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27.VIDEOGAME ART: REMIXING, REWORKING AND OTHER INTERVENTIONS

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ABSTRACT
This paper explores some of the areas of intersection between videogames and both digital and non-digital art practice. By looking at examples of art practice drawn from videogames, it outlines some categories and so provides an overview of this area, placing it within the wider context of contemporary and historical art practice. The paper explores the tendency for much of this work to have elements of subversion or "détournement", whilst also identifying areas of tension in the appropriation of videogames as material for art practice

KEYWORDS
Videogames, art, digital art, appropriation, subversion, patch, mod, machinima

INTRODUCTION

Most people's first contact with a computer is through videogames. They are the meme by which computers have entered our collective psyche. The iconography of videogames has become part of our "shared cultural capital" - the set of icons that people can reasonably expect their audience to recognise. People will recognise Lara Croft in an advertisement even if they have never played any of the games featuring her character. Similarly, they will know about *Space Invaders* or *Pacman* - and have some idea how to play them - even if they have never seen the original games.

In addition to this, videogames provide a rich vein of exciting and relevant issues. Sherry Turkle was amongst the first to formally study the issues raised by videogames in her book, *The Second Self* [1], where she interviewed children about their attitudes to computers and computer games. But although the increased familiarity of society with computers has - as she predicted - made questions such as "is the computer alive?" less problematic, new issues have replaced them. In relation to videogames, these include the following: Where (and what) am I when I play? When I die in the game, who or what dies? What does death mean? Who do I play against?

Given this combination of factors, it is not surprising that videogames have increasingly become an area of creative inspiration and exploration. In this paper, we intend to explore some of the areas of intersection between videogames and art, trying to map out some key issues in the construction and interpretation of digital and non-digital art that uses, or is inspired by,

videogames. We are not, on the whole, making value judgments about this work in relation to other forms of art (or digital art). In stead, we are tracing out the territory and the modalities of these artistic practices. From this, we will draw conclusions and indicate some interesting areas of activity requiring further research.

DEFINITIONS

We have chosen, for the purposes of the paper, to interpret the term "art" broadly and include in it all forms of creative practice involving or referring to videogames and game culture. Our discussion therefore also covers areas of practice which would normally come under the category of game hacking and fan art.

But this is not to say that we regard everything as appropriate for inclusion in our discussion. The emphasis of this paper is on "alternative" or non-mainstream practitioners, and we therefore feel it appropriate to exclude commercial videogames from our discussion. We acknowledge that the discussion of art in mainstream videogame practice is a fascinating and complex debate, but it is not one that is within the scope of this paper. However suffice to say that, although a number of the artworks covered in this paper refer to commercial videogames such as *Space Invaders* or live "parasitically" as modifications of games such as *Unreal*, this does not, in our opinion, necessarily make the original videogame "art".

We also wish to exclude from our discussion the work of artists such as Toshio Iwai, whose interest is in the creation of wholly original videogames for use within a gallery setting. Again, we acknowledge that this is a fascinating issue in itself, but it is not one that we will cover with in this paper. We are not excluding all gallery-based work from our discussion, but wish to make a distinction between the work of artists such as Iwai, which is typically described using terms such as "audio-visual installation" rather than videogame, and that of groups such as Blast Theory, where the relationship with the world of games and videogames is explicit, acknowledged, and intrinsic to the work. The distinction that we would like to draw here is between videogame art and playable art. Videogame art is art that refers knowingly or explicitly to videogame culture, iconography, etc., and which therefore requires a familiarity with both areas. This is covered in our discussion. Playable art, on the other hand, does not refer to the world of videogames, and can be understood solely within the context of art history and contemporary art practice. This is excluded from our discussion.

There is a clear parallel between our exclusion of playable art and our exclusion of commercial videogames. In the same way that playable art can, for the most part, be understood solely within the context of art history and contemporary art practice, so commercial videogames can be understood solely within the context of videogame history and contemporary practice in videogame production. Although we will make reference in passing to both commercial videogames and playable art, the emphasis of this paper is on other areas of creative practice involving videogames.

It should also be noted that we use the term "videogame" in this paper as a catch-all term that encompasses arcade games, computer games and those for games consoles (such as the Playstation or Xbox), and that our choice of this word should therefore not be interpreted as favouring any particular delivery platform or genre of game.

GENRES

Despite this broad definition of videogame art, it is still necessary to have some system by which to

group disparate works, and thereby allow us to identify common formal and thematic concerns. But rather than divide this area solely on the basis of the type of work produced, we have found it more useful to have categories which group them under broader themes.

We therefore propose - for the purpose of this paper - to group artworks under the following categories:

- Remixing - the use of videogame iconography in other media (either taken and manipulated digitally, or reproduced by hand).

- Reference - the creation of original games which make knowing reference to previous games. As we state before, wholly original games produced as art fall into the category of playable art and are excluded from our discussion; commercial videogames are likewise excluded even though these often make knowing reference.

- Reworking - the modification of existing games, often to create new interactive environments or "machinima" (non-interactive movies).

- Reaction - performance (often disruptive or ritualistic) within a multiplayer game.

This system of categorisation has a number of benefits. Firstly, as we are making distinctions that are based more on the intention of the artist than on the specific techniques or technology used, they form a framework which is less likely to require us to add new categories as new forms of practice emerge. This is a fast-developing field where much of the most innovative work emerges "from the street" and it therefore requires a theoretical framework which is flexible enough to keep up. Secondly, grouping works in this way often brings disparate works together in surprising ways and these contrasts can often bring to the forefront issues which might otherwise go unnoticed.

In the following sections of our paper, we will work through the categories described above, using them to identify issues within videogame art. But in the same way that there is an overlap between the categories that we have defined for ourselves, so there is an equivalent degree of overlap between the issues that arise from the discussion of them. The issues that we raise should not be regarded as exclusive to any one genre - we merely chose the point in our discussion where the issue was thrown in the clearest focus, and they apply to all forms of videogame art.

REMIXING

As we mention in our introduction, videogame icons and aesthetics are part of our shared cultural capital. It is inevitable therefore that creative practitioners will take these icons to use directly as raw material in the creation of their own work. The Aphex Twin track *Powerpill Pacman* is a clear example of remixing - here the musician has sampled the music and effects from the *Pacman* videogame and used them to produce a dance track. The *All Your Base* shockwave is a similar example, involving the appropriation of both dialogue and graphics from *Zero Wing*.

But in addition to these works, there are those where the imagery and iconography of the videogame has been reproduced by hand in other media, rather than being sampled, captured and manipulated digitally. A common example of this are the paintings, drawings and 3D renderings done by fans of the characters in videogames, but other forms include the creation of game-influenced cross-stitch [2], the writing of fiction stories featuring game characters [3], and even the creation of treehouses based on the giant battling robots of Mechwarrior [4]. It goes without saying that illustrations include nude versions of the

game characters and some of the fiction is erotic or homo-erotic [5]. The homo-erotic ("slash" fiction) includes both *yuri* (FF) or *yaoi* (MM) couplings.

It is tempting, particularly with the illustrations, to create a new category for this other work - calling it "reproduction", for example - but to do so is to miss a number of important points. Firstly, the characters from early videogames such as *Pacman* or *Space Invaders* typically consist of less than 16 pixels by 16 pixels, making it trivial to reproduce these iconic figures perfectly by hand. When the artists behind space-invaders.com reproduce the characters from *Space Invaders* by sticking bathroom tiles to the outside of buildings, they are, after all, producing an exact pixel-perfect copy of the original graphics.

Secondly, it is useful to think of this fan art as a "cultural remix". In the same way that hand-painted movie posters from Ghana [6] juxtapose Hollywood and Ghanaian aesthetics (and reveal something about both societies), so these works show the world of the videogame reflected through the attitudes of those producing it. The result is a fascinating multi-layered mix of styles and signification.

Thirdly, it is useful to think of some of this work as a "remixing" of reality as both spaceinvaders.org and the mocked-up photographs of *All Your Base* show the videogame world "escaping" and "invading" the real. This tension between the videogame world and the real world is particularly strong within the genre of cosplay [7] - where people create costumes based on videogame and manga characters - as it is heightened by there being two opposing notions of "realness" at play in these works. The cosplay artist tries to look as similar as they can to the original character, but this is impossible when the original is a character from a cartoon or a videogame: the more real their costume looks, the more the realness of the person in the costume stands out as the jarring element.

This highlights the complex relationship which exists in all of these works between the original source material and the work that appropriates it. There is a resonance set up in the viewer: a simultaneous recognition of the familiar and a noticing of the different. In some works, such as *Powerpill Pacman*, this is quite simple - the *Pacman* theme has been speeded up to make it even more manic than the original - but in other works, the relationship is more complex.

The resonance and tension between the primary (original) work and the secondary (the copy) is often heightened by the fact that this is often *unauthorised* appropriation. The significance of this unauthorised appropriation is emphasised if we widen our discussion out for the moment to look at the appropriation of manga characters (i.e. those from Japanese animation), rather than that of videogame characters. We can see quite clearly then that the appropriation that takes place in manga-influenced cosplay, for example, is fundamentally different to that of the *No Ghost, Just a Shell* artwork - and arguably more interesting. The character of Ann Lee was licensed by the artists Pierre Huyghe and Philippe Parreno and is now, in effect, being re-licensed by them to the artists producing "official" Ann Lee artworks. This contrasts with cosplay - and other forms of fan-driven art - where characters are taken without permission and the relationship between the original and the copy remains one still filled with tension, resonance and meaning.

REFERENCE

In the previous categories of work, the artists involved have appropriated the aesthetics and iconography of the videogame, but discarded the game itself - there is no game, only the iconography of the game, taken and used for some other purpose. There are, however, a large number of artworks that take the opposite approach: they keep the gameplay but throw out everything else, and the original game - still recognisable - is then used as a vessel into which other meaning is "poured". Examples of this type of work includes Tony Ward's *Alien Invasion* (using *Space Invaders* to comment on multiculturalism in Britain), Thompson and Craighead's *Triggerhappy* (using Space Invaders to comment on contemporary philosophy), Mauro Ceolin's *RGBtetris*, *RGBatari* and *RGBinvaders* (using *Tetris*, *Breakout* and *Space Invaders* to comment on globalisation) and Jim Andrews' *Arteroids* (using *Asteroids* to comment on poetry and language).

In this list, we are only touching the surface of this very popular genre of work. Even so, it should be obvious that the same videogames keep being used, with *Space Invaders* being by far the most popular game referred to. There are technical reasons for using these early games - they are simpler than modern games and it is easier to copy their graphics and interaction - but these are not the only reasons: these vintage videogames also provide the artist with clearer, more recognisable, and less problematic icons than those found in contemporary games. Even now, the *Pacman* and *Space Invaders* characters are more widely recognised than Mario, yet they carry none of the "brand baggage" of these more recent game icons. If we look at these characters in terms of semiotics, Space Invader "means" videogame, while Mario "means" Nintendo.

There are, however, issues regarding the sustainability of this genre as these works, by their very nature, tend toward repetition and (self-)parody. Yet, even so, certain works - such as *Triggerhappy* by Thompson and Craighead - stand out. *Triggerhappy* presents a version of the game Space Invaders, but rather than defending against wave after wave of aliens, players must shoot up a series of text extracts taken from Foucault's essay, "What is the Author?" When looked at from the viewpoint of computational semiosis, this playful and nostalgic appropriation of the videogame reveals layer upon layer of playful self-referentiality - meanings within meaning, puns within puns. There are ironies everywhere - the player must kill the author (or at least their text, which talks about the death of the author). Even the idea of the game is a pun - "a play on words".

Desert Rain, by Blast Theory, is another work within this genre that stands out. It may seem odd, at first, to group *Desert Rain* and *Triggerhappy* together, but it is consistent given that both are referring to previous videogames: with *Triggerhappy*, it is *Space Invaders*, while with *Desert Rain*, it is the FPS genre in general.

One particularly interesting aspect of *Desert Rain* is the way that it is, in fact, two parallel installations: one which exists in the real world and one which exists in the virtual. The boundary between these two worlds is - quite literally - fluid, as the virtual world is projected onto a screen made out of falling water, and the artwork is therefore able to shift focus between the two worlds in a sophisticated way. When a figure emerges through this screen to give an object to the viewer of the artwork, they are not only "escaping" from the game as we have described before, but they are also transferring meaning from the virtual world to the real. In the context of this particular artwork, this is a very effective technique.

REWORKING

Although the works in the previous category take their inspiration from pre-existing videogames and seek to replicate their gameplay, the creation of these games typically requires the artist to recreate and reprogram the original videogame again from scratch. This inevitably involves the duplication of effort and for anything but the most simple of games also requires programming skills beyond the average artist - in the case of the *Desert Rain*, for example, Blast Theory worked with the Communications Research Group at Nottingham University, UK, who did the programming work.

Such resources are not available to all, and it would naturally be far easier to work with the original videogame and modify it. This brings us to our next category of work: reworking. This category of artwork relies upon altering either the code that the game uses to run or the data that it uses while it runs. As we will discuss later on, this type of modification can be done on a variety of games, but is most common with the "first-person shooter" (FPS) games such as *Quake*, *Unreal*, etc. The techniques used with these games tend to fall into four distinct categories: patches, skins, maps, and mods. Patches are alterations to the code of already-existing games. In the context of the FPS game, this is often to change the physics of the world, the abilities of the player, or the behaviour of the monsters, or to add new weapons or functionality to the game. Skins are new characters, and maps are new environments. By combining patches with skins and maps, it is possible to come up with extensive reworking of these games which can, if taken to its ultimate degree, render it almost unrecognisable in relation to the original. This package of patches, skins and maps is often called a mod (short for "modification").

Most of the patches, skins, maps and mods produced are done simply to expand the scope of the original games: a player may, for example, create a skin to allow them to play the game as a character from *The Matrix*, produce a mod that gives them a new type of weapon, or simply create a new map to give them a new arena in which to play the game. But one problem in looking at patches and skins as art is that it is often difficult to make the distinction between those made to enhance the game, those made to subvert it for fun, and those made to subvert it for artistic or political ends. For example, how do the nude skins created by Linda Erceg "analyse the importance of viewer perspective in pornography" [8] while those of pornstar Asia Carrerra or the nude hack of Britney's Dance Beat [9] don't, and on what sustainable basis can we make this distinction?

The situation is somewhat easier with maps, where there is a clear distinction in terms of function: some you enter to kill other players (and be killed), while others you enter to experience as an artwork. One can think of the latter as being analogous to that where a room in a gallery is transformed to create a site-specific installation. There are, however, a number of advantages that these works have over real installations, the most obvious being that the installation itself is not limited by space or budget.

It is interesting to see how few of the works in this genre are multi-player environments, given that this capability is built into the original game engine. One reason for this may be that the artist has little control over where the person entering their virtual environment goes or what they do, see or think, and as a result, it is difficult for them to create an interactive environment that provides a coherent experience for one person, let alone one which makes sense with/for multiple participants. An exception to this is Fuchs and Eckerman's *Virtual Knowledge*

Space - a multiplayer environment (based on the *Unreal Tournament* engine) created to house networked objects from the collections of different Viennese museums.

The best work in this genre are those which play to its strengths of the FPS as a medium (the ability to create fantastical environments) and work around its limitations (the limited interaction possible with other characters, for example). There also needs to be an appropriate matching of form and content. *Adam Killer* is a good example of both of these. It explores the nature of death in virtual environments and does this through removing the reason for killing but not the ability to kill. As a result, the only action available to the user when faced with a roomful of passive figures is to kill (or do nothing).

There is, of course, no need for these works to be playable if the intention of the artist is to deconstruct the videogame. *Adam Killer* exploits glitches in the code to produce psychedelic trails and "hall of mirrors" effects, while *SOD* and the *Untitled Game* series by Jodi take the same ideas to its extreme becoming, like much of their other work, formal experiments in abstract visuals. *Gameboy F_UK* by Corby and Baily is another example of a deconstructive patch, featuring a Gameboy emulator that has been patched and recoded so that it degenerates over time: sections of the binary code of the game are presented on the screen, while the graphics likewise overwrite sections of memory, making the game function less and less well.

Gameboy F_UK is interesting in that it highlights the fact that while the modification of FPS games may be the easiest and most popular genre patch art, they are not the only form of it. Another interesting thread of artistic practice is emerging around *The Sims*. Although there are works such as *White_Picnic_Glitch* by Brody Condon which, like his work with the FPS, deconstructs the videogame from within, these are relatively uncommon, possibly because the game engine of *The Sims* does not encourage or facilitate this sort of extensive hacking (though it does support the creation of objects to use within the game).

There is an area of activity that spans both FPS and The Sims, and this is the appropriation of these as storytelling media. In the FPS, this activity is termed "machinima". These use the same techniques as works such as *Adam Killer* - patches, mods, maps and skins - but to radically different effect and purpose. Here the intention is not to create a playable game, but to use the game engine to produce a non-interactive movie which is either viewed within the game engine or captured and viewed as a film/animation.

The equivalent activity in The Sims is the creation of "albums", where players construct scenes within *The Sims* and take screengrabs to illustrate stories. While many of these stories [10] are genre-based - soap operas, romance, superheroes, etc. -, others are of a more personal nature. These include examples of people using these albums to "work through" personal tragedy including death, loss, divorce, drug-addiction, and abuse (both physical and sexual). In addition, there have been a number of works based on or around the events of 9/11 [11].

The notion of making films within a FPS game engine is an interesting one as it not only offers a low-budget tool for doing 3D animation, but also provides a new way of doing it - not through painstakingly defining keyframes and rendering a sequence, but rather by "acting" within a 3D space while your movements are rendered in real time. The problem is, however, that other aspects of the machinima process - such as clothing your character or creating the sets - are

complicated and time-consuming and this limits the production of machinima to those with the necessary skills and resources. This contrasts strongly with Sim albums, where their production requires no more skill or knowledge than playing the game (and because the game is very much centred around constructing and participating in scenes, it is very much a natural outgrowth of the gameplay).

One also finds that because of the nature of the machinima community, the emphasis is often on producing the best and the flashiest work, rather than the most meaningful or engaging. Again this contrasts with the Sim albums - because the game draws upon our need for the world of *The Sims* to parallel our own or to express our dreams, it encourages a level of emotional engagement not present in the FPS (and consequently not yet found in machinima).

But there are, however, some people who are using FPS to make films to explore more personal and political agendas - the problem is that the machinima "phenomenon" has, in many ways, shifted attention away from them. "Machinima" has become, as a term, associated with the more mainstream work of groups such as Ill Clan and Strange Company, and it therefore does not seem an appropriate term to use in relation to the work of fringe practitioners such as Tobias Bernstup. There are, of course, differences in the modes of production, presentation and consumption of these two types of work, but these have to be acknowledged rather than using the umbrella term of machinima for all FPS-based animation, as some commentators have tended to do.

REACTION

The emergence of networked multiplayer games such as *Quake*, *Unreal* and *Half Life* (which can deal with dozens of players), and of the so-called "massively" multiplayer games such as *Ultima Online*, *Everquest* and others (which can deal with hundreds or thousands of players) have lead to the emergence of another new form of artistic activity involving videogames: the artistic intervention in the world of the game.

This is not a new phenomenon, however, and can be seen as a variation on the type of performance that occurs within other forms of online 3D and text-based virtual environments. The difference is that in these other environments, the emphasis is, for the most part, already on free-form expression, role-playing, and performance. This contrasts with the world of the multiplayer game where the players have, to a greater or lesser extent, a reason for being there and a mission that they need to be getting on with (though in the case of the massively multiplayer games, the goals of the game may be quite diffuse). Performance in a multiplayer game is an intervention *into* the game, while performance in an online environment such as AlphaWorld is something that emerges more from *within* its milieu .

Gunship Ready, by Brody Condon, is an interesting example of an artistic intervention in a videogame. Designed as a modification of the online game *Tribes*, this work provides a flying gunship within the world of the game. The players are beckoned by the artist to climb onto this vehicle, but when they do, they find that they are taken on a tour around and eventually away from the battleground. They have been kidnapped (by the artist), rather than, as they thought, being taken to more exciting battle. Having been abducted, they are presented with the situation where they must kill themselves (in the game) in order to re-enter the action.

Brody Condon uses his intervention to explore issues surrounding the different value placed upon death in the real world and the game world, a theme common

to much of his work, noting that the players have no problem with killing themselves in order to get back to the main business of killing other people. But if the game world is, in this way, so self-evidently devoid of significance, one could question whether the intervention in that world is similarly drained of significance and becomes, quite literally, an empty gesture. Do the players witnessing Condon's intervention from within the game question the nature of death to the same extent that we do as outside viewers of it?

But this is not to dismiss this work - or this genre of work - completely, merely to highlight some of the issues that arise from this type of intervention. Performance within a virtual environment is an interesting territory to explore, and attracts a great deal of activity within the field of dance and technology, for example. It may therefore be that the particular issues surrounding intervention and performance within a game space just need more exploration. Particular attention needs to be given to how the intervention or performance is contextualised for the viewer, so that it is not seen by them as being just a bug or someone "messing around". The nature of the observer - as unwitting witness, co-participant, or outside observer - needs to be considered.

COMMON THREADS

Because of the limitations of space, we have managed to explore only a comparatively small number of artworks here; even so, these cover the main genres of practice in this area (as defined in our introduction) and through our discussion of them, we have introduced a number of the key issues in videogame art. In this section, we intend to pick up on some of the most significant of these themes and develop them further.

We will start with appropriation as this is, in many ways, the defining feature of videogame art - without appropriation of some sort, a work falls into the category of playable art (as defined in introduction). Corby and Baily have described their work *Gameboy F_UK* as a "readymade" as it takes and uses the pre-existing code of the emulator and the original game. While the use of this term isn't entirely accurate in relation to this work (the code is modified extensively by them, rather than presented "as is"), the concept of the readymade is, nonetheless, a useful one to bear in mind when looking at videogame art in general. In all videogame art, something is appropriated: the graphics, the gameplay, the conventions of the interface, etc.

But with videogame art, we are usually talking about *détournement*: appropriation tinged with subversion. The work of Brody Condon (Adam Killer, White_Picnic_Glitch and Gunship Ready) appropriates the form of the videogame, but subverts its content, using them to criticise the conventions of videogames from within. SOD and Gameboy F_UK, on the other hand, subvert the form of the game, making it unplayable so as to explore formal issues regarding the nature of code.

Machinima is an interesting case with regard to subversion. They appear, at first, to be the most conventional form of the videogame art - being, after all, just animated films - but they can be seen, in many ways, as the most complete subversion. Here the very *raison d'être* of the videogame - the fact that it is meant to be played - is subverted. The maker of machinima "plays" with the videogame, but not in the sense that it was originally intended. To those who produce machinima, the quality of the actual game is incidental. Their interest lies with the quality, style or speed of the rendering, or the ease with which the game engine can be hacked into and modified.

In some ways, this is the most complete subversion of the videogames, but a counter-argument is possible here. Are the makers of machinima - and those creating patches and skins - just playing their role within a system designed to create as much content (and publicity) for the games as cheaply as possible? Is their obsession with the latest and best and fastest simply serving the commercial interests of the games companies?

It is also worth noting that the creation of maps and patches tends, on the whole, not to represent unauthorised hacking into the game, but is rather an activity nurtured, encouraged and controlled by the makers of the games. An interesting comment on this comes from an interview with Jodi (Joan Heemskerk and Dirk Paesmans), where they explain why they used an old FPS (Wolfenstein) for their experiments in videogame art [12]. They said "there are also a lot of modification possibilities built-in in the new games but these are much more standard and stay within the general framework and the overall visual values of the game. With the older games, we can get deeper inside and make real contradictory changes or at least undress the rules, the visuals and the code as bare as we want." Although Jodi have specific aesthetic aims, this does highlight some issues about what parts of the videogame are exposed for manipulation by the artist and how far it can actually get from the original. Jodi have since produced work with other FPS (their *Untitled Game* series), but this still uses a comparatively old game (*Quake*).

Appropriation is both a strength and a weakness of videogame art. If one wishes to critique violence and gender stereotypes in videogames, for example, what better medium is there to use than to take an actual videogame and subvert it? But if, on the other hand, one wishes to explore a more subtle and complex idea, producing a *Citizen Kane*-like meditation on loss, for example, these game-related issues linger on, whether wanted or not - the viewer of the artwork will still be wondering "what do I kill?"

As we have mentioned before in this paper, this issue of the audience's relationship to the artwork is a fundamental one that videogame art needs to negotiate. Interactive art has, to a certain extent, turned the corner in this regard, so that when we experience Char Davies' *Osmose*, we tend not to say that we are "playing" with it. Many would, however, happily use this word in relation to Thompson and Craighead's *Triggerhappy*, and though this should clearly not be taken as indicating a hierarchy of digital art, with videogame art at the bottom as it is merely "play", it does indicate that there are some outstanding issues relating to the content of videogame art and the context in which it is produced, presented, received, and discussed.

CONCLUSIONS

The intention of this paper has been to outline the field of videogame art, to propose a system of naming and categorisation for this field which is flexible enough to allow for future developments, and to describe key works in this field. Having done this, it is now appropriate to draw together some conclusions and identify areas for further exploration.

If a criticism can be raised about videogame art, it is that it sometimes lacks sophistication - both in terms of the techniques that it uses and the ideas that it seeks to convey. We should be wary, however, of expecting the solution to this problem to come solely through technology - it is inevitable that videogames will become more technically sophisticated, but this does not necessarily mean that the art produced with them will likewise gain in subtlety and nuance.

Technology does not inherently improve a medium, though it can have this effect by allowing a wider, more expressive, vocabulary of techniques to develop. A useful comparison can be made here with cinema. Improvements in film technology have not directly helped cinema to become more expressive medium, but they have had a positive influence through allowing newer, more expressive, shooting techniques to emerge. The close up shot only emerged when improvements in lens technology allowed for a sufficient depth of field at close range to make it possible. The informal "fly on the wall" documentary style known as *cinéma vérité* was likewise only made possible through the development of smaller cameras, faster film stock, better microphones, etc.

Although we have deliberately avoided defining a "canon" of great videogame artists in this paper, we have described works which are successful on a variety of levels, and what is notable is how many of these adopt simple techniques, but use them well. Tobias Bernstup's short loops exploring issues of gender are more interesting than the 90 minute machinima blockbusters; Adam Killer is likewise more interesting that other larger and more complicated art mods, and what could be simpler than sticking bathroom tiles to buildings to reproduce iconic bitmap characters?

It is encouraging that successful videogame art is already being produced, but it is important that this success is nurtured in the appropriate way. All too often, videogame art seems like a "demo" - a short, flashy demonstration of technical skill designed to attract attention from one's peers - and while this is, in many ways, understandable given how few opportunities there are to exhibit this type of work, it is not a sustainable way for this field to develop in the long term.

Two things are necessary. Firstly, there needs to be more opportunities for this sort of work to be exhibited and the framing and context of the work shown need to be more sensitive and appropriate. Secondly, there needs to be more serious criticism and analysis of videogame art. Together these measures will lead to the emergence of a more sophisticated vocabulary of videogame art, a critical language more able to articulate issues surrounding it, and an audience which is more able to appreciate both the artwork and the analysis of it.

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