aren't just trivial… If an important section of the world's anti-imperialist forces and the Third World think that games are important, an important medium for their voices to be expressed and useful in real world struggles, not just play-acting, but getting kids to play these games who do throw stones and do participate in a war, then I think that adds a lot of legitimacy to the medium. Like Ken Loach will make *Land of Freedom*, and anyone who's politically serious will say, "yes, what a great film, I don't necessarily agree with the exact politics of what he's saying, but, you know, that's an important film." And now we're at a position where people can take seriously games, and say, "that's an important game, that's an important piece of propaganda: good propaganda, immersive propaganda."

JO: In some ways it has a more foreboding potential, because of this intuitive discomfort that people have with games as a training by participation. So when they are used for political purposes, independent games or a sizeable chunk of independent games will inevitably have a direct impact on our socio-political landscape, as a kind of critical theatre.

MS: I'd like to hear about your proposed game, *Escape from Woomera*. Can you tell me about the project? Then I'd like to go on to ask what you think the significance is of making a game about the situation of refugees in Australia.

K: *Escape from Woomera* is proposed to be a first-person adventure/role-playing game, based in the confines of the detention centre, as a sort of classic game-dungeon scenario. That's part of the attraction from an aesthetic perspective. In terms of great escapes there's Alcatraz and that's kind of cool, and there's Woomera, and that's kind of cooler.

Escape from Woomera

Escape from Woomera

Elika, why do you look so sad?

Elika:
Oh Mustafa! I was reading from the Koran just before, and one of the guards came up and demanded to look at it. When he finished leafing through the pages, he threw it on the ground instead of giving it back to me.

Press [1]   What did you do?
Press [2]   That's terrible, but only to be expected in this place.

Elika
Click left mouse button to interact

Well, in games there's *Castle Wolfenstein*, but this is a step up from *Wolfenstein*, this is scarier.

The proposal at the moment, which will probably change a bit, is that you will have a selection of characters to choose from, and you have a background history of where your character has come from and how you got to Australia, and you have to sort of battle the bureaucracy and try and survive day-to-day in the centre. The ultimate goal is to escape and you can, to some extent, choose your strategy, so we wouldn't preference one particular strategy. We wouldn't say, "Right, here's a gun, shoot your way out", for example. We will be keeping it as close to real-life inspiration as possible because people have escaped, of course, using classic methods reminiscent of *The Wooden Horse* or *The Great Escape*, in terms of their ingenuity.

When people claim that we're just "sensationalizing" these stories, asking, "how is this going to educate about the plight of the refugees?", to some extent we are able to say, "look, we're just using the material that's there. We're basing it on these inspired and heroic real-life actions." Other people have also utilized this material, like the online documentary *Long Journey, Young Lives* by Sohail Dahdal and David Goldie that the AFC funded recently. This is made from film footage of interviews with young Australian kids – refugee kids – and what it was like in their homeland. In contrast we are interested in focussing on the great game elements in these stories and trying to make a game out of those, rather than trying to present all the information and points of view. Our aim is not to make an educational piece, but an immersive experience. People make games out of the Gulf War, people make games about bombing North Korea. Rather than try to make a documentary from this material, we want to make a game about what we find interesting.

JO: But the tension is almost greater than in those other examples. Because it's like, it's like not being able to visit the house next door, not being able to see over the fence. There's an inherent voyeurism in every game – a game like *Carmegeddon*, for instance, or a game like *Grand Theft Auto* – where you're doing things that you couldn't otherwise. These centres are something that we're in a kind of public detention from. We don't have access to Woomera, let alone its insides. Woomera, and detention centres like it, is not only strategically isolated to ensure it is harder to escape, but also to ensure the public will forget it's even there. The inherent tension within this situation, in the country that you're standing on, is that you don't have access to this stuff. *Escape from Woomera* is all about taking a highly representative impression of life in a detention centre, mobilizing it through public networks, and installing it onto people's desktop computers inside their homes. Games are an ideal medium to engage with this kind of content – better than a documentary could ever be – because to play is to become a subject of the content. In this way *Escape from Woomera* is an opportunity to better understand what these people face inside and to practice getting out.

MS: One of the questions that such a project raises is that you can't know in advance how people will use it. Players may find different resonances, perhaps ones that you haven't thought of yet.

JO: Well, it's going to be infinitely boring to just hang out there. It's still a predicament, virtual or otherwise. So much of gameplay, particularly in adventure-based games, is about "how

do I get from here to the next part?", "how do I move from this situation to experience something else?", "how do I get out?" That's the frustration that is logically embedded within so much gameplay, and is actually logically embedded within this real situation.

MS: It's a strange moment when art and life are overlaid.

K: I haven't discussed this with Julian yet, but I hope that when we make the game, we can allow modifications of it. And I can make my own little modification that's not very politically correct (laughing). We'll make what we think we want to make and then people can go off and make their own slightly more subversive versions, re-skinning ACM guards if they so wish.[2] I would like to make a game that we would like to mod ourselves. Where you can create your own fantasy in that space.

MS: You never know, people might set up a little commune.

JO: And plant veggies.

MS: Clearly, you're not conceiving of this game as having any sort of automatic effect, in terms of suddenly generating mass empathy for refugees in this country. While it's making a critique, you're not envisaging its significance in simplistic terms.

K: I don't think it will necessarily offer any answers, but I think that the videogame is a subversive medium in which you can say subversive things. People have their "Free the Refugees" graffiti stencilled around town, and this is a form of "graffiti-like" cultural resistance. I suppose it's broad, but there is a certain demographic whom I think it would resonate with, and at least raise it as an issue in their minds.

MS: Has there been anything done like this before, anything looking at whether games politicize people?

K: I don't know of anything, apart from the Syrian example (with the exception of Flash-based stuff).

MS: And apart from *America's Army*.

JO: I don't know if there's been anything done deliberately or consciously, but I've seen people choosing to politically bond together outside of the context of actual games. Clan culture in massively multiplayer RPGs is a great example of this. Given an opportunity to experiment with something, to really have a go, it's amazing how quickly people will do it. People really take to that stuff and invent a context for it, problematizing an otherwise perfectly comfortable situation. And not only in relation to prescribed elements of gameplay.

K: Yes, the feeling of solidarity is important as well. *Under Ash* has a really terrible control system with no strafing (laughing) and it's really frustrating. But blowing up virtual Israeli tanks was so cathartic. Unless you're in Palestine all you can do is wear a *kafieh* in the street and say, "Israel out of Palestine". You're not actually helping much by playing this Intifada game but there's something about it…

JO: There's something funny about it too, that a bunch of people would see a situation to which they have no access as so desperate that they would virtually reconstruct it and promote an opportunity to tamper in it. That in itself is just so interesting to me, the deliberate creation of a play context to explore a real situation you otherwise could not access. It's a huge amount of work, but clearly it's providing a better means of engaging with content than film…

MS: But isn't that what you are also doing with *Woomera*?

K and JO: Yes.

K: What I fantasize about, I'm not totally sure about it, but when the US invades Iraq in the next month or so, I can't be there with a gun, defending the cities or whatever, but it'd be amazing to have some online multiplayer game where you were virtually defending Iraq in solidarity and kicking US and British and Australian soldiers out. You could have clans – "we're the anti-imperialist clan, join our clan" – somehow sort of mobilize people in the game context as well as try and politically mobilize people. Not by invading the game and co-opting it, like the *Velvet-Strike* people (actually not the *Velvet-Strike* people, but there was some other splinter group off that that suggested disrupting *Counter-Strike* games and suiciding…)

JO: There was the *Friends* one recently, where a group of people re-enacted a whole episode of *Friends* inside *Quake III*.[3]

K: You could just take the game as it is and turn it completely around. You'd say, "We're playing in the spirit of the game, it's just that our guns are turned on a different enemy. We're fighting against imperialism, we're not trying to distract the game."

JO: The other day I got into a lot of trouble on the fibreculture list for suggesting that at the end of the day MMP games were public spaces, in Canetti's sense of the crowd, and that they would make very good sites for protest. If we're not allowed to actually protest on websites in Australia, then let's just take it into a game, take our very vocal concerns into a game. I got flamed![4] I was told that it was turning away subscribers and the moderators were saying they were very sorry, but to please stop it. There were people who were "protecting" games, saying that they were there to satisfy the existential needs of gamers and that they shouldn't be used for anything else. It was very interesting. It was an attempt to exclude games from the cultural imagination.

MS: Drawing lines between play and politics?

JO: This is going to come up over and over and over again.

MS: A sort of demarcation – "This is games space and don't you dare bring anything else into it"?

JO: Yes. It probably got 40 posts on the thread or more. In some ways, it's still being referred to.

K: The commercial industry is dragging the real world into games, already. Julian's suggestion was extremely appropriate, because people are starting to live their lives and have their social interactions in these MMORPGs. They're not just games where you shoot something. It's not like there's some pacifist there who's saying, "no, no, war is bad, lay down your guns." And then you say "bugger off, we're trying to have a game of *Counter-Strike*." It's quite different because these are games in which people hang out.

MS: And chat, and fish.

JO: I play a lot of MMORPGs. I really like them. One of the things I've been wanting to do for a while is a safari in an MMORPG. We'd dress up in safari clothes and have binoculars and look at the wildlife, meet the locals, and we'd have anthropologists.

K: These questions are especially pertinent now because companies have gotten into debating whether games spaces are public spaces. Everyone's sort of reading Naomi Klein about how we have to reclaim what used to be town squares and our shopping malls and our public space. Is the Internet a public space?

JO: But is the game's town square a public space? It's similar to a state-funded space. To me it's an interesting question: just because it's distributed on databases, it's geographically bound as far as regulation of its content is concerned. It's still [circumscribed] in that you aren't allowed to do certain things there.

[Returning to the fibreculture debate about protesting in games] People were saying: "You can't do anything that is not gaming; leave the poor gamers alone."

MS: Do you think your interlocutors in this dispute are familiar with these games?

JO: Well, one of them claims to be, but the other one says if people want to come home from work and slaughter each other (and they clearly haven't played a MMORPG, because that's not what people actually do), then let them. (There are some disturbingly conservative new media commentators in Australia.) I found that really interesting.

K: It's just like anything that is vaguely political, there are going to be people who will hate you.

JO: These people want to preserve the media type; they're basically standing in for the media type, trying to protect it from people doing alternative things with it, so the generic term "game" isn't somehow tainted or something.

K: Someone should protect the media type from the massive corporations, in the sense of corporate censorship, like Sony, for instance. If you want to make a PlayStation game, first you have to somehow get on their developer's programme. Then the game has to go through a strict approval process before they'll allow it to be released on their platform. They can even decide "we've had enough of that genre this year", for example, and pull approval on a game, which potentially sends a small developer into crisis because they've invested so

much into developing for that platform. And the console manufacturers have pretty clear ideas about the "tone" of games they want their brand to be associated with, be it "family games" or whatever. But of course in terms of political content…

JO: Exactly. This is really interesting.

K: Of course that means that games can have political content as long as it's political content that the console manufacturers and publishers don't mind having their brand associated with.

JO: If you look at almost any MMORPG clan home page, it's full of stuff about clan histories and wars, and it's all made up.

K: As long as it's fantasy.

JO: You know, there's a bunch of MMORPGs around that you can't take screen grabs from. You can't even do that, you can't take a photo. Isn't that interesting, that you can't even do that? They're worried about it being misrepresented, even though it is a totally fictional elsewhere.

K: Has anyone talked about the idea of the subscriber base voting on this, actually having elections and voting on these sorts of rules?

JO: The really classic example of this was in *Ultima Online*. This guy gave a presentation on it in Tennessee, at the PCAS/ACAS conference I went to a few years ago. He did this paper on emergent organizational systems, player vs server administrator interests and things like this. One of the examples, I think, was *Ultima Online*. They really wanted to increase the size of the landscape, the gamescape. But because the gamescape was actually broken up into sectors at that stage of *UO*'s development, there was a server responsible for every sector. Often when you play MMORPGs today, you're crossing fields and you'll actually notice this in the scenery. You're jumping across hard disks at that point – lag occurs. You can find people actually losing time and gaining time as they are crossing world sectors. In *UO*, anyway, they wanted to create a whole bunch of new world sectors, and everyone waited around and waited around and waited around. They said it was going to be the promised land, with all these things there. You know, "it's going to be amazing, the wildlife is going to be incredible". Eventually, it was three months, then six months or something like this, and everyone was getting really frustrated. Most players were running around accumulating huge amounts of capital, wealth, in anticipation of the goldrush of this new landscape, so when it finally materialized out of the ocean, they ran out to it and started building. There was so much activity within such a small area that the entire game crashed and everyone lost their wealth. So they protested outside the town square, buck naked, for a couple of weeks or something, protesting to the server administrators.[5] That's pretty interesting, you know, protesting against the administrators, purely internally. But it's just outside the perimeter of game and real. Pretty cool.

MS: Julian, can you tell me about selectparks at ACMI?

JO: Basically the *acmipark* project is an idea to bring essentially another way of being at the ACMI to the ACMI. Chad [Chatterton] and I for years now have been really interested in the ability for games to work not only as another form of architectural simulation, but also as a way to transform an existing site. At ACMI, we're building a virtual reconstruction of the site, and replacing the CBD surrounds with a vast park and a subterranean complex, underneath the centre. We want to create the effect so that you walk away from the physical ACMI building, having played the game, and imagine that there are in fact these subterranean caves and gigantic labyrinths underneath the station. We're reinventing the site, as much as doing a game based on it. Creating a myth for the centre, if you like.

MS: Which is nice because the Federation Square precinct is already a reinvented site.

JO: That's right. We're re-reinventing it you might say. And we're trying to incorporate quite a few of those themes: naturally the building is sitting on the train lines and it itself is a converted landscape. We're incorporating those trains that run underneath in the game as an abstraction. The game will actually be a production that is embedded in the site. It won't just be an asteroid out there, an asteroid of virtual reality that plays with possibilities. It is very much rooted to the site.

We have, however, had all sorts of stylistic imperatives that we have had to work with and some problems. In terms of the lab architects, for instance, trying to emulate [the design] or draw from it, extract from it, reference it, or stray from it has been a problem.

MS: Who are the lab architects?

JO: They designed the building and site. We work with their plans (it cost us an arm and a leg for the plans).

K: They made you pay for their plans?

JO: Errm yes. And [we also had to work] with other contractual restraints, like not being allowed to deface the building with a virtual bomb or the like.

K: In their IP?

JO: In their IP. Basically, they said you cannot spill virtual paint, you cannot tip any virtual thing over, you cannot deface. You can do other things that you wouldn't normally do in the real world, but you can't mess with our stuff. It's like "c'mon guys, don't you think this is a little hung up?" *acmipark* would have been a different project were this not the case.

They're concerned about how their design is being interpreted. We're working around the site, and building stuff underneath it, but we're not allowed to alter their designs. They're like "How are you designing, what are you designing from, what are you drawing from?" They've realized that if we can get 100 people in there at the same time, being distributed over the World Wide Web, it's another public interface for their IP. And initially they expressed some concern about this.

K: How much did the plans cost? (Exclaims when told)

JO: I know, it's quite weird, really weird. So, once again, games and the real.

MS: It's a real anxiety, isn't it?

JO: It's a real anxiety at so many different levels. There's the public, corporate and federal levels, just to begin with. Everyone is worried about where games meet the real. Everyone has an instinctual anxiety about it. It reveals a lot about how games have taken hold of the symbolic layer as an interface to reverse engineer the real.

K: Everyone's been saying what about defamation for *Escape from Woomera*, in terms of the plans for the centre itself? I hate intellectual property (laughing).

JO: But isn't it great to be working in a medium that makes people so nervous?

K: They don't understand it though, either.

JO: But I think it's great that it makes them nervous. It's a good sign.

MS: I've got some questions about things in *acmipark* that I'm not clear on. I know you're designing avatars and costumes and things as well as the space. But are people going to wear that in ACMI or is it what their avatars will wear in the game? I suppose I'm asking what the interface will be for playing the game?

JO: OK, the basic premise is using a publicly played 3-D multiplayer game to transform the site, to rewrite it. We've set the game at night, when no one is around. What are the things that you can do in the game? Well, you can climb in, on top and around the building, having access to places you are disallowed in the real world. There are a number of sound installations in the site, a virtual concert hall for external performers to stream into and plasma screens playing digital movies. You'll choose a character – man or woman – assemble their body parts and things and then run around and do things in the game.

MS: So, you sit at the computer and play?

JO: Yes, that's right. There will be two ways to interact with the game. One of them is in the network at the site, via computers, and the other is over the World Wide Web. And if you go to the ACMI itself and sit down at the computers, you will materialize, pretty much at the point you're sitting at. The idea is that you move around in this public space, jump from things, explore things, explore elements of the architecture that you ordinarily couldn't. The ACMI itself is seeing the work we curate for the game as an extension of their exhibition programme. They want to incorporate the gaming engine that we've made – the software – as an interface for virtual content that they couldn't otherwise host in the real world. Some of these involve strange properties, new ways of moving the image, these kind of things. And then things that happen inside the world will become a part of their press releases and things like that. You'll be able to visit the ACMI site from wherever you are in the world, using the free software.

I would like to see it go much further technically and, also, aesthetically. But it's got to be quite popular, so we can't do anything too dangerous. We haven't got a lot of money to go around, and it needs to be a popular public space. But they're thinking about paying moderators, who will actually moderate what people say in the game. They're taking it very seriously, with their IP lawyer and everything, because ACMI, of course, have IP also. It's not just like us having an idea and making it into a game. It is an extension of public space. So it's been a big learning curve. Much bigger than I anticipated.

MS: Finally, Kipper, I believe that you're planning on launching an organization related to independent games development soon?

K: Well, I've set up a site, gdlo.org: I called it the "Game Developer's Liberation Organisation" (there is meant to be humour in that). I want to meet other game developers who have left or progressive ideas that they want to see manifest in games. I think that one way to do that is to put up a site, putting up news and commentary about politics and games, and game projects that are progressive. I guess sort of seeing the game used as another medium for cultural resistance and maybe even writing a little manifesto or something that if I can get other people interested they can add to, or change. Apart from people like Julian, I'm finding it hard to meet people who are dedicated to the game medium: not just people who think "games are cool", but who see themselves as game artists and want to look "outside the box".

I suppose in my fantasy world, there would be some revolutionary game developers [who] made stuff and just ignored intellectual property laws when they needed to. Like an Indymedia for games. People already do hack into consoles and make politically focussed games, but, it's about wresting creative control away from the corporations. As a game developer, you're alienated from the products of your labour. I mean it's a new industry, but old-fashioned exploitation, old-fashioned alienation. People working in game development are creative people, they're artists, they are society's new breed of artists and they're mostly faceless employees. They won't go down in history as painting the Sistine Chapel of games because brands like Sega will achieve that sort of legendary status. It is corporations who are now the new authors, and many developers are extremely frustrated. They get paid shit, but that's not their primary concern. They hate their unpaid overtime and all that, but that's not their primary concern. Their primary concern as far as I can see is the creative control of what they do – and they go home from work and the really creative thinking ones play music and write novels and make films. Because games are corporate controlled, and there is no visible alternative direction and there's no precedent and there's not much inspiration out there, they don't see that there's any future for games as a medium for their expression. It's a criminal waste of a generation of creative labourers who get so alienated that they feel that their medium isn't the one that they can express themselves in.

JO: Mmm. It's a real problem.

In April 2003, the Escape from Woomera *project received $25,000 in funding from the New Media Arts Board of the Australia Council.[6] This enabled the development of the prototype of the game, which can be downloaded from the website.*

Another development has been the closure of the Woomera Immigration Reception and Processing Centre, the remote South Australian refugee detention centre that was the focus of much protest, and some spectacular escape bids. At the time of writing, the Australian Government's policy regarding the detention of "asylum seekers" remains unchanged, and other IRPCs continue their operations around the country.

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Notes

1. Ernest Adams made a similar call in his (2001) "Dogma 2001: A Challenge to Game Designers", Gamasutra, February 2, www.gamasutra.com/features/20010129/adams_01.htm.
2. Australasian Correctional Management (ACM), a subsidiary of Wackenhut Corrections Corp, was until recently the contractor employed by the Department of Immigration and Multicultural and Indigenous Affairs to run the detention centres.
3. The first *Quake/Friends* performance was on 18th October 2002. It was staged in real-time online and in the Digital Media Studio of the University of Nevada, Reno. See http://digitalart.artsci.unr.edu/Art%20Web/Digital%20Media/DELAPPE/Recent%20Works%20In%20Progress/Quake%20Friends/QUAKE%20FRIENDS%20MAIN.html.
4. This discussion from November 2002 can be read at the archives, at http://www.fibreculture.org/archives/index.html.
5. Several articles on games and protest reference this event. See, for instance, Brad King, "Make Love, Not War Games", June 8, 2002, Sympatico.ca, http://games.sympatico.ca/news/wired/stories/0,1572,52894–74,00.html; Tony Walsh, "Big Mac Attacked", Shift.com, 12 November 2002, available http://www.alternet.org/story.html?StoryID=14530.
6. See also my short piece discussing the game, following the announcement: Swalwell (2003) "The Meme Game: *Escape from Woomera*", RealTime, 55, June/July, http://www.realtimearts.net/rt55/swallwell.html.

Medieval Unreality: Initiating an Artistic Discourse on Albania's Blood Feud by Editing a First-Person Shooter Game

Nina Czegledy and Maia Engeli

Blood Feud

In Albania, a fascinating yet one of the poorest countries in southeast Europe, the practice of blood feud remains a considerable problem. After the fall of communism, a rapid resurgence of historical beliefs and traditional customs has been noted countrywide. These included religious, political and social approaches. Since the early 1990s, mostly in the northern mountains of the country, people have gone back to codes and behaviours from ancient times and thus after a hiatus of five decades, the centuries-old practice of blood feuds awakened again.

For more than a decade, the blood feuds in northern Albania have received increased media coverage. Blood feuds are not unique to the barely accessible mountain towns and villages of northern Albania. Similar tribal practices have been reported in other isolated societies of the Mediterranean or in the northern Caucuses. The stories of vengeance relate to the historical *Kanun* of Lak Dukaghini (also known as Canon of Lek Dukagjin). The *Kanun*, a body of tribal laws practiced over thousands of years in the mountains of Albania and Kosovo, was codified by Lak Dukaghini (1410–1481). Unwritten till the nineteenth century, the *Kanun* lays down "all the essential rules of human life, relating to marriage, inheritance, pasture rights, criminal acts in traditional codes of law, transmitted from memory to memory. The job of the Council of Elders in this region was not to make new laws but to interpret the facts of any particular case in the light of the laws they knew." (Malcolm)

Over the centuries, Lak Dukaghini, a hereditary prince of a ruling family, became a mythical figure in Albanian history. He fought against the invasion of the Ottoman and Venetian armies. When retreat became inevitable, he moved to the Highlands of Albania where he built fortified castle-towns and reorganized the Council of Elders. His name became a legend and the *Kanun* has been kept (and enriched) by all Albanians regardless of their religion six centuries after his death.

The traditional northern Albanian society, based on clans or tribes, has been structured on strictly patrilinear lines. In contrast to the popular belief, the *Kanun* is not intended for punishment but satisfaction of one's own honor when it has been polluted by blood: purification by blood as blood can be wiped out only by blood. Since honour is of the essence of the code, there are strict rules for every step of a feud. For instance, a man may not be shot when he is with a woman or with a child. On the other hand it has been observed and noted nearly a hundred years ago by Edith Durham, the first female foreigner travelling in the mountains of "High Albania", that women had an exceptionally hard life in this society. Engaged in endless domestic and field work, they were forbidden to have contacts with the world outside the family till old age. The only escape from the strictly confined family life, was to become a "sworn virgin", which involved renouncing all prospects of marriage, dressing in man's clothes, carrying arms, fighting and leading the life of an honorary man (Durham).

In his study of the Canon and its suppression during the socialist period, Professor Aurel Plasari recounted how communist practices alienated, suppressed and violently buried the code of Albanian customs. The collapse of the state after 1989 and the economy has forced many Albanians to turn to their old covenants, natural relationships (those of blood) to fill the void created by the lack of cultural links (work and class relations, social coexistence, etc.). While the communists repressed the practice of blood feud and claimed the elimination of the *Kanun*, the vendettas have re-appeared in the past ten years (Plasari). These days, as a result of blood feuds, about 1500 families (including 800 children) have confined themselves within the four walls of their houses under the terror of death, which waits outside. In this confinement their experience lacks any future, which in turn generates only feelings of hatred and revenge. A group of activists in Albania seeks to address this issue by finding ways to reach the families involved and assisting them to get out of the vicious circle of vengeance.

Ana Adamovic's Visit to a Family Affected by Blood Feud
Before she came to Albania, Ana knew about the blood feuds in the north, however she had no notion of how extensive and real these are still today. When she went to Shkodra in September 2003, a local NGO who works with the affected families told her that there are nearly 1800 orphans and 700 widow victims of these killings. An affected family was contacted and they agreed to be interviewed and photographed. Ana found a 13-year-old with his father in the house and some other members of the family.

> When you enter the house it looks normal, they offer you coffee, but the kid is completely pale, he does not even go into the garden. It seems the neighbours are involved in a spying game for whoever offers them more money. Everybody in this house watches the door

Figure 1: Father and Boy Affected by Blood Feud by Ana Adamovic.

Figure 2: Boy Affected by Blood Feud by Ana Adamovic.

anxiously. As the boy is not going to school, the father tries to engage a private teacher. The family also plans to escape to another country. They believe the government is not doing anything for them here.
(Adamovic)

According to their story, a neighbour passed through their garden and the father's brother got into a quarrel and then killed the neighbour. Afterwards he escaped into the mountains. When Ana asked how long they expect this situation will last, they replied that it might last forever.

Ana came from Serbia, a poor country at war for twelve years, but she was shocked, really shocked and felt like she was travelling back to the Middle Ages: "The level of poverty is really shocking up north. One feels like on another planet. It is also very upsetting that nobody seems to help from all the foundations and charity organizations." (ibid.)

E-mail from the Medieval Ages
A group of activists, including artists, lawyers, writers and psychologists decided to develop a project, whose aim is to substitute the actual mediators (mass media and politicians), which have so far established ties between these families with the rest of the world, with virtual mediators: Art and Culture and Digital Technologies. The goal is to build new communication channels through written and visual materials, contributing to the development of an interactive website. This will assist these isolated people to assess themselves and communicate not only with the group of activists but also with the rest of the community. The activists, writers and psychologists on their part will be enabled to analyse the impact of Culture, Art and Technology on everyday life.

The title of the project is: "E-mail from the Medieval Ages". The project is considered to be "a travel in time". A travel into the past, allowing the activist group to provide the isolated inhabitants with new technology, to amend their present situation and to secure their future, side by side with the more developed parts of the country. One of the starting points offered to facilitate this project, was the "Medieval Unreality" workshop we taught at the Cultural Center Lindart in September 2003, introducing the editing of the first-person shooter game *Unreal Tournament*.

At the Cultural Center Lindart
The Cultural Center Lindart, established in 2001, is noted for initiating pioneering events and workshops in Albania such as "Dare to be different" the first comprehensive art exhibition by Balkan women artists in Fier (2001) and the digital storytelling workshop "Windows and Curtains" (2002). Its mission statement is on "the supporting and promoting Albanian artist women, on the sharing of knowledge and develop collaborative project in the old arts and theory, on innovative research and cultural practice across old and new media forms." The center is located in the middle of Tirana, Albania's capital, on the first and second floor of a nice, modern house.

While it was easy to imagine possible connections between an ego shooter game and the blood feud problematic, it was more difficult to get prepared for the logistic circumstances at the Cultural Center Lindart in Tirana.

We expected only female participants in the workshop, but it turned out to be a mixed group: Three young men, who worked at a private TV station, and five women with very different backgrounds: a lawyer, two artists, the curator of the Center and a psychologist. The women all had some basic computer knowledge and experience with image processing and the men even had gaming experience, but none of them had done 3-D editing or game design before.

Because, for several years now, electric power is centrally shut down for at least four hours daily (11 am to 3 pm) the first thing we had to negotiate were the hours of the workshop. We agreed on 5–7 pm as the common session and 3-5 pm or 7–9 pm as individual sessions. From the five computers, even though they were quite new, *Unreal Tournament* would only run on one after the first day. Exchanging some graphic cards made it possible to have two more computers running after the second day.

Starting Point and Tasks

There are many points of departure for reflection and action regarding blood feud. Editing a violent first-person shooter game forced the participants to take violence as a given factor. The development of the game levels and the discourse on the blood feud happened concurrently. The process of developing each individual concept seemed to be harrowing for the participants and it became evident that Albanians, even distant from the feuds, remain emotionally involved in these historical issues. Somewhat later in the process, themes related to cycles started to take precedence in each of the projects. We began to understand that there is no straight way out of blood feud, and change can only result from subtle interventions in the course of the vicious cycle.

The strategy of the workshop was to give good starting points and provide a sound learning approach to the *Unreal Tournament* editor, so that utmost effort can be devoted to the creative expression of thoughts. We did not know much about the participants' computer experience in advance and therefore wanted to give them a prepared game level that they could modify and expand.

The initial level was a white platform; numerous bots could be loaded to demonstrate violent fights. On the platform there were a number of no-kill zones. These islands, where the player could not be killed, were abstract interpretations of the houses where the people affected by blood feud are hiding.

In addition to the white platform, white (neutral, non-textured, naked) players were provided. The first task of the workshop was to use photos of traditionally dressed Albanian people as inspirations to "dress" one or two players. This was done with the program Upaint, which comes with *Unreal Tournament* and offers an interface to freely paint players.

The main task was the design of a level for *Unreal Tournament* with the white platform as a starting point. Learning the editing software was demanding, but nonetheless the main focus remained the blood feud problematic. How can something effective be created about something that is as futile, and to an outsider senseless, as the blood feud? Is there some hope that the vicious cycle can be broken? How could one interfere? The first concepts of the participants were often based on the notion of a game with a defined goal and end; like
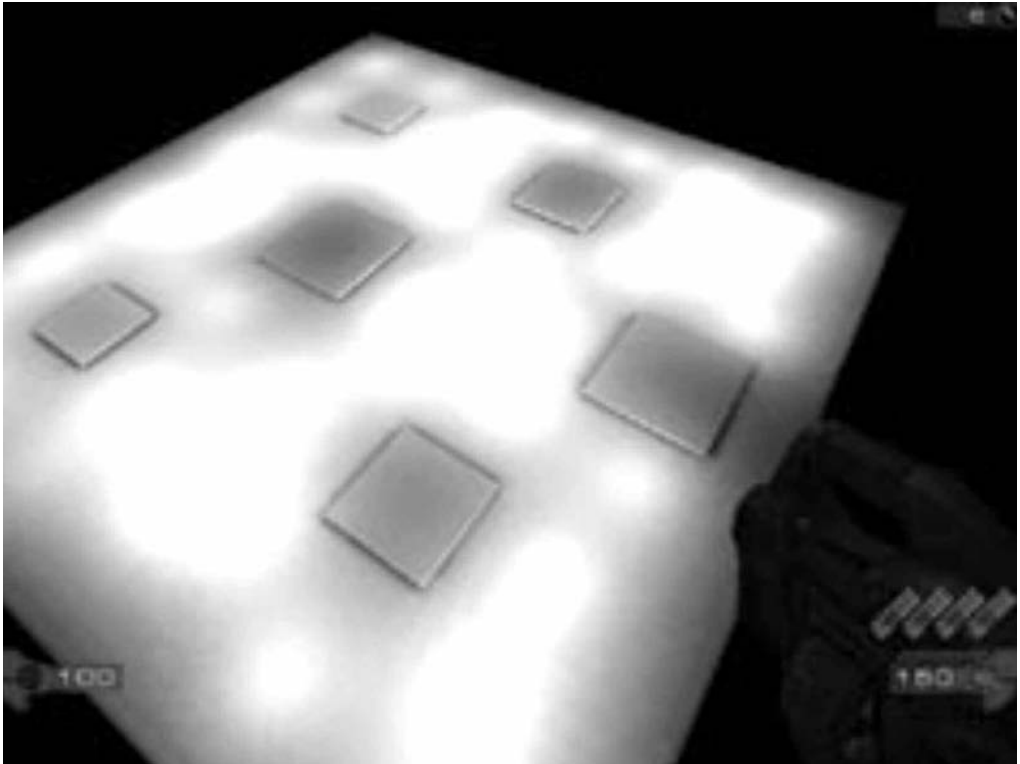
Figure 3: The white platform

Figure 4: The white players

Figure 5: A selection of players: Selman (Holta Hoxha, Pirro Koci), Malcolm and Shota (Eleni Laperi, Elona Hasko), Berrhan (Enkelejda Limani, Berald Bulku), and Uku (Suela Qoshja, Ermal Koci).

solving a puzzle, if you do this and that you will get out. Blood feud is not like that and neither are shooter games. The design of first-person shooter games is a spatial art focussing on creating the appropriate surroundings for actively behaving players. Furthermore, the characteristic of the shooter game that each time a player dies, a new one appears at the original "Playerstart" in the same exposed situation, paralleled impressively the fact of blood feud where every killing creates a new victim.

Go with the heart – Te veprosh me zemer by Eleni Lapari and Elona Hasko

Based on the metaphor "go with the heart", the concept of this level displays four special spaces representing the chambers of the human heart. Beyond the biological configuration, these constructs also represent tenderness, vulnerability and love as symbolized by the heart through exquisite Albanian landscapes of the north country represented on the chamber walls. The heart evokes these images – yet the splendor of the magnificent lakes, stark mountainsides dotted with ancient stone houses, the brilliant grass of the meadows, the pebbles, the flowers, all have served as the sites of age-old feuds. These landscapes of the exterior (and the human interior) have seemingly not changed for many years as witnessed both by the contemporary images on the chambers and Edith Durham's century old description. "The Grey wilderness of barren rock, that glares dazzling in the midsummer sun and beats back the heat with cruel force, takes wondrous blue and mauve shadows at dawn and even, and when wet, is the heavy purple-black of a thunder-cloud." The real and the unreal amalgamate in this game, the perpetual action of the circulatory system and the unremitting blood feuds intertwine in the chambers and hidden tunnels. Throughout the game the juxtaposition of the human heart and various signifiers of the blood feuds remain consistent landmarks. Once in a while in a blood-red tunnel, one encounters a woman holding a child, or a portrait of a young boy. These are the silent reminders – or perhaps one should say, the true victims of the endless feuds.

The game route (similar to the blood vessels of the heart) consists of several paths, only one of them is safe connecting two safe chambers. Unsafe tunnels on the route can trap the player. The male players wear the traditional white and black garments as well as the red headband and belt of the "blood" fighters. The girl is clothed mostly in red with black

Figure 6: The platform with the four chambers

Figure 7: Landscape images inside a chamber

Figure 8: Women and child at the end of a red tunnel

Figure 9: A female player at the entrance of a chamber

decoration. The goal for both of them is to reach the blue – for hope – "oxygen" chamber and from there players will be tele-transported to the beginning. "Go with the heart" is a very poetic rendering of a problematic situation.

Did you choose the right way? – Zgjidh rrugen e duhur by Holta Hoxha and Pirro Koci

The concept of this level is partly based on Dante's *Divine Comedy* and partly on the pragmatic consideration of the number of solutions available to resolve a situation. Dante in his search for happiness devised a journey through hell, purgatory and heaven. Today, in our everyday life we usually adopt three ways to resolve a problem: the emotional route, the rational and obeying historical principles.

The principal platform of this level shows the present situation where people (victims of the vendettas) are locked in their safe houses in respect for the Canon of Lek Dukagjini. On entering the space one encounters a parade of male fashion models. This on one hand is to emphasize the contrast between the lifestyle of these models and the victims of blood feuds. Judging by the surface, what could be further from the confined casualties of the blood feuds than the elegantly clothed, carefree appearance of these young men? Yet, considering the strict and often unwritten conventions models live by, the enslavement of the models to their own environment might not be so different from the bondage of the code observant mountain dwellers. Both the models and the vendetta victims have a point in common: they have to conform to the principles governing their behaviour. As one travels in the tunnels and chambers, the surrounding symbols become more and more ambiguous, ranging from deformed biological specimen to ominous flaming objects. The players wear traditional Albanian folk costumes with the time-honoured use of red colour.

In the game, as in everyday life, three options are offered in response to the blood feud situation. One, the emotional reaction, is leading to a chamber (representing hell), the other, a rational choice, leads to the chamber representing purgatory. The third option is a balance between emotional and rational reactions as well as historical principles – and leads to heaven.

Fight for freedom – Lufto per Lirine by Enkelejda Limani and Berald Bulku

This level's design is based on a number of distinctive kinds of spaces. The players and robots start in dark labyrinthine tunnels, from which they have to move out quickly because enemies are approaching from behind.

The player then enters a big labyrinth with rural stone textures on walls and floors creating a hard and rough atmosphere. There are few patches of grass where one can hear birds singing; these patches are the safe islands, but violent robots can throw you out of these no-kill zones and you have to run again. The labyrinth contains a number of special objects or spaces. For example: the evil tunnels, which are literally dead ends. Inside the tunnel the unpleasant, reddish illumination increases and the player gets confronted with images of despair. Turning away he may realize that a bloodthirsty enemy blocks the way out. A more pleasant object is a huge stair in the middle of the labyrinth allowing for an overview from above. From here the player can see the layout of the labyrinth and locate the enemies, which he can easily disable if they try to climb the stairs as well. Back down in the labyrinth

Figure 10: Male fashion model parade in the entry space

Figure 11: Emotional reaction leading to hell

Figure 12: Rational choice represented by purgatory

Figure 13: The third option leads to heaven

Figure 14: In the labyrinth

Figure 15: An evil tunnel

Figure 16: Overview from the stairs

Figure 17: At the "end"

there is a little hut full of weapons, the player can pick up as much as he can carry and hope to survive a little longer. The last room of the labyrinth is more interesting; it has a blue sky over the grass patch and round object hanging in mid-air. Things seem lighter and the player – severely injured once he gets this far – longs for the only exit where he sees "health packs" ready for his healing. But they are a trap, they heal and beam you back to the beginning of the endless nightmare.

At this point, it might be useful to note that some of the project participants had family experiences of the blood feuds, which lent a refusal to propose a way out, only the title indicates that it is necessary to fight for freedom.

Face to face – Balle perballe by Suela Qoshja and Ermal Koci

The concept of this level is to show that in Albania, beloved by its inhabitants, there are safe places, and there are others, which are very dangerous. While travelling the routes of this level, one is at most times in undeniable danger, the strong colours and images of the environment mean to show the possibility and the strength of survival. Almost always it is safe to stay inside the walled spaces, however it is even safer if you are able to get outside and away. The enclosed spaces on this level are constructed and connected to each other with tunnels. These tunnels offer only relative safety. Some seemingly safe platforms might be really dangerous black holes leading to bottomless pits.

Images of Tirana buildings have been used in the construction of this level, eliciting the turbulent past of the city. While the blood feuds are mostly confined to the north country, with family migration, the vendettas creep into the city as well. The images of the Tirana buildings also evoke the mundane, everyday activities of the inhabitants, yet the game environment provides another rhythm to this environment. The developers of this level found the contrast between the Albanian past and present very significant. The Canon (the basic concept behind the levels) is a code of past traditions, while the game is developed by the most current technologies offering a most intriguing differentiation. The artists felt that with this level they construct very new realities.

One of the players created for this level was named Uku, after a well-known name in northern Albania. National colours have been used for his costume. His shirt has been decorated with the symbolic Albanian eagle. Uku's strength was symbolized by his dark hair and strong facial features.

Conclusions

The results, compared with other workshops, were on a very sophisticated level. The most important reason is probably that the match of media and message was optimal. Shooting was not something alien that had to be dealt with because it is part of the game, shooting is central to blood feud. For the artists, it was also helpful that images could be easily imported. Therefore, the messages created are primarily visual but include the generation of a sense of place; a location the player can get to know, and the better he knows it the more successfully he can cope with the threat.

Figure 18: The main plaza of the level

Figure 19: The staircase – a safe place?

Figure 20: A fresh weapon is available

Figure 21: A tunnel leading into a house

Even though we are happy with the results, there were some instances when the language barrier – we communicated in English, which in fact was nobody's native language – and a lack of in-depth knowledge of the Albanian past and culture were apparent and we could not fully understand the participants ideas or had difficulty helping them when sensitive input would have been important.

The exclusive use of the male form when describing the player is intentional in this text, since it is always a reference to the male family members, which are in danger of being killed. Nonetheless, it is remarkable that no one thought of addressing the issue from the women's point of view. The women are suffering from blood feud as well. Could not they be influential for breaking the vicious cycle as well? Is it because of the first-person shooter media that solely the male point of view was addressed or has it to do with the women's role in this society?

The way out could not be demonstrated within the games levels, they were designed to demonstrate blood feud and blend in messages about other values or different paths to go. The game does not change itself, but hopefully the player will intensively experience the blood feud problematic and get inspired to reflect about steps into new directions.

The "E-mail from the Medieval Ages" project, which this workshop was part of, is still in progress. In the spring of 2004 , representing the first stage of creative expression by the affected families, 96 disposable cameras were supplied to 59 children, ranging from 6 to17 years of age, living in the north. When the children were asked to take photos of their everyday lives, they recorded images in their homes, gardens, animals, schools and themselves. Seeing the photos, one can realize that the children felt different about their lives when given the opportunity to use the cameras. Instead of others taking pictures of them or other subjects, they are the authors of their own images. From the processed photographs, 165 and 15 texts such as short stories, letters or poems were exhibited at Lindart in June with plans of touring the show abroad and exhibiting it first in Paris. As for the future, once computers and Internet access lines are secured, the project continues, in the hope that technology will positively inscribe and change the culture of blood feud in northern Albania.

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Section 3: Games and Other Art Forms

Should Videogames be Viewed as Art?

Brett Martin

History repeats itself in every aspect of life, but more predictably in art. Every time a new technology provides a fresh medium in the art world it is met with a lack of respect, indifference, or indignation, and must go through an acceptance process by the art world. New mediums are often commercially based ventures, and are not easily accepted as art.[1] Today, knowing how to manipulate images using computers is considered impressive, but the images created are not currently viewed as art. Videogames, much like its predecessors photography, video art, and cinema, will struggle through this process.

Misinterpretation faced photography in the mid-nineteenth century as landscape painters had their work recreated in a matter of minutes. The art world argued photography required no talent because cameras achieved the same effect regardless of the user. Creating art may not have been the goal of the camera inventors, however, the sale of cameras to the masses may have inadvertently impeded the advance of photography as art.

Landscape painters used cameras to achieve accuracy in the studio rather than painting outdoors; artists took the photograph to the studio and then traced and painted from the photograph to achieve the desired look.[2] Cameras were also used in photo booths on street corners to capture snapshots for entertainment, as they are today. As a result of these uses, it was hard to argue that photography was art in its infancy. Furthermore, early art photographers chose subject matter to mimic traditional art and exhibit the capabilities of the new invention. These were often still lifes such as Louis-Jacques-Mande Daguerre's *The Artist's Studio* or William Henry Fox Talbot's *The Open Door*.[3] Landscape painters and portrait artists of the time were initially grateful for the new invention because they realized its potential to advance their skill to the next level. Conversely, many could now use cameras to create their own landscapes with little effort. This created fears among artists that painting would fade away and be replaced with the new technology brought on by the Industrial Revolution.

Oscar Rejlander was one of the few artists of the time to argue that photography was art. The photograph *The Two Paths of Life* is Rejlander's reaction to the allegorical paintings of the man he admired most, Hogarth.[4] Created in 1857 in his ingenious studio, *The Two Paths of Life* was a piece Rejlander believed others would consider art.

The print is 30" by 16" and required approximately thirty negatives to produce. Even though his cone-shaped studio ingeniously utilized daylight, it took nearly two hours to expose some of the negatives because the chemicals needed more light than a modern negative.[5] This piece would be difficult to reproduce today, and Rejlander created it with fledgling technology that few understood at the time.

The photograph resembles Raphael's *School of Athens* and Thomas Couture's *Romans of the Decadence*. The composition includes a father figure/wise man, showing his two sons/apprentices *The Two Paths of Life*. The imagery of the right section suggests the virtuous road of life and includes a holy figure, a nurse helping an injured person and inventors. Rejlander referred to figures on the left side as images of "gambling, wine, licentiousness, and other vices, ending in suicide, insanity and death".[6] The allegory of good and evil is unmistakable, but the message was misunderstood. Some believed the wise man pointed to the road of pleasure rather than the road of virtue. Rejlander made another print of the work with the wise man pointing to the right. Though, he made several alternations to the work, this was the only alteration made in response to criticism.[7]

Criticism of Rejlander's photograph came from all sides and voices. The public did not accept it because it depicted nudes. Though the painting world highly respected nude studies and Rejlander was copying the nudes found in Couture's work, people viewed photographs as more true to life. Many regarded it as pornography, and during its exhibition the left half was censured at times to prevent public outcry. Other critics could not accept that something mechanically produced could create such an image and viewed the piece as a direct insult to Raphael's and Couture's works. This was also a result of reproducing Couture's work so close to its debut in 1847. Raphael's work was produced in 1510, so the reference was not as fresh as Couture's work, but critics believed it was a mockery or outright plagiarism. Another criticism was that the artist's hand never actually touched the final product, which was practically sacrilegious in the art world at the time. Additionally, the photograph was devoid of color, looking like a very accurate sketch to most viewers and, therefore, incomplete.[8]

At one point Rejlander explained every aspect of the photograph, subsequently revealing his secrets. The alternations to the work also hindered his argument because people believed it was easy to change. Once his methods and alleged short cuts were revealed, the public viewed the work as rudimentary. As a result, the meaning of the photograph was lost, as well as the time and effort Rejlander spent to produce the piece.

To defend his work, Rejlander stated:

> A photographic composition commenced in this manner must contain many parts in
> common with art; and even where they part company photographic art does not stand still,

but proceeds and gathers other merits on another road – though a more humble one, yet full of difficulties requiring much thought and skill up to the last moment, when they again converge.[9]

This statement represented a call to action for other artists exploring the medium. Instead of replicating previous art, Rejlander encouraged pioneers to create stand-alone images that would be considered art. Rejlander evidently reached a multitude of artists. Rejlander's disciple, H. P. Robinson, actually bested Rejlander in several showings. Robinson was not attempting to simulate art of the past like Rejlander. Instead, Robinson strove to be an excellent art photographer, and the critics appreciated the attempt.[10] Robinson's work did not generate controversy; he did not use his work to transform photography into a legitimate art form. Rejlander pushed people too hard, too fast, and they did not understand what he wanted to convey. They either thought he insulted traditional art, stole it and made it his own, or tried to get publicity with his controversial photos. He merely wanted to open people's minds to a new medium with great potential.[11]

Just as with Rejlander and his cameras, anyone can compose with a computer, but is it art? Does training matter? The answer is found in how the public views Rejlander's piece today – as true art. Though Rejlander is not considered popular and he rarely appears in art history literature, his reverence for his new medium share eerie comparisons with the thoughts of modern artists. "The time will come when a work will be judged on its merits, not by the method of production…"[12]

Though photography is regarded as art today, other mediums have shared the same fate as early photography. Video art is a particularly good example.

Video artist Nam June Paik must fight television's commercialistic base to have his work viewed as art. Moreover, his medium of choice is the focal point of his audience's living room. He began his crusade in the 1960s, when television became a household staple. He defends his work by saying, "We are moving in TV away from high fidelity pictures to low fidelity, the same as in painting… the aim [is] fidelity to nature. Monet changed all that. I am doing the same."[13] Whether cognizant or not, he relied on the methods photographic artists used in photography's formative years. Paik's work mimics other art forms rather than emulating them. His *TV Cello* placed television sets in an upright position resembling a cello. Appropriate music and visuals on the sets accompanied Charlotte Moorman's hand movements.[14] His ingenious method of overlapping mediums, as opposed to copying them, garnered him respect in much less time than Rejlander. He strengthened his art by straying from the medium's commercial roots and avoiding full emulation of traditional art. Viewers will not see any of the film noir elements of Alfred Hitchcock's films in Paik's work, nor will they see Charlie Chaplin's hilarious portrayals of the Tramp. Nor are there television ads reminiscent of Andy Warhol's studies of American commercialism. Paik explored video with independent thinking, and therefore his work stands in higher regard than Rejlander's.

The art world had a hard time accepting the new medium initially and this was another circumstance evocative of photography's past. The 1960s proved a better era for exploring avant-garde mediums than the nineteenth century, so Paik had an easier time than

Rejlander. Nonetheless, Paik had to overcome many obstacles. He exploited the new open-mindedness to expose his art publicly, and was met with criticism. Many of his pieces were misunderstood. Paik's piece *America* showcased a United States map in which each state was represented by a television playing images of that state's heritage. In each state the exhibit appeared in, audience members were filmed and displayed on their state's television.[15] Though many viewed it as patriotic, Paik was questioned as to why his video was not a special program on television. In response, he argued the experience of walking around the exhibit would be lost if aired on television. Furthermore, ad sponsorship was needed to appear on television, which would make the piece difficult to argue as art and would clash with the purpose of creating the piece. His other pieces were even more disputatious and misinterpreted. Paik dealt with the nude female figure with *TV Bra* and most of Moorman's other appearances.[16] Paik did not attempt to mirror famous nudes of the past, but expand on them. *Reclining Buddha* expanded on Titian's *Venus of Urbino* and Edouard Manet's *Olympia* by using a filmed nude model in a provocative pose that was compared with a Buddha on top of the TV. Controversy has arisen with each piece across history, but Paik's controversy is unique because a live model was used and the images were moving.[17] Surely in the public's eye this was the closest art had come to pornography to date. Though Paik's ideas for forging a new medium should be applied to videogames, the case for videogames as art cannot be completed without a comparison to cinema.

Stylistically, cinema is the closest medium to videogames. Both rely heavily on technological advancements to draw crowds and are entrenched in the commercialistic world. The majority of the public views movies as an art form, but not all movies are regarded as art. *The Wizard of Oz* is one interesting example of cinematic art. The movie was a major achievement due to its innovative special effects and application of Technicolor. This was a major selling point for the movie, but the movie is considered to be significant for several additional reasons. The movie had complex sets, perfectly integrated musical numbers and ground-breaking special effects.[18] However, the movie stood the test of time not simply because of the colour, but in the way colour was used. The metaphor of Dorothy leaving her drab, colourless life to visit the exuberant Oz could not have been fully realized without the use of colour. This is a rare case in which a technological achievement also housed art.

Cinema also relied on past mediums to gain momentum in its early years. Theatre terms and styles were used in early film, but this was mainly due to the fact that the actors and actresses originated from this medium before turning to film. Many early movies were based on plays, but cinema actually lost the ethereal experience that makes theatre still popular today. Theatre holds more refined elements of artistic value than cinema, and therefore early cinema was not considered art. Film in the later twentieth century had to establish itself apart from the books it obtained material from by offering acting and imagery that books could never offer. When film turned to special effects, lighting tricks as in film noir, and *trompe l'oeil* techniques, it matured and established itself apart from theatre as these elements could not be reproduced easily on stage. Videogames take the technological advancements to the extreme and share the element of an ethereal experience with theatre. However, movies today have more to offer aesthetically than games, and until games establish themselves apart from movies they will not be considered art.

Videogames' solely commercial history will be another issue to tackle. Computers share this history, but software makes the computer an artist's tool rather than a plaything. Several artists use computers to plan, create, or finalize their art; but no well-respected artists showcase their work in a videogame format. As a result, it may be difficult to prove videogames can be aesthetically pleasing. Many gamers argue the *Final Fantasy* game series is an art form because each screen is a beautifully rendered puzzle piece that creates an entirely imagined world. However, most gamers do not argue that the *Madden* football games are art, despite the lifelike feel from mapping famous player's faces on to polygons. This implies games create art through imitating life, but games will not be accepted as art simply because they replicate reality.

Videogame creators utilize many of the same processes that painters and movie producers employ. Concepts must be sketched out, characters modeled, landscapes rendered, narratives produced, music composed, and video edited. In doing this, videogames compile all of the art world's tools into one medium; drawing, painting, sculpting, design, architecture, creative writing, computer and video art and acting all come together to create videogames. Rejlander echoes from the past again when he said that new mediums, "must contain many parts in common with art".[19] The one element separating videogames from movies, which also compile the aforementioned skills, is the interactive element allowing players to control and manipulate the game's environment while creating an ethereal experience from playing. Videogames and movies utilize art to entertain audiences. Games frequently emulate movies for this reason.

Videogames may only be regarded as an art form if movies are considered art. Is the *Wizard of Oz* art? Strong arguments indicate it is. Is *National Lampoon's Vacation* art? Not likely. It is not regarded as a significant contribution to art, but was created in the name of fun. Simply because a medium combines several different accepted forms of art does not mean it is art by default. The problem may be distinguishing between games that are art, games that sell well, and games that are simply poor. A similar problem arises in distinguishing which paintings are art.

Certain paintings are viewed with differing amounts of significance. Claude Monet paintings are held in more regard than a Bob Ross piece. In the same sense, *Final Fantasy* is more respected by gamers than *Madden*. Both games present varying levels of entertainment, but so do most paintings. Is the significance of the abovementioned artists due to them creating a precedent? Perhaps so, but the artists did not merely set trends, they understood the potential of the medium and elevated the art form.

The analogy between movies and games also brings up another argument: games rely on the vocabulary and style of movies and, therefore, videogames may not be viewed as unique. Rejlander strived to emulate famous paintings in his photographs, and videogames seek to emulate movies. As argued before, making equivalents of paintings as photographs did not help Rejlander prove that photography is art. In fact, it was a hindrance. Games continually strive to become interactive movies. Instead, the games should become an independent art form. Jack Kroll argued that producers want game designers to be viewed as artists because the games would sell better as a result. The game designers are already

artists even if they create art for commercial purposes. Producers would likely never support a game created solely for aesthetic purposes because it would not have the guaranteed sales producers are looking for. Kroll also argued games could not possibly convey the emotional complexity art demands because videogames only simulate humans.[20] Henry Jenkins refutes this by arguing Disney's animated movies invoke basic human emotions, so "why should pixels be different?"[21] In fact, several games deal directly with human emotions, including death. *Final Fantasy VII* had one of the main characters, Aeris, perish at the hands of the main villain, Sephiroth. In *Secret of Mana*, one of the main characters, Sprite, was the last of her kind and sacrificed herself to save the world. These might not have had the same effect as a tragic movie, such as *Schindler's List*, but videogames are attempting to tackle tough issues. However, in *Final Fantasy VII* and *Secret of Mana* the other characters do not display the emotions that death evokes to the degree found in cinema and novels. When attention is aimed at fine-tuning the narrative elements and characterization instead of technological achievements, videogames will take a major step in becoming art.

Videogame creators are taking a step in the wrong direction by imitating the closest related medium. The more videogame producers use other mediums to gain strength, the more it detracts the overall medium from becoming art. Games based on movie licenses are historically poor and only offer significance through technological advancements. *Goldeneye*, a James Bond game based on the movie, is one of the few games escaping the fate of most licensed character games. Its multiplayer function and innovative reward system are precedents. It did not further the medium artistically, but made the genre more appealing and expanded options. Producers should look to Paik for guidance, as he overlapped the mediums instead of imitating them.

Another objective of art is to reach the audience in some way. Videogames accomplish this by allowing the player control. However, games could and should go much further. As in any book or movie, if the main character is uninteresting or flat, the story will suffer. Therefore, the character gamers control is even more important. This is obvious to most writers, but videogames are not known for their plots or the pseudo-acting of the polygonal characters. A character-driven medium can only gain significance by exploiting elements that make these characters human.

A hindrance in the argument of videogames as art is the lack of an efficient way to display them in an exhibit or gallery. These shows would also be mocked and judged maliciously by those in the traditional art world, if history truly repeats itself. However, we do not see televisions on walls in museums displaying *Wizard of Oz* as cinematic art. With technological advancements comes change in the way we view art. Simply watching a movie or playing the videogame will become the exhibit. The test will be if the exhibit has anything to offer aesthetically, morally, critically, or otherwise.

Aside from testing our reflexes or stroking our egos, videogames have little purpose. This could work in their favor. Richard Serra, an acclaimed sculptor and well-known artist, once said in an interview with Charlie Rose that art can in no way be functional. He argued that architecture and furniture design was not art.[22] Aside from the potential for moral allegory

that Rejlander believed all art should contain, art forms have no purpose. Even with this in mind, Serra pointed out that there was not a painting during World War I or II that kept bombs from dropping.[23] Serra may have good points, but he is overlooking the idea that form follows function. Without function, form can become several things and is often termed art. Form can then be used for a function regardless of whether functionality was a requirement. Videogames could benefit from not having the function to entertain. Without this requirement, the game could become art. It may still entertain, but entertainment would not be the main function. The industry would benefit from having more experimental games as video art is often formed from. One example of this experimentation today is *Rez*. This is a flight simulation/shooter mix with a polygonal human form attacking polygonal enemies. The music also interacts with the play in that defeated enemies produce a beat that enhances the background music. The game's storyline is a man vs machine narrative that has a computer become too powerful and a gamer that must hack in to save the world from computational meltdown. These innovations are welcomed, but it is the symbolism in this game that should turn heads in the industry. The human form evolves with each level based on a historical civilization, which portrays the span of time and symbolizes man's accomplishments. The game is experimental, as it appears to be a merger between the dance genre and the first-person shooter genre. This game is a major step to games becoming art and may some day be viewed as art itself, but an independent videogame industry may be the only answer to creating videogame art. This could end the cycle of cloning more popular games and making repetitious sequels within the industry. Such an industry would also allow for entertainment not being the main focus and would not be solely driven by sales. An independent gaming world may also deter videogame creators from increasing levels of violence, as the innovation alone would grip the audience and the industry would not have to shock to sell.

It is argued by some that videogames teach our children unsatisfactory moral codes, but, if this is true, games are no less to blame than books, movies or other art. In *Grand Theft Auto*, it is interesting to note that there are no children in Liberty City. Does this suggest that the happenings in Liberty City should not be viewed by children? Though the mature rating answers this, the game holds some moral allegory even though it is so violent. Art pieces are often shocking and violent, but are given the term art because they evoke some human emotion. The raging controversy over *Grand Theft Auto* may be a step towards considering videogames as art; games are an undeniably major part of our society. Art imitates life, but life also imitates art. Nevertheless, violent movies and videogames are cathartic and are healthy ways of releasing anger and frustration. In situations where violence appears to stem from the media, the perpetrators often are so far removed from reality that all cathartic possibilities are lost. While shocking videogames may elicit human emotion, it is the wrong sort of emotion. Shooting someone in *Grand Theft Auto* does not produce sadness or rage, but is deemed fun, and the emotional response outside the gaming world is outcry from the public. Increasing shock value to sell does not help in the attempt to classify games as art.

Few artists make videogames for the aesthetic, but thousands of artists creating videogames want to establish something more than the next big game that will sell. Several online artists use the element of videogames in their work, but this is not

videogame art. This is art based on games and presented in separate mediums such as computer art. There is not a game on the market today which possesses all of the qualities needed to substantiate the title of videogame art. The closest games have come to art is the early games found on 8-bit systems. Games like *Super Mario Bros*. used the medium to nearly its full potential at the time. *Super Mario Bros*. was a gamble because the game was a precedent in the field. *Super Mario Bros*. was born from art, reached its audience through being interactive, served its function of entertainment, is historically significant in the game world and is not based on previous art forms. It is not considered art because it does not elicit any emotional response toward the characters, it does not have a meaningful plot, and there is little moral allegory to be gained other than saving the princess. These factors suggest that the full potential of the medium as a storyteller was not achieved. It can be argued art does not need these factors, but the traditional art world holds certain works with significance because those pieces are extremely important in the cultural context. Paik's art would be misunderstood if it was not created in the context of the MTV generation, and Rejlander's work was misunderstood because he was ahead of his time. Videogames sell well, which suggests that games are important within the culture, but only the art world decides if games are art, and the public can sway that decision. The public only considers a movie artistic when all of the elements that create it are at their full potential, and even then there is a possibility that the movie is not art. Games are not being considered by the art world because the public still sees games as a child's plaything. With each new game that targets wider audiences, games come closer to getting noticed on a broader scale.

Kingdom Hearts, a game that merges the worlds of Disney and *Final Fantasy* along with art and videogames, uses a mixture of realism and surrealism to achieve what may be the closest attempt at videogame art today. This game poses unique challenges for designers, in that it attempts to take two very different styles (the intense art of *Final Fantasy* with the cartoon art of Disney) and have them converge in one world. The Disney characters had to make the large jump from two dimensions to three and the *Final Fantasy* elements then had to mesh with the worlds of Disney. This sort of merger is a precedent in the gaming world, both in the game and in the real world; Square and Disney represent the largest companies in their prospective fields. The significance of this game is indisputable because of these precedents, but it is still not viewed as art. The game entertains while being innovative and aesthetically pleasing, yet the emotion is missing and portions of the game distract from the narrative. *Kingdom Hearts* also has no memorable moral allegory other than the "save the world with new friends" mentality that can be found in nearly every role-playing game. Movies edit scenes to keep narrative flowing, but videogames will need to tackle the lingering problem of keeping gameplay intact without disrupting narrative flow. This is further challenged by the view of narrative disrupting gameplay. Several games only use the often unseen intro and the ending to convey the plot, meaning it is not seen as a key element. *Final Fantasy* games have attempted to solve this dilemma by using unplayable movie scenes to advance the plot, but this is also a series that is striving to become an interactive movie. The gaming world must better employ narrative if it hopes to contend with mediums that use the element more efficiently, and thus become art.

Significant videogames have been created even though none can be considered art. Nevertheless, more games are on the way that may sway the art world to reconsider shunning this unique new media. The public must open their minds and realize that new mediums, no matter how embedded in commercialism, have the potential to become a well-respected art form. Producers of videogames must take drastic and expensive measures to create games that leave past mediums behind and create games that can independently be considered art, if that is what they truly desire to achieve. Designers must hone the elements of the mediums that have come before games to their full potential and use them innovatively and independently. The public should not let a new medium frighten them, even though the work spawned from it may be upsetting. Photography, video art, and cinema have shown the art world that great mediums with limitless potential are worth struggling for and that history repeats itself. Perhaps one day Rejlander's words will urge the public to accept whatever medium artists choose and "[the] work will be judged on its merits, not by the method of production..."[24]

Notes

1. Art will be defined as accepted fine art in the nineteenth century during and right after the Enlightenment period where the traditional art world accepted more mechanical forms of art such as photography because the technology was understood.
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19. Rejlander, O. G. *An Apology for Art-Photography*, 1863.
20. Espejo, Roman, *At Issue: Videogames*, New York: Greenhaven Press, p. 47.
21. Espejo, Roman, *At Issue: Videogames*, New York: Greenhaven Press, p. 45.
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Some Notes on Aesthetics in Japanese Videogames

William Huber

Will Wright, the videogame designer responsible for the acclaimed *The Sims* and *Sim City*, has described a trajectory for the development of videogame aesthetics that recapitulates the history of representation in western painting: a slow rise through realisms, constrained and founded on technique, culminating with and dissolving in impressionism and the abandonment of the realist enterprise and the opening of aesthetic freedom.

According to this history, videogame development is nearing the apogee of a progression to perfect realism that will lose prescriptive force as technology and production processes make photorealism technically trivial. Martin Jay has charted the vicissitudes of the scopic in western, particularly French, thought. Reproducing Walter Benjamin, he suggests a dialectic by which impressionist, expressionist and abstract visual aesthetics come into force in the wake of an exhaustion of the mimetic imperative. We can and should, indeed, be suspicious of this history, yet it is enough for our purposes to observe that it is at least naively tenable and that problematizing this narrative is a subsequent process to describing it.

What we might reluctantly describe as "the Japanese aesthetic tradition" does not track this model at all. When mimetic criteria are mobilized, it is as a tactic: even naively, one could never produce a history of pictorial representation which arced into and through exactitudes of realism in the field of vision.

Less than take the classical terms of the Japanese aesthetic tradition as a pre-history, rather than a working basis, for any claims we might make about the aesthetics of contemporary Japanese artistic practice (including videogames), but, more importantly, we should see those classical terms themselves in the light of an engagement between Japan and the western aesthetic tradition.[1] Additionally, it needs to be noted that, in the interest of introduction, some very broad gestures are made here that could and should be

problematized: while the philosophical, aesthetic and artistic traditions of pre- and post-Meiji Japan are distinctive from those of the arbitrarily defined "West" as well as from other Asian and world cultures, there is considerable historical dynamism within them, and even the boundary conditions – between the within-Japan and outside-Japan, and the local and the national – are far from straightforward. With these sobering caveats, an overview of classic and contemporary aesthetic concepts may be helpful.

Certain concepts are cited as the most common aesthetic categories used in classical Japanese aesthetics: among them is *mono no aware*, or "pathos/feeling of things" – this is a kind of poignancy characterized by emotional misdirection; *yojo* or "surplus of meaning", in which perlocutionary force overwhelms the content of discourse; *yugen*, a simultaneous indication or suggestion of transcendent beauty without representation, and *sabi*, or poetic loneliness. These traditional[2] elements do reappear in videogames and other contemporary practices, but usually self-consciously (even more self-consciously than they did in nineteenth-century literature and painting, when they were mobilized in the service of the production of a modern national project).[3]

So, we can also identify aesthetic concepts relevant to contemporary artistic practice and popular visual culture. One such category, descibed by aesthetic theorist Megumi Sakabe[4], is that of the problem of masks and faces, the complicating of the question of mimesis and the relationship between mimesis, caricature and abstraction. Another is the evolution of what artist Takeshi Murakami has described as *Superflatness* – an adaptation of traditional isometric and surface-oriented visual strategies to the realities of a Japan in the middle of an ongoing crisis of encounter with the West. We can often find, also, calls for aesthetic performance and of the integration of aesthetic demands on the player with the other demands of the game. To these categories we can add new ones drawn from the aesthetics of *manga* and *anime*: terms like *puni* (endearing infantilism) and *moe* (a concept applied both to the adolescent feminine ideal – energetic, perky, yet innocent and vulnerable – and to the ambiguously chaste infatuation of *otaku* for the characters that embody those ideals.)

Videogames require simulation, rather than simple representation, in order to function and be playable, and simulation in its way takes its course from the mimetic practices which preface it. A fighting game, for example, represents the characters and situations of martial-arts films, and also uses the techniques of pictorial and photographic representation (framing of a scene, foreground/background, etc.) But simple static representation is inadequate: behaviours must also be represented, and the representation of behaviour in a dynamic system is simulation.

As described by Sakabe, mimesis has been addressed as a different kind of problem in Japanese aesthetic discourse, and it could be said that in the distance between European and Japanese strategies of mimesis is a simulation-sensibility that is more supple in its treatment of the game-subject. Consider the simulation of quotidian activity one finds in *The Sims* with the treatment it receives in a Japanese dating simulation game such as *Tokemeki Memorial*: the former simulates skill-acquisition in a quasi-photorealistic way, as the avatar must work out in order to increase his physical prowess score. In the Japanese game, the interface is a simple menu. However, for the former, such activity acts

simply as a prerequisite for certain types of career advancement; the latter interweaves the investment of time into different educational and extracurricular activities with different trade-offs in relationships and performance. The use of the static visual field to connote a dynamic social system recalls the distinctive camera of the film-maker Yoshijiro Ozu, who almost never used pans or moving cameras while capturing the ambiance of the social dynamics of the Japanese home. Likewise, a videogame avatar will move into a space and move out of it; the events of the world will occur and pass, and the spaces which are thought of as being marked by those events will remain after those events have terminated. This effect is notable in side-scrolling games and "beat-em-ups" such as *Street Fighter* and *Viewtiful Joe*.

Gaze, Masks, and Mirrors

Megumi Sakabe has described the mimetic tradition in Japan as unconcerned with recovering a primordial, static *logos* – the essential characterizing meaning of the thing to be represented; rather, he bases the strategies of mimesis in a problem of masks and faces. The self that is presented to the world, even the "self" of things, is to be understood as tactical and unstable – a mask. Depicting an object or a subject then is a matter of suggestion: of showing the mask-action in a way that indicates it, already, is an act of mimesis. In this light, the simulation imperative is one of dealing with masks and mirrors. Sakabe describes the roots of the problem in the term *omote* – an old Yamato dialect word which means both mask and face. The simulation conceals that which for which it stands in, while it simulates the very act of representing.

Likewise, the question of the gaze is cleft in Japanese aesthetic language. Gaze was translated both as *omo-zashi*, the features, and thus intentionality or pointedness of the face, and then later as *mana-zashi*, or the outward pointing of the eye; the question of being simulated and simulating is seen with the understanding that what sees itself as a self can only do so by knowing itself as knowable by another. (Sakabe suggests that the influence of Sartre has displaced the earlier term from currency in Japanese cultural discourse, with a European impatience with uncertainty of intention – ambivalence is considered a marker for falsehood and dishonesty in western depictive practice, but of sincerity and consideration in Japanese practice.) In terms of aesthetic practice, this is characterized by a stylized language of affect, a repertoire of gestures and utterances.

Sakabe himself traced these questions in drama and the pictorial tradition, but the dilemma rounds a corner at that point that it becomes an issue of game – simulation.

Aesthetic Performance

A feature that sometimes appears in Japanese videogames is that of the integration of aesthetic performance as a criterion for player success. Dance/music games and karaoke games will grade and reward certain types of improvisation and virtuoso play with added scores, unlocked features, etc. In some role-playing games, the construction of symmetries by the player, who can complete sets of collectible objects within the game – is rewarded by otherwise unavailable sequences and features. The field of the aesthetic itself is a dominant theme in Japanese discourse and in videogames acts as an axis of play.

The videogame is unique as a visual media that makes explicit demands on the body of the player – do this or you die, do that and you get bonus points, the narrative, either in or of the game, isn't going anywhere unless you do something, and perhaps do it several times. There's little surprise, then, that in Japan the double nature of motion – as operant and as visible – would become integrated into the body of music and dance games such as *Dance Dance Revolution*. Sakabe writes:

> … the boundary between ritualized movement and the movement known as natural is, to a certain degree, always very ambiguous – indeed, ordinarily we cannot easily distinguish them. We always see in human movements a relationship with others … [5]

Rupert Cox[6] has suggested that the Japanese category of "play" (*asobi*) includes elements of aesthetic performance: he notes that Mitsukuni Yoshida amended Roger Callois' four categories of play with a fifth, the play of seasons, to include activities such as the tea ceremony and moon viewing.

Exposed Apparata: Isometrics and Menus

Isometric projection in the depiction of domestic and public space became common in the Heian era with the popularity of paintings of court and palace settings featuring exploded roof views (*fukinuki-yatai*); the technique persisted and was developed in the Tokugawa years in *ukiyo-e*, a long-lasting tradition of painting of popular scenes, which in turn informed and was informed by the developing theatrical tradition of *kabuki*. The Japanese theater has always "exploded" its view, leaving in view the apparatus and labor which construct the spectacle to the eye of the audience. This lack of an impulse to hide the mechanisms of portrayal persisted in early Japanese cinema: the first films were projected perpendicular to the audience, proffering a full view of the projector apparatus.

Yamaguchi Masao has observed that the Tokugawa era's proscription against industrial culture led to the relocation of mechanical culture to ludic sectors: *karakuri* culture, the culture of mechanical technologies as entertainment. Clockwork technologies were used for animated dolls and automaton puppets and used in *kabuki* production.

Likewise, these visual strategies appear as the recurrent mechanism by which isometric perspectives alternate with menu-driven ones, in games like the *Pokémon* games and the *Final Fantasy* series. Avatars transverse across an isometric landscape; when an event disrupts the navigation of the game-space, the interface becomes menu-driven.

Superflatness

Takashi Murakami is a contemporary Japanese artist who works at the intersection between popular visual culture and fine art: in 2000, he organized *Superflat*, an exhibition of work by contemporary artists and designers freely expropriating from and commenting on the aesthetics of Japanese popular culture – its cartoonish eroticism, its graphical conventions – in a way that is superficially similar to the work of pop artists from the 1960s and 1970s like Roy Liechtenstein and Andy Warhol. Yet, there's a sensitivity to the sublime in the work of these artists, and, in contrast to the pop tradition, a disinterest in the mediation of personality. The almost gentle *Superflat Manifesto*[7] that accompanied the exhibit reflected

uncharacteristically on the lineage of the visual conventions of contemporary and popular Japanese art, freely proclaiming its origins in six Edo artists, as well as in the works of Hokusai and Jakuchu. From a discursive perspective, one could make something of this self-conscious positioning of artistic practice in the tradition, but we can also take it flatly, at face value: the Japanese representational moment embraces the contradictory boundaries of mimesis to become resolved in flat conventions of resistance to absolute perspective.

Murakami has himself identified videogame development in Japan as part of the development of the Japanese aesthetic overall. Describing *Pokémon* and *Street Fighter 2*, he notes:

> [G]ames with the movement aesthetic of Japanese television animation are seen as very original and as evolutionary developments of games that only Japanese, who have grown accustomed to two dimensional expression, could make.

Notes on Certain Games: The Games of Masaya Matsuura
Masaya Matsuura's profile as a quintessentially Japanese videogame auteur persists even as he collaborates with American artists and produces games in English. The *flatness* of Matsuura's work extends into the third dimension in *Parappa the Rapper* and *Um Jammer Lammy* – the characters are shown as flat comic figures, yet can "peel" off the screen into the third dimension. This is an explicit rejection of the realist representational aesthetic: a conscious and conspicuous use of 3-D technologies (the peeling effect requires sophisticated use of 3-D) to affirm the 2-D aesthetic.

Synaesthetia is strongly featured in his games *Rez* and *Vib Ribbon*[8] and is an element of many music/rhythm games. Resisting the diegetic function of sound in non-Japanese videogames (where sound can reveal a position, or enhance the immersive illusion) synaesthetic effects recall the mask/face ambiguity described by Sakabe: it is part of the expressive vocabulary of performance, and thus its role as indicating the uncontested real is diminished.

Linked to this understanding is the knowledge that to be able to see, to conceive of the object, is to be exposed to vision, to be seen.

The player is not invisible, but also creates his effect on the game in bodily performance. In *Parappa* and *Um Jammer Lammy*, aesthetic performance demands that the player improvise: too-faithful imitation of the prompts does not score as well as well-played riffs.

Matsuura's *Mojib-Ribbon*, a music/rhythm game based on mixing hip-hop rhythms with *sumi-e*, or traditional calligraphy. The player's aesthetic failure here – bad timing – creates a botched object: characters that are drawn with too much or too little "ink".

Tokimeki Memorial 2
The dating simulation turns each encounter into a light portrait, a character sketch, a soft pin-up, and a cartoon, as it represents adolescent romance as an element with the operation of one's life. Even as the protagonist picks and chooses his response to the girls; the girls

populate his life like a pantheon of characters, he is responsible for maintaining his own attractiveness, his academic competitiveness, his interests – all through an interface by which the player schedules the activities of the high school year. Though these games are genre-marked (games in which a male player has a year-end kiss as a game-goal are marketed explicitly towards boys), there is an anti-porno logic in that the love-agent is never invisible or transparent – he is visible to the world, to his love interests and always enmeshed in them.

The basis of this anti-pornography is the fidelity to question of masks and faces, and the different function of the gaze described by Sakabe. To gaze is to be also an object of discourse, and it is impossible to look without being called upon to determine a position with regard to the object of the gaze. You cannot look at a girl without being demanded to declare yourself, even if the declaration is nuanced or indirect – and the choices of communication you make define your eventual status and your consequent love interest. You can only "choose" a girl by defining your own mask.

Boku no Natsuyasumi

"My summer vacation": a sim in which a boy is sent to the countryside to stay with his aunt, uncle and cousin during a period of transition at home. The summer home is a series of spaces which are organized by the activity of the player, yet persist, and are depicted as pre-existing the player's involvement. The space persists and is depicted photorealistically: the characters are drawn flatly. Traditional poetic aesthetics – the element of nostalgia in *mono no aware* – ties the game with the film and literary tradition. As much as it is a simulation of a once-common rural summer that is no longer an option for many urbanized Japanese children, it is also a reminiscence of lost childhood.

The reappearance of traditional childhood activities is also apparent in the game *Boku no kaputomushi* (My Stag Beetle); a simulation of the still-common hobby of collecting, breeding, cataloging and fighting stag beetles; the logic of taxonomy, childhood naturalism and gladiatorial combat are very much like those seen in *Pokémon*.

Viewtiful Joe

This game for Nintendo's GameCube console is a multiple remediation of forms. In the prologue, the player is told that he has been transported to "Movieland" to save his girlfriend: the character Joe is literally brought into the flatness of the screen. At the same time, the play of the game harkens back to the style and structure of the now fading arcade games.[9]

The game also alludes to and demonstrates two features we have described above: superflatness and the demand of aesthetic performance. The game celebrates its two-dimensionality thematically, and stylistically, using the heavy lines of comic books. It is a tour-de-force for the flat aesthetic: gameplay is also strictly two-dimensional, yet still generates an experience of spatial immersion.

In remediating cinema, the game rewards aesthetic performance with added scores and power-ups for particularly spectacular maneuvers. As suggested by its title, the character is conspicuously an object for the gaze of an invisible, implied audience.

Final Fantasy

Among the most popular of game franchises is the *Final Fantasy* series, for Nintendo and Sony consoles. The continuity of the game, its existence with the RPG genre as a franchise, is idiosyncratic with respect to other media franchises, in that neither characters nor, in a strict sense, diegesis persists from version to version. Rather, the series is united by recurring play elements and minor characters set in vastly different worlds (fantastic, futuristic, industrial/dystopian) and an oddly baroque visual sensibility. Often identified as "the most Japanese" of all videogames[10] the way that Ozu's films were once designated as the "most Japanese" of cinema: as characterized by *mono no aware*, the pathos of things, and by themes of loss and memory.

There's an irreducibility to straightforward genre logics that permeates the *Final Fantasy* series, and its self-conscious structure.

Certain thematic elements bind them together: the aesthetics of apocalypse, themes of memory, amnesia, and misplaced/mistaken identity; fluid racial ontologies. The idea of the baroque has an unusual place in Japanese aesthetic appropriation from the West. It is possible to see the baroque culture of masquerade and artifice as in some ways analogous to that of *omote*.

The games have progressed from simple flatness to isometric projection, yet certain structural elements remain: navigation of space alternating with menu-driven combats and activities, and the proliferation of mini-games and collectible objects within the game.

Notes

1. For an overview, see the articles in Michele Marra, 2001.
2. The problematic nature of the "traditional" nature of an aesthetic category is beyond our scope: the question is addressed by Stefan Tanaka (1994).
3. See Karatani, 2001 in Marra, 2001.
4. Sakabe, 1976 in Marra, 1999.
5. Sakabe, 1976 in Marra, 1999.
6. Cox, 2002, in Hendry and Raveri, 2002. There's a great deal of caution that should be taken at assuming a radical difference in the category of play, but the reference is here in the interests of challenging assumed identities in the category and to draw attention to the inclusion of activities featuring aesthetic criteria in the practice of play.
7. See Murakami, 2000.
8. Murakami himself linked Mastūra's *Vib-Ribbon* with twelfth-century animal character scrolls (*emaki*) such as the *Choju jinbutsu giga*, in which woodland creatures such as frogs, rabbits and monkeys are depicted as cavorting along a sketched hillside scene.
9. The game's cartridge can be brought into the arcade to interact with the arcade version of the game, unlocking special features.
10. At the same time, the *Final Fantasy* series is the success story for the creation of an export market for the RPG genre, while the *Dragon Quest* series long enjoyed greater domestic success: see Kohler (2004) for a general history of the genre.

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THE COMPUTER AS A DOLLHOUSE (EXCERPTS)

Tobey Crockett

I propose that one of the most interesting conjunctions between the realms of art and videogames centers on the metaphor of "the computer as a dollhouse". I am interested in this trope primarily because it introduces some psychological avenues through which to assess notions of interactivity and digital media in relation to play, imagination and creativity. We need to reconsider play, particularly play among avatars, as a creative and artistic act, to which end I propose that any critical theory of digital media and interactivity must include an "aesthetics of play" and an "aesthetics of empathy". My conclusions are based on my own observations and practical experiences playing and building in 3-D virtual worlds, and on information largely provided by others in regards to transactions in MMORPGs and other persistent environments. What follows are some excerpts from my doctoral research, which includes some inquiry into the nature of the "computer as a dollhouse".

The Early History of the Computer as a Dollhouse
The history of dollhouses is fraught with themes of obscure cultural artefacts, feminine cultural productions and self-expressive, imaginative creativity. Ancient Chinese and Egyptian tombs, dating as far back as 7,000 BCE, often contained small replicas of the world around them, objects which were meant to serve as substitutes for the real world in the next life. The urge to model miniature versions of our world, either for ritualistic, educational or imaginative purposes, is a very ancient human activity. Some of our earliest known Ice Age objects, some as old as 25,000 years BCE, are doll-like fetishes made of bone and ivory, symbolizing the feminine, mysterious and chthonic.

Miniature worlds are not solely relegated to the cultural domains of the ancient, magical and quaintly "primitive"; much of today's entertainment technology finds its roots in the all-encompassing aesthetic experiences of the Enlightenment project, experiences which were often predicated upon the contained space as it is transformed into another reality by religious, transpersonal or other states of altered consciousness. These spaces might be tiny, as the architectural models of the dollhouse will show, or they might have been scaled

for a broader public consumption. Examples include the cathedral which, with its operatic offshoots and the subsequent interventions of Richard Wagner, is, among other Renaissance cultural productions, a clear forerunner of the modern cinema; it is also intended as a schematic representation of the world, united by divine plan. Garden design, especially Baroque-era creations complete with architectural follies, menageries and mechanical devices, attempted to encapsulate the world of nature and history into contained spaces which were to symbolize the larger realm. Traveling exhibitions of enormous dioramas and massive paintings were another substantive backbone of nineteenth-century entertainments, making both painters and exhibitors alike wealthy and famous before the dawn of mass distribution. Such miniature worlds foreshadow the development of the small screen with its all-encompassing visual information.

As for the history of dollhouses themselves, it is challenging to piece together a critical history of such marginalized and ephemeral objects. In the sixteenth and seventeenth centuries, special cabinets or small rooms known as WunderKammer housed exquisite collections of natural objects, rare artefacts, optical devices and special toys. These toys often included automata, which were early mechanical devices with analog programs and proto-cybernetic systems of automation, objects which were very early forerunners to the computer. As Barbara Maria Stafford explains so vividly in her catalogue for the "Devices of Wonder" exhibition, Wunderkammer were engineered, collected and arranged to offer practical glimpses of the entire material array of objects which represented our expanding perceptions of life on this planet. These special collections act as significant predecessors for the type of objects and experiences which we now associate with the virtual.[1]

While WunderKammer were early prototypes of museums, they also act as forerunners to the dollhouse. Dollhouses were not originally intended as toys, any more than most dolls were initially destined as playthings for children. Dolls have a rich, mysterious and even spiritual history which does not preclude their practical applications as models, often for fashion designers and dressmakers, and as instructional aids for mothers and women-in-training. Sixteenth- and seventeenth-century dollhouses were intended to prepare a wealthy young lady to manage servants and all the necessary complexities of a large productive estate. It was not until the nineteenth century that Victorian ideas about childhood and the broadening of the middle class had an immense impact on the way dolls were gradually perceived as more trivial or marginalized objects of interest, significant only to feminine culture.[2]

Some of the very early dollhouses functioned as decorative settings or cabinets for storing the amazing and magnificent automata which peopled the mechanical imagination of the Baroque era. Only royalty could afford such elaborate constructions, and a brief period of fascination for automata on a large scale led to pleasure gardens with water-powered scenes, apparently riveting such eminent children as the young Louis the XIII, among others. Courtly interest in such large-scale automata declined fairly quickly, but a fixation with their illusionistic mechanical quality was retained on a smaller scale, appearing variously in clocks, music boxes and dollhouses, often with dramatic narratives from the Bible, hunting scenes or courtly arts played out by the doll-like figures. Later, public shows of mechanical automata with paying audiences continued as a mainstay of spectacle and popular entertainment, well into the nineteenth century.[3]

My main interest in the early history of dollhouses and automata is the conjunction of the cabinet-like housing for complex machines with programmatic functions. Combining this with the simple observation that playing with avatars and building worlds is very similar to the creative engagement we have with dolls and blocks leads me to propose the computer as a dollhouse. Upon investigation, that turns out to be more than a trivial comparison.

Avatars as Transitional Objects and the Evolution of Empathy
Many complexities, linguistic and philosophical, arise with the introduction of "seeing as if" with the "eyes" of one's avatar or from a "god's eye view". Sometimes we are in a virtual world with a limited choice of avatars, or we may be a tourist and be unable to change avatars at all. What happens when, as if in a crowd of penguins, we find ourselves in a cluster of avatars which look exactly the same? Especially if viewing this crowd of undifferentiated avatars in third person, we have the distinct impression that we are merely one among a group of similar objects. Then the only way to distinguish our own avatar from a sea of others is to either move forcibly away from the crowd, or to speak, such that our chat dialogue appears above our head. Otherwise, we would not be able to make the distinction between ourselves and others. The subject/object distinction is thus briefly negated while we share a group presence. In my approach to virtual embodiment, this "accidental side effect" of being in avatar turns out to be a significant phenomenon, pointing to an evolution of empathy and the avatar as a transitional object.

Being in avatar and experiencing a brief confusion about our identity is not our first experience of learning how to distinguish between who or what we are and are not. While many disciplines and branches of critical theory deal with the topic of identity construction and its various implications, I, particularly, find the notion of a "transitional object" introduced by the psychologist David Winnicott in his discussion of identity construction in infants to be useful in this context. In *Playing and Reality*, a 1971 text which extends his thesis about the creative self, Winnicott elucidates a notion about infant perceptions which enable the baby to create the initial separation of reality into phenomena of subject and object. This first occurs by the infant's non-differentiated identification with the breast, which then becomes a "transitional object", later substituted with a toy, through which the baby learns what is and isn't part of the self.[4] It is important to recognize that the primary issue, identity construction, with which we must contend when we are asking about "virtual embodiment", is exactly the same as Winnicott's infant: who, what and where am I?

My observation is that the avatar, and perhaps even the entire virtual world it inhabits, similarly acts as our transitional object as we negotiate a new sense of embodiment in cyberspace. This has led me to suggest a notion of the "computer as a dollhouse" – a cyberized play space in which we learn about our new interactivity. We use the avatar, like the baby uses the toy, to understand what is subject and what is object as we create our foundation about how reality works. In this case, the reality we are learning about is not our day-to-day reality, but rather cyberspace.

Transformative Play
Christopher Bollas, another psychoanalytic source who is himself quite influenced by Winnicott, argues that the baby may indeed play with toys as transitional objects in order to

create a world-view, but she does so against the steady backdrop of the mother's presence. In Bollas' terms, the mother is a transformational object. The transformational object is experienced, rather than intellectualized, and it alters self-experience.[5] This definition bears a strong relationship to my argument that the avatar is a transitional object for users, and, perhaps, further research will prove it appropriate to argue for the role of virtual worlds themselves as transformational objects as well. The avatar is so inseparable from its world, its identity is so "situated" in that particular space, that one might want to argue for the entire world as a transformational object and not just the avatar.

If the virtual world is a place of transformational play enabling the user to experience themselves in a new light within the context of cyberspace, it can really only do this in a social context. Empty virtual worlds do not in and of themselves provide a sufficient catalyst for the kinds of transformations which I have in mind to take place. I believe that it is only in the presence of others that we can point to new and interesting developments, hence I place an emphasis on interactivity as a person-to-person operation, rather than as a human-computer interface.

Eric Zimmerman, a co-founder of GameLab and designer of the game *Sissyfight 2000*, among many other projects, also challenges machinic paradigms of interactivity. He asserts that the interface is not a barrier or membrane between the user and the data she is manipulating, but instead functions as a kind of activity zone which enables the creation of "meaningful" or "transformative" play.[6] *Sissyfight 2000* is a social game in which characters must cooperate in order to win; they do so by ganging up, successfully teasing other players and prevailing in a revision of the classic playground drama of verbal bullying. This game is not a twitch reflex game based on target skills, but rather depends on social skills; it emphasizes a very different process for attaining mastery from first-person shooters. While this is not a very empathic game in the standard sense, it is still true that players must be socially adept and bond with one another in order to succeed. Those who cannot bond, lose. The pleasure of the game derives in no small part from the sense of irony and social status which accompanies this battle of wills.

Will Wright, creator of the world famous *Sims* games, also points to the intense socialization which takes place as part of what he describes as the "meta-game" surrounding *The Sims*. What Wright calls the "meta-game" is the layer of social exchange which takes place in support of the game, but which is not the game itself. For example, Wright is fascinated by the phenomenon of "family albums" which have accrued an enormous amount of what he refers to as "fan" attention. I will return to these issues again when discussing the role of the player as author. For now, I wish to emphasize the way in which players of *The Sims* have taken to arranging entire families, houses and events in order to take "snap shots" (screen grabs) of the characters as a means of illustrating a story. In fact, they are using *The Sims* characters and settings in order to write, exploring creative impulses and other psychological urges. There are several "September 11th" family albums, for instance, in which people have written *Sims* family stories in order to express themselves and explore their feelings about the events which have so impacted the nation.[7] Many websites offer additional modifications of the program and tens of thousands of objects which did not originally come with the program may be acquired from these "fan" sites. Wright says nearly 90 per cent of the content now seen in *Sims* environments is "fan" generated.

This process of authoring fresh objects in order to extend the play occurs in many formats of 3-D virtual worlds, but what I find significant is the way in which users are themselves transforming computational objects as part of a play process. It is perhaps similar to craft efforts at making dollhouse furniture, doll clothes, scrapbooking, auto detailing, and so on – all of these are similar activities we see played out in the real world. But the process of virtualization, digitization and exchange also makes these model authoring activities fascinating adjuncts to an interactive economy of play. Celia Pearce makes the same point in her essay about emergent authors as being a necessary element in interactive environments.[8]

The Purpose of Play
Digital authorship of new models becomes a critical issue for the kind of participatory play which such games enable and this is the same play phenomenon which I discern for free-form virtual worlds in general. This play is a kind of artistic self-expression where narrative agency is given to the player, even for players who do not think of themselves in terms of "expressiveness" or artistic capabilities. One way that we practice such perhaps unconscious self-expression is by imitating and appropriating the mass media forms with which we are relentlessly inundated in this advertising-driven culture. Wright has enabled the problem-solving, pattern detection and strategy mode of play in a fresh way with *The Sims*, and he does it by giving much of the narrative agency to the player. Such imitation or simulation hinges on the ability to accurately reproduce the patterns, standards and hallmarks of extant media forms. Digital media greatly enhance our ability to do this. This type of problem solving and pattern resolution is not only about aesthetic manipulation; it is also concerned with rules, improvisation and fun. As noted earlier, 90 per cent of the content available for *Sims* players is now generated by "fans" of the game. Not only is this economically quite interesting, but it illustrates that relatively ordinary users, as Wright says, "a housewife", can become digitally expressive when sufficiently motivated and allowed access to effective tools for digital authoring.

Since I make the comparison that participating in a virtual world environment, even a MMORPG, is like playing with dolls and blocks, perhaps I can explain the different flavours of virtual worlds play as being similar to the differences between playing with a Barbie and playing with a handmade rag doll. Clearly, very different types of play and role playing are taking place with these two kinds of images, one completely pre-fabricated and rife with cultural messages, the other homespun, more likely an expression of personal values. Even though both the Barbie and the rag doll should be understood within the context of doll play, the types of behaviour and narratives associated with these different cultural objects are distinct from one another. Within the enormous pool of online real-time interaction, the more free-form kinds of generic virtual worlds are just a tiny bubble of activity. I am interested in these worlds in particular because I see them as fulfilling a need for an online creative play space which enables self-expression, and because I observe that interactivity can be explored more fully here than it can in other arenas of the Web, including the widely popular MMORPGs.

It seems to me that such authoring is not more complicated than many of the other craft or other decorative arts which generations of humans have explored as part of a self-

expressive artistic practice which we seem prone to enjoy. There is a parallel to the Victorian era when inexpensive colour printing, chromolithography, similarly inspired a wave of new handicrafts such as decoupage, collage, quilting, painted china and so on.[9] As alluded to earlier, observers of digital culture point to the rise of "fan" or user-generated phenomena such as the creation of *Quake* movies and levels, customized avatars, faked photographs which tour the Web in e-mail jokes sent to others, blogging and many similar phenomena as evidence of the way lay authors are utilizing digital tools and digitized materials to self-express and, perhaps, coincidentally, subvert the status quo. In *The Practice of Everyday Life*, de Certeau points to such subversions as a means of escape and release from the drudgery of our media-drenched society.[10]

Where Is Cyberspace Anyway?

In their wonderful books, *Techgnosis* and *The Pearly Gates of Cyberspace*, Davis and Wertheim analyze in great depth the urges towards a type of technologically mediated transcendence prompted by the new technology. These urges can be discerned in such divergent theorists as Marshall McLuhan, Hans Moravec and Teilhard de Chardin, among many others. One of the interesting aspects of the virtual-world discussion which I feel has been inadequately considered is the use of the word "avatar". Avatar comes from the ancient Sanskrit language and it means "to cross down into", as the animating force of a great spiritual being such as Jesus or Buddha is said to cross down from the realm of the ethereal and to manifest itself on the material plane. The temptation to see cyberspace as "out there" or "up there" is, in my opinion, belied by the place word "down" which is so etymologically central to the term avatar. In my estimation, cyberspace ought not to be seen as an escapist fantasy up to heaven or off into space. It should rather be recognized as a mature call for social responsibility and reciprocity, "down here", with us, as part of our very contemporary social sphere and new public spaces. Locating cyberspace down here puts a very new spin on the psychological and critical theory we can use to unpack our puzzling relationship to digital technology and help us to finesse our ideas about interactivity.

If cyberspace is indeed "down here" with us, then an appreciative assessment of community, the peer-to-peer architecture of the Internet itself and the potential empowerment of individuals to undertake significant social action at a distance becomes less idealistic and more sobering than it seems at first blush. Looking for examples of how such "good" civil behaviour might manifest in cyberspace led me to explore the building of and theory behind virtual worlds. It is my belief that an expanded set of criteria will allow us to see more accurately the substantial social work which is taking place in the seemingly innocuous realms of gameplay, persistent environments, MMPORGs and virtual worlds. While there are important distinctions to be drawn between these various manifestations of social engagement in cyberspace, what unites them is a sense of identity construction and imaginative empowerment which we can discern via a broadened tool set revolving around an aesthetics of play and empathy – ideas embraced by the metaphor of the computer as a dollhouse.

Notes

1. Barbara Stafford and Frances Terpak, *Devices of Wonder: From The World in a Box to Images on a Screen*, Getty Research Institute, Los Angeles, 2001. The "Devices of Wonder" exhibition at the Getty was a marvel of curatorial finesse and insightful cataloguing. Of particular interest to me

were the automata and mechanical objects on display, a number of them still functional, or shown functioning on video. These were devices many scholars could only have read about, and to have them assembled and available for direct observation was an astounding pleasure.

2. For more on the relationship of doll play and a chronology of notions of childhood, see Miriam Fourmanek-Brunnel's excellent book *Made to Play House: Dolls and the Commercialization of American Girlhood, 1830–1930*.

3. See Constance Eileen King's fascinating history of royal diversions in the chapter on "Automata and Creche Figures" in *The Collector's History of Dolls*. Flora Gill Jacob's small but rich tome *A World of Dollhouses* also has exceptional dollhouse anecdotes.

4. For an earlier version of the psychological aspects of avatar consciousness and Winnicott's object relations, see my paper "Fun, Love and Happiness – or an Aesthetics of Play and Empathy in Avatar Worlds" in the Siggraph 2002 Electronic Art and Animation Catalogue, p. 126, Donald Winnicott, 'Playing and Reality', pp. 11–12.

5. Christopher Bollas, *The Shadow of the Object*. Bollas writes intriguingly about an expanded role for empathy in the counter-transference process. Bollas, p. 14.

6. Eric Zimmerman's remarks were presented at the panel "Extending Interface Design – An Ecological Systems Approach" organized by Andruid Kerne at Siggraph 2002. Other panelists included Michael Mateas, Thecla Schiphorst and Will Wright.

7. Will Wright presented these comments several times as a participant in at least four panels at Siggraph 2002.

8. Celia Pearce has a very interesting article, "Emergent Authorship: The Next Interactive Revolution", which appears in *Computers & Graphics, 2001*, in which she also discusses the creative problem-solving role of the user/author as a critical component of interactive gameplay.

9. This is part of my ongoing research and will be covered at greater length by me in the future. My main point is that the process of imitating mass media forms is keyed to a mental and creative process of problem solving and pattern finding, a process of cognitive sorting which is of great interest to the fields of game theory, cybernetics and cognitive science.

10. Michel de Certeau, *The Practice of Everyday Life*.

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Networking Power: Videogame Structure from Concept Art

Laurie Taylor

Introduction

From their beginnings, videogames have often unwittingly used concept art to generate the belief of an ideal, which has the capacity to give fullness to individual games, and to create continuity within any game series. While videogame designers did not seek to create an underlying super structure through concept art, the combination of the concept art with the culture of video gaming led to the popular and industry approved belief that concept art was the "real" of each videogame. I use concept art here to mean the representation of the necessary elements of the game world and/or the character within the game world such that the character and the game world becomes logically distinct, and/or differentiated through their own style. Concept art thus creates the structure for the style of the individual game. Videogame concept art also gets reiterated with paratextual materials and subsequent game releases. Unlike film concept art, which is created prior to the actual film, videogame concept art is made prior and after the game is made for advertisements, as fan art, and for subsequent game versions. Game walk-throughs, booklets, fan art, and later game releases all use concept art. The real, then, as defined by concept art, became that which each game or each game iteration sought to portray correctly. In this way, concept art forms the base structure that each game, individually or as it exists within and as a series, seeks to emulate and verify. Concept art thus becomes the super structure from which each game unfolds and into which each game enfolds itself. Concept art can best be understood within the theoretical terminology of a system of unfolding and enfolding which is readily available in the scientific exploration of physics and how the minor particles (like each game or each game in a series) relates to the structure as a whole. In this paper, I will show how concept art serves as a metastructure for individual games and serials just as quantum physics promises a metastructure for our world. Both structures may not hold true, but our desire to see structure and continuity make us take the structure as real. As with the desire to normalize William Blake's works so that his characters fit the normal character molds

and form consistent and cohesive stories, so concept art serves to make greatly disparate images cohere within a particular videogame serial. Concept art as a metastructure is pivotal to understanding videogames because it shows how the culture of video gaming interprets and defines the medium and it shows the significance of seemingly minor paratextual elements to the actual videogame text.

Concept art, combined with the experiential knowledge of the videogame characters and the videogame world, serves to create an underlying system. This system exists only in the mind of the creators and players, but the system is fairly consistent throughout different players and creators because of the support from the networked videogame culture. Thus, these concept art systems then become systems that are imposed and supported by their creators. Because each system is believed to be true, each gets recapitulated in later game iterations and thus actual game development follows in line with the system; the system as it comes from the player's gameplay experience and knowledge of the concept art. Popular reception of concept art holds concept art implicitly to be a prime mover or first cause of the videogame metaphysics and, then, because it is accepted as the initial and the true or real, adherence to it is believed to be the best or most accurate for that videogame world. This is explicitly shown with fan art competitions for the most accurate representation of a character or game. In this way concept art creates a system which each game iteration folds into and may slightly alter with the game iterations unfolding. Concept art works like a folding/enfolding/unfolding system as it reaffirms itself and it shows which text is believed to be authoritative – not the one the game programmers made, or the one that obeys a predetermined grammar or logic, but the one the designers planned for in the initial conceptual art.

How Concept Art Operates in (for) Videogames
Concept art is necessary to videogames for planning, and it now exists in its own right as a paratext to videogames, but a paratext which becomes its own text when it is solely featured as representative of the game in posters, stickers, art books and as the illustration to articles on and advertisements for the games. Videogame makers themselves stress the importance of concept art to game design, even sometimes equating the conceptual artists to game designers, as Andrew Rollings and Dave Morris, the game designers and authors of *Game Architecture and Design*, do:

> Concept artists do not necessarily have to be computer artists. It may be better that they're not, as computer art tends to force a finished look, while artistic ideas are often best developed in a sketchy half-formed way that fosters creativity. The ideal concept artist is, like the game designer, more concerned with broad strokes and capturing general style than in finishing fine details. (104)

Concept art in videogames is necessary for game planning, as game design is tedious in terms of programming needs. Concept art also serves videogames in the same way storyboards serve animators and film-makers, allowing for planning and alterations prior to making expensive or difficult sequences. In early games, where the final product could not be very visually rich because of technical limitations, concept art added another dimension of complexity and texture. Yet the concept art was shown as an example of the

"actual" game world. Videogame concept art has always been released for game previews and within the paratextual apparatus of videogames. This meant and means that players are familiar with the concept art in all game previews, reviews, advertisements, and then the concept art gets repeated within the physical game packaging – from the game boxes to the game books to the sides of the arcade machines. Because concept art is integral to the creation of videogames and because it is released prior to and with the game release, it serves as a metastructure to which all aspects and iterations of the game aspire both in pre- and post-production. With concept art being ever-present prior and subsequent to game releases and because it was a more complex and rich image of the game world, concept art was seen as the beginning and the end. Concept art was seen to found the basis of the world and to provide the goal for each game to aspire to in its presentation of the "real" of the game world. This formalization of concept art unified the videogame dimensions of engine, platform, perspective, and technological changes, so that each aspect of each game, or each serial, is but a bit of the whole, which is shown through the concept art. The other dimensions of each videogame continued to exist, but these were seen as choices on how to portray the game world, with the game world defined by the concept art. While continuity in a sequel or series is certainly expected, continuity as the adherence (even in an individual game) to original concept art is not an intuitive assumption unless the culture of video gaming is first recognized.

While videogame players often criticize game makers for structural changes with new technology for new game versions or sequels in a game series, the game players rarely (if ever) criticize game makers for the changes in character appearance, provided that the character design remains consistent with the original concept art. This is significant as most consoles enter their new generations and computer imaging technology takes frequent, huge leaps forward. Normally, what constitutes the style of a game is the game genre, format, interface and art style. As many of the games mature technologically (with both new equipment and new programming) and thematically (to match their large maturing audience), the appearance of consistency is maintained through the faithfulness to the original concept art. This continuity, which game players and creators perceive, does not actually exist because many serialized games change just as radically in terms of image and visual display as the games that the same audience complains about, which alter in manners not directly related to design. Also, the concept art is slowly modified with each game iteration. Thus, while the appearance of hero Samus Aran in the first *Metroid* differs hugely from the Samus Aran on the GameCube version of the game *Metroid* (*Metroid Prime*), the audience does not perceive difference except in terms of detailed appearance. To the audience, the first Samus is the same as the most recent, both in name and appearance. This is one example of many, but the structure provided by the concept art (see Rygar's world and monsters) promises an ideal to which the audience holds the game designers and to which the game designers hold themselves. This promised ideal, as based on the conceptual art creates the underlying structure by which the players read the videogame world. Because this structure is seen as intrinsic to the particular videogame world, deviation from this structure is viewed as destroying or harming that world. Videogame players perceive serialized videogames, by having concept art and by their serial operation, as creating homogeneous worlds which must then adhere to the rules of those initial worlds. In *Trigger Happy: Videogames and the Entertainment Revolution*, Steven Poole discusses the

significance of the iconic nature of early videogame art. Poole specifically cites *Pac-Man*, stating:

> A symbol is a sign whose meaning is determined by social convention, like a number, a theater ticket, or the word "starling." Charles Sanders Peirce... defined a symbol thus: "Symbols, or general signs... have become associated with their meanings by usage. Such are most words, and phrases, and speeches, and books, and libraries." But we know that an important part of any videogame character is its dynamic form. (Poole 178)

In this way, the simplicity of the in-game presentation of characters and game worlds is reflected and enfolded into their usage in the concept art and into the culture of video gaming. Thus, in-game videogame art is not static in the way some representations are; instead the iconic nature of the work lends itself to a greater sense of referentiality within the culture of gaming and the images it presents.

Video Gaming Culture
Concept art, in order to function as an implicit structure, must be recognized as such by both game designers and game players. While videogame culture may not be a singular or dominant cultural structure, many aspects are consistent throughout the cultures of video gaming. All video gaming cultures predicate on networks – whether this is the local tournament at the arcade; playing against the best scores that come packaged in arcade and home videogames; or the massively multiplayer online games that require the single player to connect and interact with other players, like *Everquest*, *Asheron's Call* and *The Sims Online*; or something simpler like videogame players discussing games with each other and posting and reading FAQs and game guides online. While the posting of game guides, hints and FAQs may seem minor, it actually represents a huge aspect of videogame play, and many players write the game guides and many more use these guides. Gamefaqs.com is an entire website devoted to game guides, hints and FAQs for all videogame systems and games. The vast majority of other videogame websites have either their own hints, guides and FAQs section or they link to another site like Gamefaqs.com. Since their inception, videogames have predicated on a network of players, with many early multi-user dungeon or multi-user domain (MUD) games being based on table-top multiplayer games like Dungeons and Dragons. While this could be viewed as simply part of videogame history, MUDs are still popular, with *Everquest* being simply a newer and graphically run MUD. Sociological work, like that in Sherry Turkle's *Life on the Screen* and *The Second Self*, has been done on the nature of video gaming culture, but less work has been done on how that culture influences the actual creation of videogames.

In terms of the culture of gaming influencing game design, some games allow for players to become creators. One such game, *Neverwinter Nights* (another recent Dungeons and Dragons game), has built in editing software so that players can adapt and add to the existing games. This is a common occurrence in games, from console games like *Tenchu 2*, to games that predicate on level adaptability, like *Quake*. While the overall significance of level editing software, and video gaming culture is beyond the scope of this paper, the significance of level editing (and then the shared use of these new levels, along with the design and programming skills that the players learn and then implement to share with other players)

cannot be underestimated in the communal feel and the culture that this shared knowledge and skill base creates. Even aside from all of these networked aspects of video gaming culture, videogames often ship with programming errors. To fix these errors, players must download patches or perform certain steps to avoid or correct these errors. The players can only learn of these errors through continued attention to video gaming press – websites, magazines or other media. Gamers also influence creators because game creators often take their cues from game players and press. This occurred recently when Square decided to release a side sequel to *Final Fantasy X* which was based on the popularity of *Final Fantasy X*'s main character, Yuna. The sequel, *Final Fantasy X-2*, is considered outside of the regular *Final Fantasy* series (hence the *X-2* rather than *XI*) and was developed based on the player's cry for another game with Yuna.

The conceptual cross-generation between game players and game creators allows for the development of a homogeneous structure throughout these separate groups. While these homogeneous structures cannot cover the large and expanding medium of videogames, they do cover their separate (yet blending) cultures of gaming. Essentially, there is no one videogame culture; there are videogame cultures which blend together, but the culture of console survival horror genre gaming will be distinct from that of computer first-person-shooter culture. The cultures of video gaming all share the emphasis on the importance of concept art as an underlying structure for a particular videogame world or universe. This is very important because it is not simply that videogame players and creators see all videogames as verisimilar, or all thematic videogames as verisimilar, but that videogame players and creators see all videogames which exist within the same gaming universe as verisimilar. This can be seen most clearly with serialized games because other games simply have to remain consistent in and of themselves, not within multiple iterations.

The culture of video gaming allows the minds of the players to perceive concept art as creating the world structure, and thus as providing consistency throughout game iterations. This then gets remapped onto the players and creators beliefs of the concept art and how the games should work, so the relationship is, in the mind of players and creators:

1. Concept art founds the game structure, allowing the game to exist.
2. The player then interacts with the game and sees it as the closest possible iteration of the "real" (real as defined through concept art) as it is determined by the current technology. The player sees the individual game as one unfolding of the concept art.
3. The player then imposes the concept art onto the game appearance. The player enfolds the concept art into the game. The game becomes one with the concept art.
4. The concept art remains as the ideal or the "real" of the game world, and the iteration is seen as part of the game world.
5. The next version of the game can be either extremely similar to the earlier iteration or can follow to be increasingly verisimilar to the concept art, but cannot deviate from these two paths. New games are held to the ideal of concept art.

With this, the initial game and all iterations show a trace of the real, which only exists in the player, through his or her understanding of the game as it is played and through the concept art. But, this understanding is fairly consensual throughout the videogame players as a

group and this is how it founds the game world. The importance of concept art as it circulates through the networked culture of video gaming cannot be underestimated. Colin Martindale's study of poetry and art, in his book *Romantic Progression*, notes that control of the creative product is directly related to the degree of "dependence upon interchange with the audience" (33). The dependence on audience interchange for videogames begins when the initial concept art is released in the pre-planning stages of game development, often two to three years before a planned game release. This time frame (along with the subsequent release of other concept art images, game screenshots, cinematic clips and articles and interviews on the game design) allows players and the videogame popular press ample time and information to exert a great deal of influence on the game design.

The community of video gaming, which includes both the creators and players, allows for a consistent view on how videogames should be, with the *should* being formed for each game and game serial through the concept art.

Concept Art is Real (even if it doesn't exist)
In first-person perspective games, like *Doom*, *Duke Nuke 'Em*, and *Quake*, the player-characters only exist in concept art or in cutscenes because the game perspective prevents the player from seeing the player-character. Thus, the player-character does not really exist in the game world as such. Yet, the player-character does exist in terms of the culture that supports and plays videogames. The nonexistent status of first-person player-characters as physical characters in the game world contradicts the popular belief and understanding of their existence, which reinforces the significance of concept art to the creation and maintenance of the videogame world structure. To fully explain the significance and workings of concept art, an exploration into a game serial is needed. For this, I turn to the game series *Metroid*, with its heroine Samus Aran.

For many reasons, I have chosen Samus Aran for this study. Samus Aran, within the *Metroid* game series, was made on only very similar systems – the original Nintendo (8-bit technology), the Super Nintendo (16-bit technology), the Gameboy (8-bit technology), the Gameboy Advance (16-bit technology); and then vastly different technology with the Gamecube (more like a real computer with a 485 MHz Microprocessor, plus graphics and sound processors). Samus Aran is also a singular character because she was the first ever female player-character, but the player did not learn this until after completing the game and having played Samus through an average play time of twenty hours. The player knew Samus by being Samus before ever learning anything concrete about her; the introductory booklet and game literally included this information as the totality of information on Samus. Even the game book pretends to be unaware that Samus is female.

With Samus having no past and no future, the player knew nothing of Samus but gameplay, the text above and concept art. Samus is very rare for the character intimacy gained solely through game play and for her stasis and then drastic change. Samus is also very different because *Metroid* is considered a classic game, normally being a classic means that the fundamental structure of the game is not changed, but Samus and *Metroid* changed drastically in the Gamecube release of *Metroid Prime* by having the majority of the game played through a first-person perspective. While articles and letters to the editor complained

and argued against the change to the gaming structure of *Metroid* and Samus, no one complained about her appearance. Quotes on Samus' appearance ranged thematically from how nice she looked, how well she was portrayed, to how wonderful it was that player's would get to play as the real Samus. Greg Kasavin's review of *Metroid Prime* on Gamespot.com states:

> The rest of *Metroid Prime*'s controls do an excellent job of capturing the classic feel of the *Metroid* games in full 3D…Ironically, the criticisms that can be leveled against *Metroid Prime* are associated with certain conventions that are integral to the *Metroid* series… For instance, the notion of having to backtrack through previously explored areas… (para. 2)

Despite the debate over the game presentation and point of view over what should be kept of the original and what should be discarded, there were no complaints about the changes in Samus' appearance from the early games to the new.

Because serialized videogames are held to the standards of that serialized world, the changes in Samus' appearance and the fact that they were not discussed in the normal video gaming culture forums show that Samus' new appearance was believed to be acceptable in light of her previous incarnations. Samus' appearance was still very different in the early games to her appearance in the most recent game, *Metroid Prime*. But the images do appear consistent with the concept art which supplemented the early *Metroid* games. This is not to mean simply the art in the game book, but also the concept art in advertisements and in the *Nintendo Power* magazine.

Nintendo Power and Holographic Theory

Nintendo Power offered the same material that current videogame magazines, websites and fan forums now offer: hits, maps, images, interviews with designers, and overall thoughts on how games should be. *Nintendo Power* seeded the roots for the network of video gaming culture and also seeded the belief in continuity from one game to the next. Classicgaming.com, perhaps the best archive for information on older games, states:

> Nintendo promoted all of their products in their very own "propaganda" magazine, *Nintendo Power* (which still exists to this day). Almost every child of the NES era had a subscription, wooed in by its low price, previews of upcoming games, game tips, and special promotions, the most popular being a free game (*Dragon Warrior*) with a year's subscription. (para. 24)

Nintendo Power affords a fascinating historical study in video gaming culture and it provides a clear example of a paratext which helps create and add to the desire to see continuity and fullness to technologically and thematically simple games. *Nintendo Power* helped create the early underlying structures by showing the concept art of how the world should be and the maps and notes on how the game world was portrayed. In this way, *Nintendo Power* unwittingly used concept art to show the "ideal" of each game world and its characters. In doing so, each individual game in itself or in a series became but one reflection into this "ideal" world. This argument is analogous to where experiments and theories in physics often try to use data on minute particles as representative for the system in which those

particles exist. This is essentially what holographic theory does and it has proven to be a useful conceptual model for application to systems where within any minute particle is a trace of the overall structure, as consciousness and memory are believed to function as systems. David Bohm explains how holographic theory was developed and its conceptual significance for the unfolding/enfolding process in *Wholeness and the Implicate Order* as:

> We then went on to consider a new instrument, called the hologram… The key new feature of this record is that each part contains information about the whole object (so that there is no point-to-point correspondence of object and recorded image). That is to say, the form and structure of the entire object may be said to be enfolded within each region of the photographic record. When one shines light on any region, this form and structure are then unfolded, to give a recognizable image of the whole object once again. (177)

Holographic theory then shows that a single part can represent the complete totality of the whole. Thus, a piece of a holographic world would be able to enfold the entire world structure and system. Concept art in videogames then is holographic because a single image or set of images are used to represent an entire full world. Like the holograph, concept art serves to create an entire structure and system for the videogame players. Thus, for videogames, holographic theory offers a conceptual model for investigating the operation and significance of concept art as well as the investigation of different versions. The investigation of both concept art and versions are needed with videogames often being serialized and often having multiple versions of the same game being released on different platforms (like *Grand Theft Auto 3* on the PlayStation 2 as it differs from the personal computer version of the same game). Bohm again proves useful as he goes on to explain:

> We propose that a new notion of order is involved here, which we call the implicate order (from a Latin root meaning "to enfold" or "fold inward"). In terms of the implicate order one may say that everything is enfolded into everything. This contrasts with the explicate order now dominant in physics in which things are unfolded in the sense that each thing lies only in its own particular region of space (and time) and outside the regions belonging to other things. (177)

Holographic theory applied to videogames shows how the concept art can be released into the gaming culture (in multiple instances, too: prior to the game release, with the game release, and after) and then an implicate ordering structure can be arranged through the interplay between the concept art, the actual game or games, and the community and culture of the game players. From this, an implicate order of the "ideal" or "real" of the game world arises and that "ideal" cannot be deviated from without angering the players, game makers and the entire structure. With the implicate order's unfolding and enfolding, holographic theory allows for multiple valid iterations of the same. This is because the same may appear differently from differing observational points. As Samus appears simply in the first *Metroid* and as a three-dimensional and multi-coloured person in *Metroid Prime*, so can electrons appear differently depending on the context in which they are observed, "Entities, such as electrons, can show different properties (e.g., particle-like, wavelike, or something in between), depending on the environmental context within which they exist and are subject to observation" (Bohm 175). Holographic theory thus gives a conceptual model

to explain how continuity can be perceived within the incredibly disparate serials of *Metroid* or other videogames, provided the games hold to the correct underlying order.

Holographic theory further allows for the conceptual incorporation of seemingly insignificant elements, like the culture of video gaming and the paratextual concept art, because it does not claim to operate in a regular Newtonian fashion. Instead of operating on Newtonian principles, Bohm points out that holographic theory and its implicate order operate on a systemic scale:

> Thus far we have been presenting the implicate order as a process of enfoldment and unfoldment taking place in the ordinary three-dimensional space. However, as pointed out in section 2 the quantum theory has a fundamentally new kind of non-causal connection of elements that are distant from each other. (186)

With its predication on the entire system rather than the individual bits, holographic theory provides a conceptual model for videogames which includes the seemingly minor, but clearly not minor, elements. Holographic theory also provides a model which allows for the inclusion of a discussion of the best, or most useful, text.

Holographs and Text Versions
Videogame theory is in need of a model like holographic theory which can explain the significance of the paratextual elements, cultures of gaming, and the significance of textual differences. Videogame textual differences are not like those in studies of other textual differences, like Blake studies which seek to cope with completely irregular text versions and textual openings made from the internal design (and chaos) of the texts themselves. While videogame textual differences are not to this degree of complication, videogames are often treated as though any text or videogame of the same name is the same work. This ignores the significance of interface design, platform, and the differing versions released of the games (either actual different versions as with *Resident Evil, Code: Veronica* for the Dreamcast and *Resident Evil, Code: Veronica X* for the PlayStation 2, or with patched or updated versions). The role of the best or most authoritative text is not generally of much concern to videogame studies, with the particular videogame platform (PlayStation 2, personal computer, GameCube, Xbox) not yet even being required for the academic citation. With most serials and versions, no one version can be seen as absolute or defining and arguments reign as to which is even best to try to use as representative. Concept art has suppressed these arguments for videogames. The videogame arguments are currently ones of preference – with the "best" version being ignored so long as each adheres to the initial concept art, which becomes the "real" of the videogame world.

While arguments on the best version of any videogame text are not yet being debated, they will almost certainly increase as more games are played in emulation, and thus played as divorced from their original context. Arguments over the multiple versions of each videogame text may not yet arise, but the culture of video gaming has thus far accepted the multiple versions as existing within the same framework as their other versions. In this way, the arguments over the best videogame text have currently been put aside because of the implicit acceptance of the underlying structure as founded by the concept art and because

that implicit structure is holographic in nature. Concept art as the underlying structure has been accepted as the explanation for how the game world operates and as the explanation for how the game world can include more material, which it must because the player gains a richer experience from playing in the game world than the game itself can possibly account for. The structure is holographic in nature because the smaller elements, so long as they adhere to the underlying structure of the concept art, are accepted as being within the underlying structure in a non-contradictory manner. This means that the disparate portions of the videogame world, as displayed in the game versions, can still be subsumed into the game world's structure so long as they do not deviate from the underlying system. In her book on marginalia, Evelyn Tribble explains how biblical glosses are interpreted, "In this view the glosses are not fragments of competing, plural authorities; instead, in representing a consensus formed over centuries, they simultaneously constitute wholeness and holiness" (15). This interpretation of biblical glosses is much like how the individual iterations of each videogame in a series, or elements of a single game, are interpreted – with each being seen as part of a larger consensus on the whole. Thus, all iterations of Samus are meant to be iterations of a holographic cohesive whole, which is shown in the concept art. In this argument, technology is simply the reason for changes in the actual presentation. And then, as the presentation gets closer to the "real" of Samus, technology allows for a closer look at the "real" and a modification of the concept art which reflects this new clarity.

Conclusion: Why Holographs and Videogames

Viewing videogame concept art as the unifying metaphor by which videogames are understood singularly or as serialized is important for the critical study of videogames which includes their cultural and experiential aspects. Investigating how videogames are played is essential for investigating videogames in a manner that does not simply abstract videogames into other media, as many critics have done. Part of the purpose of this study is that, in exploring videogames for their operational structure and for the best or most accurate representation, disparities will be found despite the video gaming culture which suppresses difference and gaps with the excuse of "technological limitations". Exemplifying this is Nintendo's Samus Aran, who changes even within Nintendo's figuring, and Nintendo is famously controlling of their works. With the artists and programmers changing from game to game, and with the designs slightly altering, the perception of an ideal character or concept, the ideal text, really means the game's overall style. While this style cannot fit into a single author or entity, this style is defined by the concept art as it is released and modified with each game iteration. Concept art as style follows in line with holographic theory for its operations and psychological studies of artistic progression for its interpretation. For the critical study of videogames to be accurate and useful, videogame studies must include the notes in the margins, the experience of gameplay and the cultures of gaming. Videogames must be studied for all the dimensions integral to their structure; as Steven Poole notes, "videogames are a kinetic art form: many of their pleasures can only be realized through time" (148). Even these must be viewed with an awareness that these marginal glosses have been taken for granted, or only accepted without the complications and questions they bring.

Notes

1. Networking Power is meant to be a pun on *Nintendo Power*, the early Nintendo magazine that offered helpful hints, maps, a toll number for more help, *Nintendo Power* proffered new dreams

to a generation: dreams of being the best gamer and dreams of one day working on the *Nintendo Power* staff and being paid to play games.

2. I mention Blake because a great deal of work has focused on the desire to normalize Blake's works and because a great deal of work has fought against the normalization. The arguments could prove most useful in understanding how to interpret multiple iterations of the "same" text, which will be needed for videogame studies given the multiple iterations of many games over differing platforms. Often, the games are purposely altered slightly for commercial reasons; but the games are also often altered based on the needs of the interface and based on errors. The versions of the same game are greatly similar, but also have clear points of divergence. The criticism on Blake's work has dealt a great deal more variation and possible variations, and has thus already created many methods, which could be used for simpler application to videogame studies.

3. Nintendo is now at its quaternary generation, and that's without including the GameBoy or GameBoy Advance as disparate systems from the original NES and Super NES.

4. *Quake* gained and maintained popularity because it offered such adaptability even when new versions of the game were not being released by the game creators.

5. *Neverwinter Nights* actually uses a simplified C++ interface. C++ is a difficult programming language, and one that is used in making full games. *Neverwinter Nights* printed supplemental game guides for how to play and supplemental game guides for how to build with the game editor.

6. If the initial game iteration is nothing like the concept art, then the game can be completely rejected as a failure. But, the instance must be very extreme for this to happen given that most early games were very limited with the early Mario concept art looking nothing like the early Mario games, except in a very abstract sense.

7. For a lengthy discussion of the odd, and critical, relationship of point of view to gameplay, see my thesis, "Videogames: Perspective, Point of View, and Immersion" (Master's Thesis, University of Florida, 2002: http://purl.fcla.edu/fcla/etd/UFE1000166).

8. For more on *Nintendo Power*, see David Sheff's excellent explication of Nintendo's history in his book, *Game Over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children*, New York: Random House 1993. Sheff specifically addressed Nintendo Power on pages 177–181.

9. The early Nintendo games were technologically and thematically simple; often being merely platform games where the object was to continue on a straight and forward path until the end. Despite their simplicity, the act of playing changed the simple games into rich experiences which cannot be explained simply by the game materials. Also, the video gaming culture added richness to the game worlds and it, combined with the game experience and the actual game material, made for a gaming experience and understanding that was far from simple.

10. For a discussion of Blake's work in line with the discussion of scientific theory, please see Donald Ault's *Visionary Physics and Other Essays: Blake, Newton, and Incommensurable Textuality*, Chicago: University of Chicago Press, 1974.

11. The citation for web pages also includes this error because it does not require the inclusion of what browser the page was viewed on, when the browser used to view the page can cause significant changes to the page display. The MLA citation requirements show the need for the date the page was viewed, which shows an awareness of the likelihood for the page to alter, but the browser on which the page was viewed can drastically alter even the identical page.

12. See Lev Manovich's *The Language of New Media* which relies too heavily on film in order to explain Web media and videogames. In a similar vein, Janet Murray's *Hamlet on the Holodeck* relies heavily on virtual reality to explain videogames. Both of these accounts slip from analogy to reliance, and both fail for that reason.

13. For a useful discussion of metastructures and how artistic change operates psychologically, please see Colin Martindale, *Romantic Progression*, Washington, D.C.: Hemisphere, 1975.

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Fan-Art as a Function of Agency in Oddworld Fan-Culture

Gareth Schott and Andrew Burn

Introduction: The quintology

In 1997 *Abe's Oddysee* (Oddworld Inhabitants) was the first game to be released from the "*Oddworld* Quintology". The main character and player's avatar is "Abe" (see fig 1), a Mudokon (Moo-DOCK-un) who begins the game as an ignorant and happy floor-waxer working in the meat packing plant "RuptureFarms". However, Abe's voice-over narrative in the opening animated scenes is a retrospective account that reveals how his bosses, the Glukkons, have exhausted all the meat reserves in the local ecosystem for their meat products ("Meech Mynchies", "Paramite Pies" and "Scrab Cakes"). Whilst working a late shift, Abe, to his horror, learnt that the solution to Glukkon's dilemma was to turn to their Mudokon workforce as the main ingredient in their new range of meat products ("New and Tasty")! The game's introduction and re-telling of the story ends with Abe fleeing for his life issuing a plea to higher forces to "get me outta here!" However, before he can free himself, Abe discovers it is his destiny to sabotage "RuptureFarms" and secure the release of his co-workers (n = 99).

Figure 1: Abe (right) interacts with a fellow Mudokon. Image courtesy of Oddworld Inhabitants, Inc.

The Iconography of Abe's World

The Oddworld games offer their fans a specific iconographic landscape. The design of the player character, and protagonist of the saga-like narrative of the quintology, Abe, suggests a number of influences (see fig. 1). Rather than simply seeing these as vague origins, we see them in terms of the idea of *provenance* in Kress and van Leeuwen's (2001) theory of multimodal design. Provenance here means the specific use of existing semiotic resources in the making of a new text. Though this resembles the well-known post-structuralist notion of inter-textuality, there are specific differences. In particular, the emphasis in provenance is on the signifier-material, whose physical origin, texture, substance and inscrptional surfaces are important contributors to the socially shaped significance they bring with them. In the case of Abe's design, for instance, the green colour of his skin has specific signifying properties. In traditions of comic-book and sci-fi iconography, it refers to a particular vision of the alien. In combination with the bulbous eyes, gleaming bald skull and skinny body (also deployed by Abe's designers), it originally signified menace and strangeness, as in the figure of the Mekon in the Dan Dare cartoons of the British Eagle in the 1950s and 1960s (see fig 2). However, with growing familiarity, the image of the "little green man" became, arguably, an affectionate stereotype with almost comic properties. The evocation of this figure in contemporary popular media thus produces a mixture of strange, magical properties and a familiar, almost pet-like appeal, as in Dobby the House-Elf in *Harry Potter and the Chamber of Secrets* or Gollum in the *Lord of the Rings* trilogy of films. In both cases, the figure of the hairless, bug-eyed goblin is also seen as enslaved – Dobby to the wicked Lucius Malfoy, Gollum to the power of the Ring; and in need of emancipation, from, respectively, Harry Potter and Frodo Baggins.

These meanings are also imported, with the image, into the Abe narrative. Abe also begins life as a slave, along with the Mudokons in general, and his quest is for emancipation – though through his own agency in this case. However, we can look further at the construction of Abe as a semiotic bundle, as he obviously consists of more than just an image – he is an animated and interactive character, with sounds as well as visual properties; in fact, he is what Kress and van Leeuwen would call a *multimodal ensemble*. His most celebrated sound is a powerful fart. We can regard this also as an element of his design with a particular provenance. In this case, the provenance is clearly not that of the popular comic strip, but of the cult fanzine, such the UK's Viz, which includes in its pantheon of scatological anti-heroes the character Johnny Fartpants ("there's still a commotion going on in his pants!").

Figure 2: The Mekon. Reproduced by kind permission of the Dan Dare Corporation Limited.

Though there are many other references in the iconography and multimodal semiotic of Abe's world, these two make the point that quite different cultural worlds are being invoked. The popular cultural world of Dan Dare, Harry Potter and Frodo Baggins all have quite sober heroic aspirations and can be located in traditions of popular narrative reaching back into the quest-based sagas of mediaeval Romance literature and folk tale. The popular culture of Viz is essentially anti-heroic. Its social function is directly oppositional and subversive. Like the Rabelaisian practices of Bakhtin's (1968) carnival, it operates to upset the pomposity and arrogance of official culture, to displace it and substitute its own defiantly grotesque version of authority, if only for a day. What we get with Abe, then, is a curious mixture of the two provenances. We get something of the seriousness and heroism of the quest-sage, as Abe struggles for the liberation of the Mudokon slaves; but also something of the subversive irreverence and grotesque humour of the carnival anti-hero.

A final feature of the semiotics of Abe that is important to note in respect of the discussion of fan-art below is its use of inscriptional technologies. Kress and van Leeuwen regard the physical media of inscription as important contributors to the meaning of a text, and suggest that they are themselves saturated with cultural meanings. They group them into three overarching epochs – the technologies of the hand (brush, pen, chisel, etc.); the technologies of the eye and ear (the recording technologies of the twentieth century); and the synthesizing technologies of digital media. Each of these, they propose, represents a particular epistemology, so that we move from a set of technologies which represent the world; to one which records the world analogically and finally to one which synthesizes pre-existing resources, re-presenting not the world, but earlier representations. This argument clearly echoes, in some respects, Benjamin's (1935) theory of the mechanical reproduction of the work of art; but it is, on the whole, an optimistic argument that sees such development as progressive.

In this context, the artwork of Abe, like that of all computer games, might be regarded by those with a negative view of the cultural value of games, as derivative, mechanistic, superficial, facile (in Bourdieu's sense of "easy"), and, in general, opposed to a view of art as original, individual, based in hard-won craft skills. However, behind the smooth surface of the digital aesthetic all games contain a design phase rooted in traditional

Figure 3: Design taken from the official Oddworld site. Image courtesy of Oddworld Inhabitants, Inc.

craft skills. Japanese games are well known for basing their designs in the elaborate paintings of their concept artists; and Abe is no different. The official website is at pains to emphasize the hundreds of iterations of pencil sketches of Abe and presents some of them on the site (see fig. 3).

The game designers, then, are anxious to reveal a form of inscriptional practice much more reminiscent of Kress and van Leeuwen's first era, the technologies of the hand, than the processes of digital synthesis of their last era. The old, individual, craft technologies of the hand and pencil sit alongside the digital modelling of animated characters and interactive worlds. As we shall argue, fans engage with these practices and values in their own work of transformation and tribute.

The Oddworld Vision

Oddworld Inhabitants have always possessed a clear vision for the development and evolution of their franchise (now entering its fourth commercial iteration). This was evident by the way that they mapped out their quintology from the onset. Their bold approach and strong ideals for the medium of gaming have also been exemplified by the way that *Abe's Oddysee* and *Abe's Exoddus* (1998) were 2.5-D games when most other developers were already conventionally working in 3-D. At the time Lorne Lanning and Sherry McKenna, co-founders of Oddworld Inhabitants, stated that they would not do real-time 3-D and compromise art, animation or charm. The level of technology at that point (PSX, 120MHZ PC) was not considered sufficient enough to handle the vision that Oddworld Inhabitants possessed for their game universe in 3-D. Furthermore, Lanning has expressed an intention that each *Oddysee* game be accompanied by major technological leaps.[1] All Oddworld Inhabitants' actions are characterized by their intent not only to promote a subtle and classically entertaining mode of gameplay but also to challenge people to re-evaluate the capabilities of digital technology and the gaming industry.

Unusual for a character/avatar in a console action adventure, Abe's strength lies in his agility, versatility, humour and ability to interact with other characters, either directly through "gamespeak" or through his ability to possess and embody other characters. At the time of the release of the games Lanning stated that the mechanics of the games "that deal with hearing, seeing, and with verbal communication and advanced relationships between characters … has never been achieved before in any game format 2D or 3D". The communicative capacity of the game is further enhanced by player-responsiveness to the Mudokons' collective and individual predicaments (enslaved, dependency or incapacitation) and emotions (angry, wired or depressed). The *Oddworld* series therefore delineates the depth of Oddworld with its ever-expanding cast of characters (Sligs, Scrabs, Paramites, Fleeches, Slurgs, Slogs, Greeters and Glukkons) and beautifully rendered landscape environments (factories, temples, forests, vaults and mines). An interesting factor in the back story of Oddworld Inhabitants' success is the combination of film effects and game-design expertise that has gone into the production of the quintology and its bonus games. The game's cinematic feel is evident not only in its rich landscapes but also from its mood sensitive soundtrack and seamless and well-crafted cutscenes.

The *Oddworld* quintology is arguably one of the first in a line of games, like *Black & White* (Lionhead Studies), *ICO* (SESJ) and *Halo* (Bungie), that have begun to shift public perception

of computer games from "cultural flotsam", "candy entertainment" or "digitised blood sport" to legitimate art (Benedetti, 2002). Indeed, *Abe's Exoddus* received the honour of being the first videogame to gain an Oscar nomination for "Best Short Animation". The emphasis placed on outstanding contributions to art design and the strength of the worlds created by designers are, in turn, drawing a number of comparisons with artists, writers and film-makers (Provenzano 2002). In increasing the cultural relevance of gaming and breaking the pattern of the "me-too" market (Edge #111 2002), such games are also discernible for the strong ethical and moral issues that underline the narrative and drive its characters. Indeed, Lanning (2002) has commented that *Oddworld*'s "characters are driven in a way that is fired by larger issues" (p. 2). To produce a successful odyssey, or oddysee, required Abe to be more than a "flat character" but one that evolves and develops within the course of the game.

Examining Games as an Interactive Medium

Despite possessing strong aesthetic qualities and storyline, character development within *Abe's Oddysee* occurs most substantially within the game's animated cutscenes that also signify reward and significant progress to the player. Although the finale to the first game offers alterative endings based upon whether the player fulfils the quantitative, cumulative element of the game's aims, referring to the number of factory-working Mudokons rescued, it is possible to question where else players exert their influence upon the underlying game narrative or game world. Typically, theorists who grapple with the origins of captivation, fascination and allure inherent in individual engagement with new media technologies (Rafaeli & Sudweeks 1997) have used the construct of interactivity as an explanation. Video or computer games have variously been described as "interactive narrative" (Frasca 2002), "interactive games" (Haddon 1988) and "interactive entertainment" (Provenzano 2002), in which interactivity is typically understood as a process-related construct based upon the principle that individuals are not just deterministic "undergoers", acting in a fashion orchestrated by the environmental events created by the game, but also agents of experience.

Some scholars (e.g. Schultz 2000) have, however, questioned the extent to which some mediums actually succeed in balancing the power and unidirectional nature of traditional mass media in favour of "consensus-finding processes". In assessing the extent to which console gameplay offers interactivity, it is helpful to refer to the distinction Rafaeli (1988) has drawn between declarative communication, where a source sets the agenda and receives no or indirect feedback and reactive and interactive communication. In this model interactivity represents the extent to which forms of communication relate to each other, whereas bilateral interaction refers to reactive communication. In an attempt to define the contours of the role-playing game (RPG) genre, Warren Spector (1999) has argued that without both "character development and genuine choices placed within a player's control, a game cannot be called a role-playing game" (p. 1). However, the notion of "genuine choice" is ambiguous when applied to the console action adventure genre. Within console action adventure games, the text provides a setting or space in which the player can operate, but the eventual direction of progress is specified and remains there to be discovered rather than created. Thus, although the structure of the text allows for different ways of fulfilling its potential, progress and movement is very much guided, pre-structured and moulded.

In order to fully grasp the interactive nature of console gaming it may therefore be necessary to seek additional accounts of instances in which the players are not just "reactive" but generative, creative, proactive and reflective (Bandura 2001) beyond its ludic practices. Janet Murray (1997), for example, has identified a sense of agency, as a desired outcome of engagement with interactive games. Models of human agency conventionally explore the nature of individual capacity to exercise control over the nature and the quality of behaviour and actions. Indeed, at one level, definitions of both interactivity and human agency share a description of players/people as producers as well as products. One way in which we might better understand the pleasures that players derive from engaging with interactive narratives like *Abe's Oddysee* is to examine how the game functions as a medium for creative interpretive strategies and practices.

Albert Bandura (2001) has employed a model of agency that distinguishes between independence, interdependence and collectivity that may be applied to individual engagement with the different conditions of the "meta-game". That is, beyond individual consumption of the game product, games stimulate cultural production by a fan community, that not only offer a network of support for gameplay but other generative practices such as fan-art, fan-fiction and game-related theory building. Bandura's theoretical model extends conventional understanding of direct personal agency to account for proxy agency, a socially mediated mode of agency where the meditative effects of others with the necessary resources or expertise are employed to secure a desired outcome, and collective agency in which certain outcomes are only achievable through socially interdependent efforts. The application of this model to gaming accounts for the complex, multi-dimensional nature of some players' engagement with games but also offers an explanation for the function of players' participation in the production of art that both replicates and extends the fan community's conceptual understanding of the game world as a form of collective agency.

The Oddworld Forums: A research design
Henry Jenkins (1993) has long argued that the academic study of games needs to be:

> more attentive to the experience of playing games rather than simply interpreting their surface features. We need to situate them more precisely within their social and educational contexts, to understand them more fully within their place in children's lives (p.69).

The practices of fan sites not only support the popularity of the product but also represent it on a day-to-day basis. This study focuses on the contributions that fans of the games make to Oddworld Forums (www.oddworldforums.net). The forum facilitates a variety of discussion topics that are divided between Zulag 1 to 3 (drawing on the factory zones found within Rupture Farms). The whole site currently (2004) has 2,437 members who have amongst them contributed 9,864 threads and 164,933 posts – numbers that grow every day. Within Zulag 1 there are three discussion forums, the "General *Oddworld* Discussion", devoted to speculation about upcoming games, queries, theory building and general enhancement of *Oddworld* knowledge and trivia (51,222 posts). Proxy agency is achieved by players of the *Oddworld* games through the remaining "Spoiler Forum" (2,625 posts) that addresses the narrative direction of future games, and "*Oddworld* Help" (2,468 posts) in

which technical support and advice is offered to fans continuing to play the games. Within Zulag 2, members can offer feedback on the running of the forum within "Forum Suggestion and Help" (5,671 posts). Additionally, members may engage in "Off-topic Discussion", which constitutes the most popular communication forum on the game-related website (79,733 posts); in this space, friendships are formed and cemented. Collective agency is apparent in the remaining forums. "*Oddworld* RPG" (6,025 posts) represents an ongoing text-based RPG game that expands upon Oddworld Inhabitants' original concept and allows fans to transport themselves into the environments of *Oddworld*. This study mainly focuses on the collective practices found within the "Fan Corner" forum in which those who enjoy writing fan-fiction and making fan-art converge (15,089 posts).

An ethnographic account of the manner in which fans relate to the *Oddworld* games as cultural objects was achieved through examination of, and participation in, the discussion threads posted on the general discussion board and fan-corner at Oddworld Forums. The forums were accessed in order to explore how game fans extend the gameplay experience and sustain the immersion levels achieved during Abe's epic journey. This involvement, however, led to the witnessing of Bandura's (2001) three-tiered model of agency being realized within fan-culture interactions and their active meaning making practices. Fans young, old, male, female, and distributed globally, were observed engaging fervently in multi-literate discussions that dissect and draw upon the full range of symbolic resources that converge within contemporary digital games. Key to the discussion threads examined here is the exhibiting, appreciation and criticism of game-inspired fan-art.

It is worth noting that the construct of media literacy, described here, also extends to governance of the interactions within the forums. Contributors in this environment are elevated to supervisory positions, maintaining the etiquette of online communication, but also steering discussions and contributions into acceptable realms sanctioning those who attempt to violate the "family values" of the game. Unlike the resistance to similar attempts by Lucasfilm Ltd to maintain the PG world of *Star Wars* and censor fan-fiction from engaging its characters in "pornography", as described by Jenkins (1992), *Oddworld* fans honour their role as representatives of the game brand, rarely critical and often aspirational, especially in their art practices. The showcasing of work and artistic skills within corporate appended fan-culture raises interesting questions about the motivation of contributors to the Oddworld Forums. In seeking to answer these questions, it was necessary to step forward and eventually reveal the academic intentions behind our interest and question fans about their practices and engagement with the *Oddworld* concept. The combination of a sustained period of ethnographic observation and participation in the forum together with more focused questioning of fans permitted access to, and first-hand experience of, the cultural practices surrounding the game prior to being positioned as researchers and outsiders.

Oddworld Fan-Art
Terms such as "communities of practice" (Wenger 1999) and "textual poachers" (Jenkins 1992) have been used to describe firstly the practices that serve as a source of coherence for a community, based on the dimensions of mutual engagement, joint enterprise and a shared repertoire, and the objects through which social groups create meaning, which others have (often incorrectly) characterized as trivial or worthless. *Oddworld*-related fan-

art is examined here as illustrative of what Jenkins terms "the material signs of fan cultures' productivity" (p.3). Games like *Oddworld* offer players an opportunity to understand art as something that has relevance to their lives. A key constituent of personal agency for players during gameplay comprises not only engagement with the iconography of the character design and animation (as already discussed) but also the depth and breadth of the work of the background artists (see fig. 4). As Xavier, a fan, commented in communication with us a key pleasure during gameplay comes from the discovery of "new details, the games are incredibly rich. Thousands of details in each screen, stop play and look at the picture, it's really beautiful". Pinkgoth offered a similar perspective when she stated:

> Back when I first played Oddworld, I fell in love with the graphics. Its one of the most beautiful things in the 2D games with Abe – the background images, especially of Scrabania and the Free Fire Zone, the perfections of red and blue hues respectively.

As a "classificatory system" (Atkinson 1999) in which understanding and meaning is constructed, the exhibitor of fan-art on the forum also explores the aesthetic concepts of *Oddworld* through the manipulation of different materials and processes (e.g. pencil sketches, inked illustrations, puppets, plasticine models to computer-edited montages and

Figure 4: Screenshot taken from Abe's Oddysee. Image courtesy of Oddworld Inhabitants, Inc.

original art). In doing so, fans publicly refine and control their use of art tools and techniques, evaluate their own and others' work and the lessons they learn from Oddworld Inhabitants' artists and designers.

At one level, a good proportion of the art exhibited by fans are guided and epistemologised by the process of game development and industry pre-production practices at the foundation of successful games. Much like the pre-visualization of characters through concept drawings prior to programming (see fig. 5), a good proportion of the fan-art exhibited follows these conventions in the reproduction or expansion and development of the game's creatures, environments and various habitats. More generally, work exhibited by fans often holds a concern with cultural reproduction and the perpetuation of the *Oddworld* style and traditional artistic practices and skills associated with concept drawing and game art.

Examination of the work produced by fans at first glance appears to offer little by way of innovation or imaginative variation on the key principles of the original designs. Within a number of submissions risk taking is minimized in place of a pursuit of the Baconian principle of understanding (or technique) achieved through reconstruction and reproduction. Rather than offend or challenge traditionalist respectability, fan-art is not transgressive in its depiction or means of production, but instead is perceptualist with the occasional pastiche. Its deviance lies in the legitimation of games as an art form and fans homage to digital artists over and above mainstream fine art elite forms. From a culturalist perspective, such fanwork locates itself in a popular aesthetic opposed to the Kantian "pure gaze" and its social function of distinguishing cultural elites, as in Bourdieu's (1976) critique of post-Enlightenment bourgeois taste. Such engagement with popular cultural forms has often been celebrated in this way, and characterized in terms of Bakhtinian carnival, for instance. It is true that this work is carnivalesque in that the boundary between cultural producer and consumer, between actor and stage, is dissolved to some extent. This distinguishes fan art from the more general notion of "active readership" in the Cultural Studies tradition.

The location of this kind of fan art in a popular aesthetic alters conventional arguments about artistic originality, characteristic of post-Romantic ideologies of artistic genius. The kinds of artistic practice engaged in by the Oddworld Forums contributors are much more like the apprenticeship practices of Renaissance studios, in their admiration of master-practitioners of cartoon, manga and digital art, and in their diligent attention to graphic techniques which are often surprisingly traditional, as in this advice about how to do pencil drawings based on a kind of brass-rubbing technique:

> Paramiteabe: Its not that hard after you know what the type of method is used its quite easy. Anyone can do it and it involved outlining the photograph. All you do is get a photograph of anything black and white. Take a pencil and just scribble on the back of the photograph. Turn it over and outline the image on the photograph onto the paper don't press hard. You will altimatically get a line because you scribbled on the back of the photograph you will get a line of the image transfered altimaticallly to the paper. In other words your traceing it. Then altimatically you have the shape. The only thing you do now is fill in the tones of darks and lights by only using small line strokes. That's it its that simple. Its basically like a traceing or a rubbing. That was something I learned in class.

but the tones were freehand that's what the purpose of the drawing was and believe it or not Concept artist are aloud to trace when its the right time. So trace and that will be great.

This use of pencil drawing, as we have mentioned, associates itself with the industry practice of concept drawing, but it is a transformational practice in its use of this medium. As Kress and Van Leeuwen argue (1996) the inscriptional medium also carries its own significance and should not be regarded as a marginal, incidental aspect of the communicative act. Far from aspiring to emulate the surface aesthetic of the digital medium, the actual look of *Oddworld* fan art, such as the concept drawing in Figure 5, uses a medium which proclaims several kinds of social intention simultaneously: a serious interest in the craft of the artist, a desire to penetrate the surface of the game and reach into the early stages of its production and a desire to make an original contribution to the game world, albeit (and necessarily) cast in the generic visual style of the game.

Fans do engage in forms of appropriation and adoption of digital media, for instance, incorporating images from the game into iconic representations of their fan identity badges and banners (see fig. 6), in ways which fit perfectly into the model of synthesizing technologies proposed by Kress and van Leeuwen we referred to earlier. However, in the work of fans like Paramiteabe (fig. 5), the origin of the game's designs in older inscriptional

Figure 5: Concept illustrations posted on the Oddworld Forum by Paramiteabe. Image courtesy of Oddworld Forums.
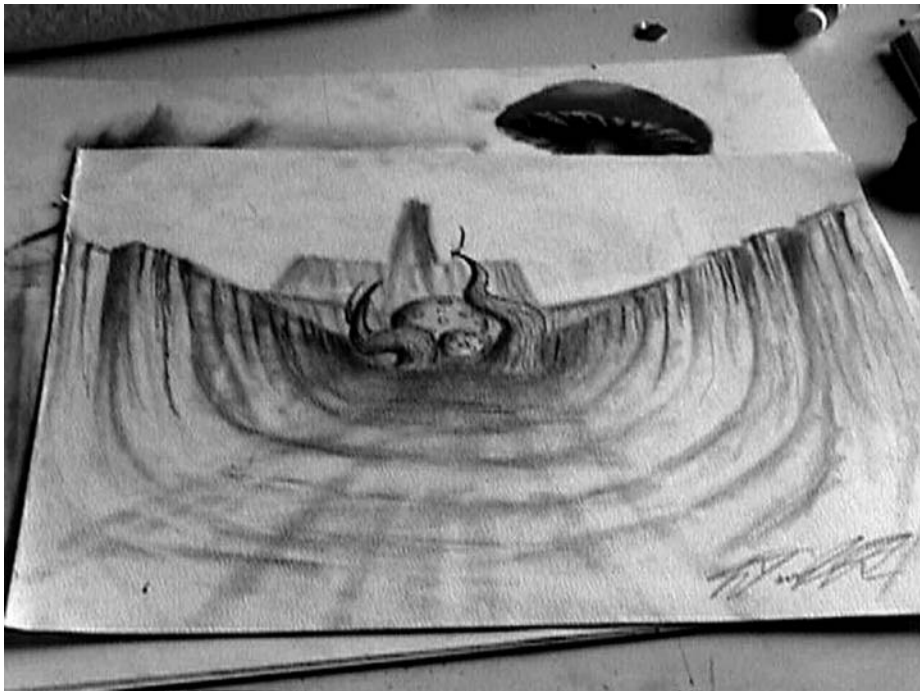
Figure 6: Banners by Xavier, Abe Babe & Paramiteabe. Image courtesy of Oddworld Forums.

technologies is much more important, and its social function and aesthetic nature lies in the valuing of craft skills, models of apprenticeship and individual originality which consists of the gradual adaptation of learnt, generic characteristics.

Interactive Galleries

Interactive communication central to the manner in which the Oddworld Forum functions, and the fashion in which fan-art is presented, critically evaluated and discussed, may be interpreted as reflective of aspects of what has been labelled "post-modern" or "neo-avant-garde" (Efland et al. 1996). That is, practice that is plural, inclusive and accommodates difference. Yet, in the utilization of traditional art practices to produce fan-art and new media technologies to disseminate and discuss work places fans' active contributions to the *Oddworld* community also rest somewhere between the more modernist curriculum practices of art education and spontaneous engagement with contemporary art. Importantly, the key function of the fan forum is how it facilitates processes of communication through which the aesthetic experiences attached to the game become meaningful (Read 1943).

Examination of forum members' responses to submitted work revealed, for example, the common use of "industry standard" (as indicative of career potential in the game industry) as the highest form of compliment offered to exhibitors of artwork. For example, in response to Tybie_odd and the Red Muse's artwork, Splat declares: "Wow those pics are really great! You should all become desighners for computer characters! You'd make millions a year!" (*sic*). Similarly, comparisons to *Oddworld* artists and other artists (for non-*Oddworld* art and literature) also constitute and reflect a well-received and highly acclaimed submission to the forum. Again, the approving Splat, this time in a different thread, is the thirteenth person to respond to Canned Gabbiar's art by stating:

> WOW! Those were brilliant! I laughed, I cried, I stared in awe at your pure artistic genius! No exaduration! I'm being solely truthful when I say that you should take up a job as a character designer for Oddworld! You'd get the job, no competition. Honestly, I just applied your fuzzles [game characters] as my wallpaper! Brilliant! (*sic*).

Digressing for a moment to pick up on the comment made at the end of Splat's post, fans' creative products are sometimes rewarded by others embracing and adopting their work (in this case as desktop wallpaper). Another interesting illustration of this observation was found in a thread that contained photos of fan-created models of key *Oddworld* characters. The plasticine figures presented in the thread mirrored merchandising practices commonly found within the film industry. Popularized by *Star Wars*, "action figures" are now commonly produced for similar films like *The Matrix* and *Planet of the Apes* and extend further to cult films like Tim Burton's *Nightmare Before Christmas* and Quentin Tarantino's *Reservoir Dogs*. *Oddworld* fans responded positively to fan-created *Oddworld* figures, showing a desire to own versions of these models. In this sense, fan constructions fill a demand not commonly met by game developers and the industry (the marketing of the *Tomb Raider* franchise being an exception). Yet, interestingly when Sydney posted a message that an official 14.5-inch resin statue of Abe was available to buy on eBay, fans were both critical and declared the price too costly. For example, Oddbod questioned the likeness of the figurine to Abe stating that; "He looks like a frog". While fans Danny and Teal picked up inaccuracies, such as, "no chest tattoo" and "he's got four fingers". *Oddworld*'s critical appraisal of capitalism may constitute a key theme of the game narrative in both *Abe's Oddysee* and *Abe's Exoddus*, yet the comments of these fans appear to embody the internal contradiction of capitalism. On the one hand they appear to be celebrating the game's subversive message, whilst on the other hand possibly suggesting a demand for cheaper and better spin-off merchandise.

Returning to fans' responses to exhibited work, in appreciation of SeaRex's design drawings, TheRaisin communicates his approval of how the influence of a popular cult cartoonist has been incorporated into the artwork:

> These … are incredible. Are you a Jhonen Vasquez fan by any chance? Y'know, Invader Zim, Squee, Johnny the Homicidal Maniac? Cause your artwork definitely looks Vasquez-inspired … Kick Ass! You have won my respect! nay!, my devotion! Rock on!

> SeaRex: Yeah, you're dead on, Raisin dude, I'm a big Vasquez fan. If it wasn't for JTHM, I probably wouldn't be trying to make a comic (or even using ink for that matter).

Vasquez cultivates an ironic gothic sensibility that challenges conventional western bourgeois values through images and narratives of joke violence and hatred. However, the fan cultures surrounding his work, like those of the Oddworld Forums, promote collective and supportive tribute art. One site (www.bunnyofdoom.org), for instance, offers fans a whiteboard resource with a basic set of digital drawing tools, to draw and save their own pictures, but also a "groupboard" where participants can draw and chat collectively with other fans online at the time. Oddsville shows recognition of the legitimacy of proxy agency in drawing on the generic conventions of *Oddworld* in her post in which she stated:

> its ok if you borrow from other people because eventually you will mold it into your won style. Me, I took a lot of styles from people here [Oddworld Forums] and the people at OWI [Oddworld Inhabitants] and now I have a mix of each

Generally responses and feedback from forum members is often unrestrained in its support, especially with regard to admiration for the bravery of exhibitor's public displays in which they share their work. Fans' comments are both generous in their praise and empathetic to the courage of exhibitors. It is not uncommon for fan-art to receive the following kind of zealous responses:

> Mac the Janitor: I LOVE LOVE LOVE your artwork ... I cannot express to you how awesome your style is. All the characters you've posted in the past look absolutely PERFECT ... I can't say this enough times ... I LOVE LOVE LOVE your stuff.

> Reptile: Man, those images will haunt my dreams. That's great work. I love "em all!

> GTdragon: WHEEEEEEEEEEEE
> CAN I HAVE YOUR AUTOGRAPH?!

> I'm serious, this is pure skills home gurl!! NEED ... MORE!!!

> Zach Roy Wilson: Whoa and double Whoa!

Here exhibitors are receiving direct and immediate reinforcement from an audience who are deeply entrenched and cultured in the representational signification systems and the visual design of the game. Members' duty to support and encourage both new and experienced artists and writers submitting work to the forum is illustrated by forum moderator Al the Vykker, who interrupted a long and exclusive thread communication with a request that members "try to be fair and go and read other peoples' work and artwork also, instead of just going to one in here. I suggest that most people around FC [fan corner] try and be a bit more attentive and give some other artists ... feedback". Here we see a relationship emerging between the functioning of different modes of agency where fan engagement in collective agency cultivates recognition in the sometimes heavy responsibility, stressors and risks attached to acts of personal agency and what Bandura (2001) describes as the cultivation of personal competencies.

When praise turns to advice, posts are equally tender in their approach to dispensing constructive criticism. In no threads were posts unearthed where any member excessively dissected the contribution of another member's art. When Dipstikk submitted work under the title "Abe art" (see fig. 7), Sligslinger commented: "Nice drawings … keep up the good work, ps: may I suggest u make Abe look less elfish". In Dipstikk's reply the point is acknowledged as he concedes that: "Yeah, the ears were a problem. I forgot that they were immobile, plastered to the side of the head". Whilst Alector's post chose to add a focus on standards of presentation and materials for exhibiting art to the thread. After praising Dipstikk and showing that he had taken pleasure in viewing his work, Alector subtly raises this issue:

> But notice: Drawings look much better when you draw them on white non-lined paper. The lines disturb the pencil drawings a lot.

> The … picture with the yellow background looks good [Fig 8]. It shows the power of the Shrykull. The havoc and the danger of it. The poem gives the drawing a mysterious touch.

An influential thread on the forum entitled "Share Your Artwork Tips" begins with a statement by One, Two, Middlesboogie, which reads: "Among true artists, there are no secrets. Pooling our knowledge can only make us better, so share the secrets of your success". The thread provides comprehensive tips on pencil drawing, pastels, inking and computer colouring techniques, a guide to buying art supplies as well as links to other Web-based art tutorials (e.g. by computer artist Kristen Perry) and texts (e.g. Andy Smith's 2002 text Drawing Dynamic Comics). As a socio-structural arena, the forums necessitate "agentic transactions" in which fans oscillate between producers and products of the social system. By working conjointly to produce a thread of this nature, *Oddworld*'s fan culture set the standards for production, levels of aspiration and self-efficacy experienced.

It is not uncommon for fans' critical comments to also have a direct impact on the artwork presented, in which sketches will be redrawn or altered in line with feedback. Consistent with Bandura's concept of collective agency, this practice most commonly occurs in fan-art in which fan-fiction characters are fashioned and realized combining the input of the fiction writers, illustrators and other contributors. Likewise, within multimodality theory the text is regarded as a "process, as unfinished business, rather than a neat, sealed object on a shelf, or in a timeless space" (Burn & Parker 2003, p. 78). Tybie_odd's work provides a good example of this in which he posted four pictures of characters from "Work at Rupture Farms" a mini text-based role play. In his initial post he stated: "They aren't my characters but I really liked them so I had to try and draw them, I have included a favourite quote and credit to their owners on all of them". With one character, A Glukkon named "Arnie" (see fig. 9), Dripik, the creator of that character, comments that despite appreciating the work, there was "maybe one thing: I imagined smaller shoulder pads for Arnie". In response Tybie_odd is happy to oblige and accurately realize the creator's mental image of Arnie:

> YAY! They like them! Now I am encouraged to do Otto [another fiction character] Coming right up, dripik! I changed Arnie's shoulder pads smaller, I post the new pic when I get done with Otto.

Figure 7: "Abe Art" by Dippstikk that stimulated discussion of appropriate materials for presentation of work and the anatomical accuracy of his depiction of Abe. Image courtesy of Oddworld Forums.

In this respect, the discursive network in which art is exhibited fosters a process of transformation, adaptation and reworking, highlighting collective stages to art production found in these spaces. It is not uncommon for individuals to also be employed/commissioned by other fans to illustrate fan-fiction. This process functions in such a way that input and feedback is expected from the author(s) and the readers of the fan-fiction as to the appropriateness of the graphical illustrations. Fans who engage in this process are required to produce work that fits with the vision of the author of fan-fiction, thus enhancing the self-development of the artist.

Figure 8: Depiction of a Shrykull a powerful force that transforms Abe and permits him to defeat those who have exploited his people. Image courtesy of Oddworld Forums.

Figure 9: Arnie a fan-fiction character created by Dripik and illustrated by Tybie_odd. Image courtesy of Oddworld Forums.

Conclusion

Games and game communities offer its fans opportunity to understand art as something meaningful that symbolizes an important part of their everyday practices. The value of "production" and "making" contributes toward an aesthetically evolved and culturally aware population, fostering a positive and informed attitude towards art. These practices represent an education in art in which computer games constitute one facet in a "pan-cultural" range of signs, symbols and images within a postmodern world. In this sense, collective agency operating within fan-culture contributes in practice to the continuous re-evaluation of assumptions as to what art is, who produces it and by what means. Fan art cannot simply be dismissed as an extreme form of Walter Benjamin's mechanically reproduced image. While it does indeed operate forms of technical and representational synthesis of pre-existing semiotic resources, it also reaches back into traditional cultures and media of apprentice pencil drawing. While its highly mobile, popular aesthetic seems a perfect instance of the postmodern moment, its appeal to traditional craft skills hints at a much longer historical hinterland of amateur and professional practice and the interesting space between them which some of these fan-artists inhabit.

Note

1. Parts of this argument are presented in a special edition of the journal *Works & Days*, entitled 'Capitalizing on Play: Politicized Readings of the Computer Game Industry'.

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Will Computer Games Ever be a Legitimate Art Form?

Ernest W. Adams

Introduction

This article is adapted from a lecture delivered at the 2001 Game Developers' Conference in San Jose, California, and as such is somewhat more informal than the traditional academic paper. My objective was simply to address the question posed in the title and to identify the circumstances and events that must occur before artistic legitimacy can be achieved. I begin by examining what art means as a cultural entity in the West and whether computer games have any place within that framework.

For the purposes of this article, I consider the term "computer game" to include personal computer games, home console videogames, online games, and most forms of computerized play that involve a monitor and an input device. The role of computerized toys is not addressed here.

What Is Art and What Does It Do?

Types of Arts

The entry for "Art" in the *Encyclopaedia Britannica* divides art into a number of types. Among them are the literary arts: writing and drama, which are characterized by the presence of narrative. Film and television also belong to the literary arts. Then there are the fine arts: sculpture and painting, music and dance. There are also the decorative arts: wallpaper, fabrics and furnishings. Architecture is regarded by some as a form of art, and industrial design, but at this point the types move more and more away from "pure" art and into areas with more utilitarian considerations. Industrial design, for example, is not really art so much as it is an aesthetic applied to utilitarian objects. The boundaries between art and non-art are not hard and fast; there is a grey area.

Another characteristic of the literary arts is that the object in hand is not the work of art itself – i.e. the paper and ink that make up the book are merely the delivery medium, not the work. Similarly with film, the strip of plastic is not the movie; rather, the images and sounds recorded on the strip of plastic are the movie – and only when they are projected on a screen. With games, the CD-ROM is not the game; it is the software and artwork recorded there which are the game – and only when they are executed by a computer. This is as opposed to, say, sculpture, in which the sculpted object itself is the artwork.

I believe that many computer games belong in the category of literary arts with movies and television because they do contain elements of narrative, and their narrative elements can be subjected to the same criticism as other narrative arts. However, this is far from the whole picture: many games have no narrative aspect.

The Philosophy of Art

For the purposes of this investigation it is also useful to look at the history of the philosophy of art. For several hundred years it was thought that art was representational, that art existed to portray a person or scene or object. Obviously this notion applied only to visual arts such as painting and sculpture, and not to such things as music and dance. They were considered separate forms not covered by the theory. And to some extent it was thought that the more accurate the representation, the better the art. In other words, a sculpture or painting which looked exactly like its subject was better than one which did not.

In the twentieth century, however, this notion was largely replaced by the idea of art as expression. People began to feel that art was not meant to depict objects accurately, but to serve as an expression of the artist's thought. This had a number of benefits. For one thing, it enabled music and dance to be included with the other forms of art, since they are highly expressive. It also allowed painters and sculptors to start creating works which were not visual reproductions of real things, but images as they saw them, and as they wished their viewers to see them. The notion of art as expression caused an explosion of new kinds of art and new ways of looking at things.

There are other theories in the philosophy of art as well. The novelist Leo Tolstoy believed that the function of art is to pass on cultural values from one generation to the next, to serve a sort of moral purpose. Others believe that art is essentially hedonism, that it exists to create aesthetic pleasure. But, by far, the dominant theory of art today is art-as-expression.

Art Lasts

Another characteristic that we can note about art, good art at least, is that it lasts. There are Greek statues 2300 years old that we still admire today. There are Egyptian statues 5000 years old that we still admire. These things were created in stone, a highly durable medium, and so they naturally tend to last. Nevertheless, we would not put them in museums and look at them if we did not think they were worth looking at. There are many other mundane objects that old that we do not bother to preserve. These ancient sculptures appeal to us not merely because they are old, but because we find them aesthetically interesting.

There are also some very old games. In Egypt, people are still playing games in the sand that have been played exactly the same way for thousands of years. That does not make them

art, it just makes them very long-lived games. Still, it is interesting to note that games can last as long as great works of art. Clearly, they have some appeal that survives across the centuries, despite changes in culture, language, religion, and so on.

It is highly unlikely that people will be playing *Escape from Monkey Island* a thousand years from now. However, it is conceivable that people will be playing *Tetris* a thousand years from now. *Tetris* is so simple and elegant that its appeal could last for centuries. *Tetris* does not belong to the literary arts, since it has no narrative, but to the visual arts. *Tetris* is, perhaps, a work of kinetic sculpture, and I could easily imagine it being displayed in an art museum.

Can Games Be Art?
Art Versus Popular Culture
I assert that the vast majority of what the game industry does is not art, but popular culture. Art is purchased in art galleries by art connoisseurs, it is criticized by art critics, it is conserved in art museums. It is not sold in toy shops. But the fact that most of what the industry produces is merely popular culture does not preclude the interactive medium from being an art form. It just means that the industry faces an uphill battle to be recognized as one – just as the movies did, moving from the nickelodeon to the screen. Film is an art form, but that does not mean that every movie is a work of art. Some are and some are not, just like games. Most movies are not art, but popular culture. And there is no question that the vast majority of games are not art either. Monopoly is not art; poker is not art; baseball is not art.

Art and Interactivity
So why aren't most games art? One possibility is that interactivity precludes art; that art is a form of communication from the artist to viewer, and if the viewer starts to interfere, the message is lost. It is certainly true that interactivity operates in a tension with narrative: narrative lies in the control of the author, while interactivity is about the freedom of the player.

However, I do not believe that interactivity does necessarily preclude art. Chris Crawford, in his book *The Art of Computer Game Design*, wrote, "Real art through computer games is achievable, but it will never be achieved so long as we have no path to understanding. We need to establish our principles of aesthetics, a framework for criticism, and a model for development." I disagree with him about a model for development – I think how you create a work of art is irrelevant – but I believe that he is correct about the other things.

In San Francisco there is a science museum called the Exploratorium. This museum takes the notion seriously that its exhibits, while illustrating scientific principles, should also be aesthetically pleasing. They consider them to be works of art, and some of the people who build them are referred to as "artists-in-residence". The exhibits are attractive as well as educational, and aesthetics plays a role in their design. These exhibits are necessarily interactive, and their interactivity does not detract from their status as works of art.

We are used to thinking of art as illustrating the human condition, or addressing large issues related to ourselves, but why should it not illustrate scientific principles? Diane Ackerman

is a poet who wrote a series of poems collected into a book called *The Planets: A Cosmic Pastoral*. These poems were not about people and their emotions, as many of us (wrongly) expect poems to be. Rather, they accurately describe the appearance of the planets, their behaviour, their position in the solar system. The poems are no less beautiful for being scientifically accurate – in fact, to a fan of both science and poetry, they are more beautiful for being scientifically accurate.

The Messages of Art

This raises an interesting question about the limits on what art can say. Art is not pedagogy – its purpose is not to teach. But still it is capable of making quite complex statements. We know that literature, for example, has themes. The theme of a novel is a declarative sentence which sums up the message of the work. Themes can be trivial, like "Death causes grief", or they can be non-trivial, like "Death causes many emotions in addition to grief".

Can games have themes? I believe that they can. Simulations certainly say things. *Sim City*, for example, says that a good transportation system is essential for economic prosperity. This is never stated explicitly; it is something that you discover in the course of playing the game. In fact, it is discovered through interactivity – if you did not interact with the game, you would never find it out. Now, of course, this is a simple economic statement. It is not very deep, and a work of art whose message was no more than "a good transportation system is essential for economic prosperity" would be considered mundane. But it illustrates the point that games are capable of saying things.

There are also non-linguistic modes of expression. Sculpture, for example, does not necessarily have themes. You cannot always distill the content of sculpture into a declarative sentence. But you might be able to distill it into an emotion: a non-linguistic expression of a feeling. And I believe that games can do the same thing.

Some Other Characteristics of Art

Art Has Content

Art must have content. This is why baseball and poker are not art: they have no content. Nothing is being expressed. Monopoly has almost no content: it has little houses and pieces that move around, but certainly not enough to be "art". When we say, "There's an art to playing poker", what we really mean is that there is a craft to playing poker – that there is a right way and a wrong way to do it and that playing poker well requires a high degree of skill. But the act of playing poker is not an aesthetic act. It has no content. It is not expressive.

Art Has an Aesthetic

Another thing about art is that it is aesthetic, it has rules for determining beauty and ugliness. In the twentieth century the idea that art was simply supposed to be beautiful was thrown out. But, nevertheless, art is supposed to appeal to us in some way. There are mechanisms, though much debated, for assessing the appeal, meaning, richness, depth, significance, and so on, of works of art. Some of these apply to games also and there are distinct aesthetic qualities of games, such as "replayability", that may not apply to more conventional art forms.

Art Contains Ideas

Art must have the capacity to express ideas. Film is an art form because it has an aesthetic, and it also has the capacity to make statements. Most games do not make statements, but, then, neither do James Bond films. Most computer games are the interactive entertainment equivalent of James Bond novels and movies. The novel is an art form, but James Bond novels are not art. For a novel to be art it must be more than merely entertaining. For a painting to be art it must be more than merely decorative.

I will mention here two games that I think contained a lot of ideas. One was *Planescape: Torment*, from Interplay. This was a game about an immortal man who had lost his name and his memory. The game was about his quest to find out his name and to learn the reason for his immortality, possibly so that he could die permanently. Along the way he meets a strange collection of people all of whom seem to know him, but whom he does not remember, and each one of them possesses part of the key to his past. Now this is not great literature; in fact it is not substantially better than the average paperback fantasy novel. But it contained far more interesting ideas that most hack-and-slash RPGs, and I enjoyed *Planescape: Torment* a great deal. I found it aesthetically intriguing.

The other game was *Balance of Power*, by Chris Crawford. It came out around 1986, and I think it is one of the best computer games ever made. *Balance of Power* was a simulation of global politics. The Soviet Union and the USA are each struggling to maximize their geopolitical prestige at each other's expense, by supporting friendly governments and overthrowing or destabilizing unfriendly ones around the world. This game taught me all kinds of things about global politics that I didn't know, and, in fact, it was so good at it that the United States State Department began to use it to train diplomats. Like *Sim City*, this was a simulation, so the ideas it contained were not aesthetic ideas, but nevertheless they were interesting and new, and it is clear proof that games can contain ideas.

I had an odd emotional experience playing *Balance of Power*, because I once tried playing it from the Russian side. We are used to playing games from the enemy side in war games – in a World War II flight simulator, you can fly either the German or the Allied planes, but all it really means is that the performance characteristics of the planes are different. But playing *Balance of Power* from the Russian side, I got an immediate and visceral experience of the challenge that the Soviets actually faced. The way the game is designed, the Americans have a lot of money but very few men under arms, while the Russians have very little money but a great many troops. What this means is that the Russians' mechanisms for influencing world opinion are really quite limited and crude. It is easy for them to send in troops, but they cannot afford to buy friends around the world by sending economic aid. I also noticed that all America's friends are extremely rich and powerful – Britain and France and Germany and so on – while all Russia's friends were extremely poor. And the experience of playing this game was quite strange. They were surrounded by enemies and treaty organizations designed to hem them in. It turned my world-view upside down, because I had never put myself in their shoes before.

Art Makes You Feel Things

Art should make you feel something. That is part of what art is about. And games unquestionably can make you feel things, but for them to be accepted as an art form, they

have to make the effort. If movies had never moved beyond the nickelodeon, they would never have been accepted as an art form. But movies, even silent movies, were clearly an outgrowth of drama, of the stage, and the stage is a very ancient and clearly recognized art form. Computer games' roots are not in movies or the stage; they are in gameplay, in board games and forms. Those are clearly not art forms, because they have so much less emphasis on the aesthetic, and because they don't usually make you feel things – certainly not subtle things, in any case.

Art Is Not Formulaic

Another important characteristic of good art is that it is not formulaic. The artist Salvador Dali came to be considered something of a fraud in his later years, because his work became formulaic, he ceased to innovate. The *Star Wars* saga eventually lost whatever claim it may once have had to be a work of art, because it became increasingly formulaic and its content driven by merchandising considerations.

Utility and Saleability

All these characteristics of art – expressing ideas, making you feel things, not being formulaic and so on – outweigh considerations of utility. Art is not about being useful. And to some extent, they outweigh considerations of saleability as well. Art does not involve merchandising. No one creates a work of art with a presumption that it is going to be turned into T-shirts and lunch boxes. A key point about art is this: It is not about what the customer wants to buy. It is about what you have to say. A work does not have to do all the things I mentioned above, but if it does none of them, the chances are it is not a work of art.

What Does It Take For Games To Be an Art Form?

We now return to the question: what would be required for games to be considered an art form? The answer is as much about public expectations as it is about the nature of the medium itself. Computer games must seem like other art forms. For games to be recognized as an art form they must do some of the things that other art forms do – that people expect of art forms. More importantly, their developers themselves must begin to act as if they believe that their medium is an art form. They must treat their work as an art form and act as if they expect the public to do the same.

Fun and Games

The game industry concentrates for the most part on producing an experience called "fun". No one would want to play a board game that was not fun. But computer games are not just computerized board games. Books and movies are not only light entertainment, nor are they merely "fun". If games never become more than the interactive equivalent of Schwarzenegger movies and teen sex comedies, then they will never explore the full power of their medium.

The commercial game industry concentrates so exclusively on fun that it has lost touch – or never even had touch – with any other forms of entertainment. Most games are the video equivalent of a theme park, a place designed to maximize fun. But adults do not spend a lot of time in theme parks. They get entertainment in other ways.

A few games produce emotions other than fun: suspense, horror, and – far more often than they should – frustration. But fun is an overrated value. If computer games are to be considered an art form, looking beyond mere fun is one of the first things they must do.

Computer Games Need an Aesthetic

Games need an aesthetic, or a variety of them. Film is not judged by a single aesthetic, but by several. They are judged by the cinematography, the editing, the quality of the acting, the quality of the story, and many other things. And like the movies, there must be a way to judge the artistic merit of the elements that make up games. We must judge the story, if there is one; we must judge the acting, if there is any; we must judge the seamlessness of the experience, which is somewhat equivalent to the editing in movies. We must judge the degree to which all elements of the game work together in harmony, without any false notes.

In time we might find a way of judging gameplay itself according to an aesthetic: is it smooth, easy, natural? Again, the gameplay in *Tetris* is aesthetically pleasing. When a player plays a really good game, she no longer even sees the menu items on the screen or thinks about the buttons. They become second nature.

Developers Must Experiment

Game developers must experiment with their medium. They must try new things and take risks.

Consider Impressionism. It is now recognized as one of the greatest of movements in painting. It was famously excluded from the French Academy, and the first show of Impressionist paintings had to be held in a private home. But Impressionism was not a technology of painting. The paint and canvas were still the same as they always had been. Nor was Impressionism primarily about looking at new things. It did bring in some new subject matter, but, primarily, Impressionism was a new way of seeing. It was about the fact that the eye is not a camera. That painting does not have to be representative.

What is the computer game equivalent of Impressionism? We do not yet know. But the only way to find out is to experiment with the medium, as the Impressionists did with theirs.

Games Must Challenge the Player

The greatest works of art, the ones that are displayed in museums and discussed endlessly, are those that took risks and broke new ground. Art must break new ground or it is merely craft, merely decoration. Great art challenges the viewer. It demands that the viewer grow, expand his or her mind, see things that have not been seen before, think things that have not been thought before. Impressionism challenged our understanding of what painting was for. The Romantic movement in music challenged the listener; it asserted that music could be about emotion, not merely melodic "prettiness".

Who knows more about posing challenges than game developers do? People play games because they want to be challenged. Of course, game challenges are usually of a different form: a challenge to achieve something, a victory condition, whereas great art challenges the viewer to see and hear things in a different way, not to achieve something but to obtain

a new kind of understanding. Yet there is no reason why games cannot challenge the players to achieve a new kind of understanding.

Sim City challenges the player to understand the relationship between efficient transportation and economic prosperity. That is not an aesthetic understanding, but it is not specifically a victory condition, either. Games are capable of challenging players aesthetically as well as logically if developers choose to make the effort. The trick is to devise new challenges, not variants on the same old ones. New genres of interactive entertainment.

Gaming Awards Must Change

No one ever receives an art prize on the basis of the technical merit or the craftsmanship inherent in the artwork. If a sculptor gets an award for a sculpture, it is not for the quality of the welding. If the welding is bad, they might not get the award, but good welding alone is not enough. Craftsmanship is a necessary, but not a sufficient, condition for winning art prizes.

There are Academy Awards for technical advances in film-making, but it is always a much smaller ceremony, held in a hotel ballroom, not in a big, beautiful theater. The awards are not presented on TV. The only people who attend the technical Oscars are film technicians, not glittering movie stars. The big public Oscars are about art, not craft.

But game awards are primarily about craft. Best programming. Best sound. There are seldom any prizes for best story or best acting, so it should not be surprising that those elements have traditionally been the weakest parts of games. "Best Graphics" is an especially ambiguous category. Some people think that best graphics are those which are rendered at the highest speed or that most closely mimic visual reality. That is not good graphics, but good graphic technology.

Game awards must honor aesthetic content, not merely technological prowess.

Games Need Not Reviewers, But Critics

Games also need critics to recognize artistic merit. At the moment there are no critics. What the game industry has are reviewers, and poorly educated ones at that. Real critics bring to their profession not just a knowledge of the medium they are discussing, but wide reading and an understanding of aesthetics and the human condition. An art form requires not just reviewers that can compare one work with another, but critics who can discuss the meaning of a game in a larger context. Critics must bring more than a comprehensive familiarity with games: they must bring wisdom, maturity, judgment, understanding.

One objection to this argument is that there simply are no games that deserve this depth of thought – that if you took the intellect of the great art critics of the world and applied it to games, it would be wasted. But that is not a fundamental weakness in the medium. The fact that there are not any games that deserve in-depth analysis is because the industry has not made any, not because it cannot make any.

The movie *2001: A Space Odyssey* baffled all the movie reviewers, because none of their traditional metrics applied. It was (generally) unexciting; it had no romance, no action, no

suspense, and very little drama in the traditional sense of the word. In fact, it had very little acting and most of that was intentionally wooden. The film critics, on the other hand, had a field day. *2001* was rich with ideas, crammed with them from one end to the other. There was an enormous amount to think about.

2001: A Space Odyssey is a great work of art. It meets all the necessary criteria. It certainly has content, over three hours of it. It says something – a great many things, in fact. It makes the viewer feel something. *2001* was boring at points – intentionally boring. Stanley Kubrick knew that space travel was not whizzing around the universe in starfighters; space travel is long and slow and boring, and he had the artistic courage to present that aspect of it.

2001 is not formulaic. It did break new ground in many ways, some of them technological, although those were not necessarily critical to its success as a work of art. It did challenge the viewer, very greatly. It asked questions about a great many things: space travel and computers and man's place in the universe.

Games need their own *2001*.

Art Requires an Artist

Game development is a collaborative exercise and many people are involved. So is film-making. But film has established a cult of personality around the director, who, justly or unjustly, gets most of the credit for the quality of a film. Games may need to do the same around the game designer. This was tried once, but abandoned for commercial reasons. Electronic Arts was founded with the notion that game developers should be promoted like, and treated like, rock musicians. They eventually abandoned that idea when the games got big enough that they were no longer being made by a group the size of a rock band, and when the fame they were getting started to cause the designers to ask for more money.

But art requires an artist. One of the absolute requirements of any work of art is that it be man-made. For games to be taken seriously as an art form, the people who make them must receive adequate public recognition. Every work of interactive entertainment that wants to be taken seriously as a work of art must have its prime visionary's name on the box. Everyone in the industry knows who Sid Meier and Brian Moriarty and Peter Molyneux and Will Wright are, but it is not enough for everyone in the industry to know these names – they must become household words. Sid Meier must be as well known as Francis Ford Coppola or Gabriel Garcia Marquez.

Conclusion

Ultimately, whether or not interactive entertainment can be a legitimate art form is up to its practitioners. It is in part a public-relations exercise, to let the public and the press know that they believe that it is an art form. But there are a number of additional steps that game developers must take, and I reiterate them here:

- Games must seek to do more than provide "fun". Fun is but one, rather simplistic, form of entertainment. There are others, and game developers must find a way to provide them through gameplay.

- There must be an aesthetic for games and gameplay. How it may arise, we do not yet know, and it will undoubtedly be subject to endless debate. But arise it must, before computer games can be an art form.
- Game developers must experiment with the medium. They must take artistic risks and break new ground.
- Games must challenge their players as other art forms challenge their viewers. They must force the player to experience new ideas, to see things in new ways.
- Prizes and awards must recognize aesthetic merit and not merely technological prowess or craft.
- Games must be the subject of genuine criticism, not merely product reviews. They must be studied, discussed and analyzed as works of art and aspects of culture.
- Game developers must treat themselves and each other as artists and to grant credit where it is due.

The answer to the question that is the title of this lecture is undoubtedly yes – but only if the people who create the games, the developers, have the courage and the vision to make it so.

Gameography

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Notes on Contributors and Artists

Andy Clarke and Grethe Mitchell
Andy Clarke is a writer and unaffiliated researcher, and Grethe Mitchell is a writer, researcher and academic. They have worked extensively together, collaborating on numerous papers on videogames and videogame art, as well as on other topics. They are authorities on videogame art and have been invited to speak on this subject at a variety of events and institutions, including the 2002 Biennale of Digital Art at La Villette in Paris (La Villette Numérique) and at the Stedelijk Museum in Amsterdam (2006).

They maintain a wide range of academic interests and are co-founders of COSIGN, a unique series of cross-disciplinary conferences which bring together artists, scientists and theorists to establish, develop and explore the field of computational semiotics. In the art thread of these conferences, they have exhibited numerous examples of videogame art including those by Brody Condon and others featured in this book.

They live in London and are currently working on a second book on videogames and art.

Ernest Adams
Ernest Adams is an independent game designer, writer and teacher, working with the International Hobo design group. He has been in the videogame industry since 1989 and is the author of two books, *Andrew Rollings and Ernest Adams on Game Design* with Andrew Rollings and *Break Into the Game Industry: How to Get a Job Making Videogames*. Adams was most recently employed as a lead designer at Bullfrog Productions on the *Dungeon Keeper* series, and for several years before that he was the audio/video producer on the *Madden NFL Football* product line. He has developed online, computer and console games for everything from the IBM 360 mainframe to the PlayStation 2. He was the founder of the International Game Developers' Association, and is a frequent lecturer at the Game Developers' Conference.

Jim Andrews
Jim Andrews lives and works near Vancouver in Canada. He is the founder of vispo.com (http://www.vispo.com), a literary site devoted to exploring the possibilities of online media. It is the focus of his work as a writer, programmer and artist. He also co-moderates the Empyre list, which centres on discussion of media art.

S. E. Barnet
Los Angeles–based artists Hillary Mushkin and S. E. Barnet have been working together periodically for six years on collaborations that challenge the differentiation between real and virtual worlds. Using video projections, performance and new media technologies, their collaborative work explores mediated experiences of space, time and identity.

In her individual practice, Barnet makes videos, installations and new media works that play with the discrepancy of the actual to the expected. Her practice integrates the public realm – whether in the form of physical landscape, political environment, social community or a combination thereof. In addition to receiving grants and awards, Barnet's work has been shown internationally, most recently at the Institute of Contemporary Arts (ICA) in London.

Tobias Bernstrup
Tobias Bernstrup is an artist and musician. He was educated at the Royal College University of Fine Arts, Stockholm, and it was there that he met up with Palle Torsson, with whom he collaborated on the *Museum Meltdown* series of computer game modifications. Bernstrup has continued to work with videogame environments, producing interactive works such as *Potzdamer Platz* and *Nekropolis*. His current work also includes performance, digital videos and dance tracks. Tobias Bernstrup has had solo shows at the Palais de Tokyo, Paris, at the Vienna Kunsthalle and at Basel's Museum für Gegenwartskunst. He now lives and works in Berlin and Stockholm.

Andrew Burn
Dr Andrew Burn is Reader in Education and New Media in the School of Culture, Language and Communication and the London Knowledge Lab at the Institute of Education, University of London. He is also Associate Director of the Centre for the Study of Children, Youth and Media. He has published work on many aspects of the media, including young people's production of computer games. He is co-director of research for the ESRC Making Games project, which, with Immersive Education, has produced a prototype authoring tool for adventure games. He is co-author of the recent book *Computer Games: Text, Narrative and Play*, published by Polity Press.

Rebecca Cannon
Rebecca Cannon is the web administrator and editor of Select Parks, an independent organization, founded by Julian Oliver in 1998, promoting the artistic use of computer games. She curates Select Parks' online archive of artistic computer game modification (http://www.selectparks.net) and this has made her an international specialist in this emerging genre of videogame art. She has spoken at several international conferences on the topic, including Siggraph, and has papers forthcoming in several books including one on virtual gender in MIT's *re:skin*.

Paul Catanese
Paul Catanese is a hybrid media artist and an Assistant Professor of New Media at San Francisco State University. His artwork has been exhibited internationally – most notably at the Whitney Museum of American Art, the New Museum of Contemporary Art, SFMOMA Artist's Gallery, the Bangkok Experimental Film Festival, La Villette Numérique, Stuttgarter

Filmwinter, FILE, ANIMAC and the New Forms Festival. His work has also been featured in *Neural.it* and *Artweek*.

As a 2003/04 recipient of a Kala Art Institute artist-in-residence fellowship award, Paul Catanese was able to explore various printmaking and book-making techniques and created a series of digital Cornell boxes for the Game Boy Advance. Most recently, he has completed a commission for Rhizome.org and a commission for Turbulence.org made possible with funds from the National Endowment for the Arts.

Brody Condon
Brody Condon is one of the foremost videogame artists. He is responsible for some of the most widely known examples of videogame art including *Velvet-Strike* and *Adam Killer*. His work has been exhibited internationally including at the following: the Stedelijk Museum, Amsterdam; Pace Wildenstein Gallery, NY; The New Museum of Contemporary Art, New York; Yerba Buena Center for the Arts, San Francisco; and many others. His work was included in the Whitney Biennial 2004, and he received an honorary mention at Ars Electronica 2005. He has taught at the University of California, San Diego, and has recently been a participant at the Rijksakademie Van Beeldende Kunsten residency in Amsterdam.

Tobey Crockett
Tobey Crockett is a critic, theorist and virtual worlds practitioner. A candidate in UC Irvine's Ph.D. Program in Visual Studies, she applies critical theory tools to the problems of interactivity, specifically focusing on 'play and empathy' in the 'camera as camera'. She is working on a book about virtual worlds and special effects and has been writing criticism since 1988, with over 80 published reviews and essays. She presents frequently on art and digital media related topics. Her virtual world, *Tobey Crockett's Wild Frontier* (TCWF), is located in the Eduverse browser of ActiveWorlds and can be accessed at http://www.tobeycrockett.com.

Nina Czegledy
Nina Czegledy is an artist, curator and writer. She has been involved in producing digital works, video art, broadcast documentaries as well as leading and participating in international workshops, forums and festivals. She has curated over twenty international media art/video programs and touring exhibitions, which have been presented in over 30 countries. Nina Czegledy has lectured widely in Europe, Asia and Australia, as well as in North and South America. Her academic activities have led to numerous publications in books and journals.

She is the president of Critical Media and a member of the LEAuthors and Leonardo SpaceArt Network. She is also an advisor to the UNESCO DigiArts Portal's African Network, a member of UNESCO's Arab States DigiArts group, and a member of Leonardo's Yasmin group. Nina Czegledy is also the current Chair of ISEA (the Inter-Society for the Electronic Arts).

Joseph DeLappe
Joseph DeLappe is Chair of the Department of Art at the University of Nevada. He has worked with electronic and new media since 1983, and his work in online gaming

performance, electromechanical installation and real-time web-based video transmission has been shown throughout the United States and abroad. In 2004, he re-enacted all three nationally televised presidential debates between John Kerry and George Bush in online games – *Battlefield Vietnam*, *Star Wars Jedi Knight Outcast* and *Sims Online*, respectively. In 2006, he enacted a project, *dead-in-iraq*, typing the names of all the American military casualties from the war in Iraq into the *America's Army* FPS online recruiting game.

Maia Engeli

Maia Engeli works in the area of telematic architectures for collaborative productive processes, learning and entertainment; she also teaches in the areas of interactive media design, immersive environments and computer game modding. She is assistant professor at the School of Interactive Arts and Technology at Simon Fraser University, British Columbia, Canada. Until 2002, she was assistant professor and acting head of the chair for Architecture and CAAD at the Swiss Federal Institute of Technology (ETH) Zurich, Switzerland. She published the book *Digital Stories – The Poetics of Communication* in 2000 and *Bits and Spaces* in 2001.

M. A. Greenstein

M. A. Greenstein is a founding co-editor of *ArtUS* and contributing editor to the award-winning *World Art* magazine. She is the author of over 100 articles, catalogue essays and interviews dealing with the weird, the grotesque, and the beautiful art from Los Angeles and the Asia-Pacific region.

A Senior Fulbright scholar to Taiwan and mainland China, M.A. Greenstein has also received research and lecture grants to many countries including India, Japan, Korea, Australia, Holland, and Sweden. She is currently on the core graduate faculty for Art Theory and Criticism at Art Center College of Design, Pasadena, California.

William Huber

William Huber is a Ph.D. student in the Art and Media History program at the University of California, San Diego. His research includes videogames and software studies, as well as aesthetic theory, human-computer interface, and Japanese visual culture. He worked for several years in the software and information technology sector.

Francis Hunger

Francis Hunger is a visual artist, DJ and producer. He was Meisterschüler on the media arts program at the Academy of Visual Arts, Leipzig, and from 2005 has been curating exhibitions at Hartware MedienKunstVerein, Dortmund, Germany.

Francis Hunger's research is on 'the computer as a male machine'. It examines the computer's development within the framework of a patriarchical society related to a capitalist economy. Recent texts and lectures include *The Invisible Economies of Open Source* (2003), *Wargames – Hackers are Gaming* (2004), *The Ternary SETUN Computer* (2006). He has also recently curated "Solar Radio Station" (2006), "How I learned to love RFID" (2006) and "Irational Action Weekend" (2006). He is currently interested in the history of the Global Positioning System and the Sputnik Satellite and has explored these interests

through works such as *Krystalia* (2003), *The Setun Conspiracy* (2005) and *Sputnik Song* (2006). Further information about these works is available online at http://www.irmielin.org.

Katherine Isbister

Dr Katherine Isbister is a Human-Computer Interface/New Media researcher and artist/designer. She is presently an Associate Professor and Director of the Games Research Laboratory at Rensselaer (RPI). She joined RPI's faculty after two years as a consulting professor at Stanford University, where she developed a course on the design of characters for computer games in the Human Computer Interface program. Isbister's research training is in the area of social psychological approaches to interface design, with a focus on social and emotional qualities in design. She received her Ph.D. from Stanford in 1998 and, following a post-doctoral year at NTT in Japan, worked in industry and research settings on social interface design and embodied conversational characters, presenting her work in venues around the world.

Jodi

Jodi is the collaboration between the artists Joan Heemskerk and Dirk Paesmans. They are pioneering figures within Net art, producing radical works which deconstruct the user interface – often through exploiting or creating glitches in the browser. More recently, they have used computer games – such as *Wolfenstein 3D*, *Quake*, *Jet Set Willy* and *Max Payne* – to explore these same aesthetic goals. Their work has been included at numerous international festivals and can also be viewed online.

Kipper

Kipper (Katharine Neil) is a New Zealand–born game developer, with an academic music background. She has worked professionally in the game industry since 1998 as a sound designer and programmer in Australia and France. Without the blessing of her employer, she co-founded Australia's independent game developers' conference, Free Play, in 2004 (now an annual conference); she also initiated and creatively directed the *Escape From Woomera* project in 2003. Katharine is a long-time activist within the anti-capitalist movement.

Henry Lowood

Henry Lowood is Curator for History of Science and Technology Collections, as well as Film and Media Studies, in the Stanford University Libraries. He is also a lecturer in the Science, Technology and Society program and the Film and Media Studies program. Since 2000, he has been director of the How They Got Game Project in the Stanford Humanities Laboratory (SHL), a research project focused on the history of computer games and simulations and, since 2004, has been co-director of the SHL as well. As one of the many initiatives undertaken by the How They Got Game Project, he is curator of The Machinima Archive, a collection of game-based movies hosted and preserved by the Internet Archive (http://www.archive.org/details/machinima).

Brett Martin

Brett Martin studied multimedia with an emphasis on videogames at the University of Colorado at Denver. He graduated in 2003 with a bachelor's degree in fine arts. He has been

named a Wii Ambassador by Nintendo. He curates the Videogame Memorabilia Museum (http://www.videogamemm.com) and is also the Digital Design Manager for the forthcoming Denver Area Gaming Convention.

Hillary Mushkin
Los Angeles–based artists Hillary Mushkin and S. E. Barnet have been working together periodically for six years on collaborations that challenge the differentiation between real and virtual worlds. Using video projections, performance and new media technologies, their collaborative work explores mediated experiences of space, time and identity.

In Hillary Mushkin's individual work in video, animation, installation and print, landscape is shaped by nostalgia and socio-politics. Since 2002, she has focused on American ideals of comfort and security in an increasingly militarized society. Mushkin's work has been shown internationally and includes a scheduled group exhibition at the Freud Museum in London.

Julian Oliver
Julian Oliver is a New Zealand–born artist, free software developer, teacher and media theorist. He has presented papers and artworks at many electronic art events and conferences worldwide, and has given numerous workshops and master classes in artistic game-development, virtual architecture, interface design, augmented reality and open source development practices. In 1998, he established the artistic game-development collective, Select Parks. He is currently based in Berlin, Germany.

Jane Pinckard
Jane Pinckard has studied the culture of gaming since she found herself addicted to *Lode Runner*. She founded the blog GameGirlAdvance.com in 2002 to explore the social and cultural repercussions of interactive media. She has worked as a writer and consultant for groups including the Stanford University Law School and Electronic Arts. In 2005, she co-created the acclaimed weekly show about videogames, *The 1UP Show*, for Ziff Davis Media. She currently works for CMP Media on the Game Developer's Conference.

Anne-Marie Schleiner
Anne-Marie Schleiner operates in a variety of roles as a writer, critic and curator. Her work has been exhibited widely and included in group exhibitions such as "TechnoSublime", Colorado University Art Museum, University of Colorado at Boulder (2005); "Killer Instinct", The New Museum, New York (2004); "Media City Seoul 2004", Seoul Museum of ArtKorea and the 2004 Whitney Biennial, Whitney Museum of American Art, New York. In addition, Schleiner has curated several online exhibitions of game mods and add-ons including "Luckykiss" and "Cracking the Maze: Game Patches and Plug-ins as Hacker Art". She is currently an assistant professor of fine art at the University of Colorado at Boulder.

Gareth Schott
Dr Gareth Schott is a Senior Lecturer at the Department of Screen and Media Studies at the University of Waikato in New Zealand. In this post, he is director of the Games Lab (http://www.gameslab.co.nz), a postgraduate research centre devoted to game research. The chapter included in this volume is from his work with Andrew Burn and other colleagues

at the Institute of Education, University of London, that formed part of an AHRB two-year funded study into RPG and Action Adventure genres and which produced the book *Computer Games: Text, Narrative and Play* (Polity Press). His research in Game Studies has covered areas such as gender issues associated with access to digital technologies and its surrounding cultures, the production practices connected to media fandom and the development of analytical tools for discussing audience engagement with interactive media. He is currently working on a project funded by the Royal Society of New Zealand entitled *Videogame Violence: Understanding its seduction and pleasures for young people*.

Axel Stockburger

Axel Stockburger is a writer, artist and academic. He works in a variety of media and has produced videogame-based and videogame-inspired artwork both individually and as part of the D-Fuse collective. These have been exhibited worldwide. Axel Stockburger holds a Ph.D. from the London University of the Arts. He currently lives and works in London and Vienna.

Rainey Straus

Rainey Straus is an installation artist and web designer whose work focuses on the body and technology. She received her M.F.A. from the California College of the Arts and a B.F.A. in painting from the State University of New York at Purchase. Her recent solo show at Gallery 364 in San Francisco explored the territory between tactile perception and digital technology, filtered through the interplay of hand-held, soft plastic sculpted objects in dialogue with live video projection. She also maintains an active design practice whose clients include ITVS (the Independent Television Service), PBS, the corporation for public broadcasting (Public Broadcasting Service) and the interactive agency Groove Eleven.

Melanie Swalwell

Melanie Swalwell's research centres on aesthetics, new media arts and digital games. Her work has appeared in journals such as *Convergence*, *Reconstruction*, and *Vectors*. Currently, Melanie Swalwell is co-editing (with Jason Wilson) a collection of essays that seek to re-place digital games and gaming into wider arcs of cultural history and theory. She leads the NZTronix project (http://www.nztronix.co.nz) which is researching the history and preservation needs of early digital games in New Zealand. Other work addresses the development of LAN gaming. She lectures in the Media Studies Programme at Victoria University of Wellington.

Laurie Taylor

Laurie N. Taylor is a teacher and scholar researching games, comics and visual rhetoric. She is the author of multiple academic articles, including articles in *Game Studies*, *Works and Days*, and *Computers and Composition Online*, as well as in other edited collections. In addition, she writes for *The Gainesville Sun*, *GamesFirst!*, and the public radio program *Recess!* Laurie N. Taylor also serves as an editor for *ImageTexT: Interdisciplinary Comics Studies* and *Gameology.org*. Her current projects include edited collections on games and ecology and on games and memory, as well as a monograph on the Gothic and games.

Suzanne Treister

Suzanne Treister studied at St Martin's and Chelsea Schools of Art and currently lives and works in London and Berlin. Using various media including video, the Internet, interactive technologies, photography, drawing and painting, Treister's practice deals with notions of identity, history, power and the hallucinatory.

Treister has shown nationally and internationally since 1981. Recent exhibitions include: "Operation Swanlake" at Annely Juda Fine Art, London; Künstlerhaus Bethanien, Berlin; Gallery Škuc, Ljubljana; Magazin4, Vorarlberger Kunstverein, Bregenz; "(The World May Be) Fantastic", 2002 Biennale of Sydney; "Don't Call it Performance", Centro de Arte Reina Sofía, Madrid and El Museo del Barrio, New York, USA; the Moscow International Film Festival and FILE, Brazil. Recent publications include: *Modern Art: A Critical Introduction* 2nd edition and *No Other Symptoms – Time Travelling with Rosalind Brodsky*, a book and CD-ROM published by Black Dog, London. She is currently engaged in three major projects: *Time Travelling with Rosalind Brodsky*, *ICOLS* and *NATO*.

Jon Winet

Jon Winet is an artist, researcher and teacher. He heads the Intermedia program in the School of Art and Art History at The University of Iowa. In August 2006, he launched *Zero One to the Globe – The World to San Jose*, a SMS/MMS project for mobile devices as part of "ZeroOne San Jose: A Global Festival of Art on the Edge" and the Thirteenth International Symposium of Electronic Art.

Earlier in the summer of 2006, he completed work on *Goal 2006!*, an international project on the FIFA soccer World Cup in the era of globalization. He is currently in pre-production on *The Electoral College*, a media project exploring the 2008 US presidential election and democratic practice in America.

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