# On Using Machinima as "Found" in Animation Production

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#### Abstract

Machinima is a relatively new animation production technique that has become popular among independent animators. It is also used by installation artists to create installation artefacts in a digital space. As a form of remix and fandom culture, machinima can be appropriated for the production of readymade and found arts. However, its exact contribution to this art form has not been clearly defined, as the knowledge generated within the machinima community is usually fragmented, incomplete and poorly documented. This article examines machinima production practices and installation art with the aim of determining how machinima components can be considered as "found art" within an animation. The outcome will be of interest to both animators and installation artists who want to use machinima in their works. It also provides a lens for further study of machinima and digital installations that use videogames.

Keywords: Found works, installation art, machinima

#### 1. Machinima as an Animation Production Practice

Machinima is "animated filmmaking within a real-time virtual 3D environment... [It is] a mixture of several creative platforms – filmmaking, animation and 3D game technology" (Marino 2002: 1). Berkeley defines machinima in a more circumspect manner: "machinima is where 3D computer animation gameplay is recorded in real time as video footage and then used to produce traditional video narratives" (2006: 66). Machinima is the convergence of videogame, cinema and animation (Marino 2002; Nitsche, Riedl & Davis 2011; Burke 2013), which absorbs the elements of all three in game production, minimizing the gap between cinema and animation

Machinima was initially a form of fan fiction based on popular culture works, especially videogames. It is usually image-based (Johnson & Petit 2012) and not produced as "professional" (Hetcher 2009; Brown & Holtmeier 2013). Marino (2002) and Horwatt (2007) believe that machinima is an avant-garde art form that is highly experimental. As an alternative production technique, machinima can help animators to form new styles based on the original game, and to diversify animation styles. It also has the potential of being applied in major production.

Machinima is a form of remix, as it combines and manipulates cultural artefacts, including various forms of readymades, into new kinds of creative blends (Johnson & Peti 2012; Nitsche, Riedl & Davis 2011; Hetcher 2009; Cheliotis & Yew 2009; Knobel & Lankshear 2008). Machinima thus inherently has eclectic and hybrid features. This eclecticism and hybridity is reflected in the remixing (video-editing) process as well as the combination of cinematic narrative and videogame materials shown on screen. Machinima reproduces the digital world of videogame in animation, therefore is also a process of remediation, a notion defined by Lichty (2009) as the recreation of works in virtually embodied media.

Creating machinima involves appropriating readymade resources, found within the game engine, in new contexts. Therefore machinima is connected to found arts, and has been used by installation artists. The digitally appropriated components of machinima within the digital space of games are highly malleable (Howartt 2007), which as Conradi states, provides "opportunities to imagine entirely new approaches to non-objective forms and to liberate the imagination of artist" (2012: 70). As a found technology, machinima provides pre-programmed scripts and visual elements that are re-arranged by the animator, from which the aesthetics of machinima emerge (Nitsche, Riedl & Davis 2011).

However the device of machinima creation is poorly documented, and the knowledge generated within the practice community is usually fragmented and incomplete (Nitsche, Riedl & Davis 2011). The appropriation of machinima is closely related to readymades and found arts. As machinima increases in popularity among animators and installation artists, an important

discussion is consideration of whether machinima components are "found". This discussion will bolster the convergence between installation art and animation.

## 2. The Concept of the "Found Object"

An installation artwork may utilize any material, including people (Janson & Janson 2004), to construct the context and the content of the artefact. Based on this consideration of the materials in installation art, found objects, as Davidson & Desmond (1996) state, are varied and can consist of materials found anywhere, including the exhibition space of the installation artwork itself (1996).

Duchamp developed the use of found objects by making a series of readymades using unaltered everyday objects and designating them as art. According to Benjamin (1993), Oliveira, Oxely & Petry (1994) and He (2008), a found object as a readymade is placed in a particular context and re-designated. The connection and the distinction between the found objects and the readymade are reflected in these prior literature. A found object is firstly a readymade; a shift in context and the act of re-designation form the process of "found" which replaces the original function and meaning of the readymade with new ones. For example, Duchamp's Fountain does not function as a urinal; instead in the context of museum it is an artwork that questions the status of art. Contemporary installation artists have accepted and developed this concept, and use found objects to express ideas in wider scopes and ways. Usually as a part of installation artworks, the collected found objects keep their aspect of reality, which enhances the artefacts' attraction and potential for encountering the real (Davidson & Desmond 1996). For example, in *Rock and Bigger* (Li 2013, Beijing, see Fig. 1), all materials are collected from ordinary life. The materials (Coca-Cola and a red balloon) are so common in daily life that viewers hardly consider them as an artefact. They use the space of art gallery as the context of the artwork, which deprives these found objects of their original function (e.g. beverage) but endows the work with new meanings (e.g. consumerism or bubble economy, based on the spectator's interpretation).



**Fig. 1** *Rock and Bigger* (Li BY 2013)

Found art can also be created in the digital space using processes that include machinima. Machinima installation artists such as Annabeth Robinson, Garrett Lynch, Fortunato Depero and Tullio Crali directly create virtual installation artefacts in the digital spaces of videogames. Others, including Cao Fei and Gazira Babeli, use machinima as a cinematic/narrative media of installation artistic creation. For example, Cao Fei's machinima documentary *iMirror* (based on *Second Life*) was considered as an installation artefact at the 2007 Venice Bienniale. As Lichty (2009) states: "while it might be possible to create (installation) works that exist in the virtual that do not express themselves in terms of references to the tangible, they are likely extremely subtle or outside the embodied paradigm of human experience" (2009: 8). The use of machinima as found emerges in the overlap between machinima and installation.

#### 3. The Found Works in Animation

In an animation work, readymades can be intentionally appropriated. There are two layers of appropriation at work: the vehicle of readymades that are invoked, and the images are reproduced in the space of animation. The first layer is primarily reflected in the process of animation production, as the animator imports and works with readymade components (such as 3D digital models or images) in production (e.g. in Premier of AfterEffects). The second layer is predominantly displayed on screen as images, and audiences can visually recognize them as readymades from other works.

Furthermore based on the concept of the found object, on both levels a readymade in an animation can be considered as digitally "found" if it aligns with the following features: (1) is a readymade; (2) is combined with other materials, or is put in a new context; and (3) has new meanings or functions. The term "found work" can be used to describe those components that are not originally created for the project but are appropriated from elsewhere, as well as the two layers of appropriation reflected in found works. For example, a 3D model of a car (a digital file) can be collected and imported into a particular animation project. Simultaneously, the digital image of the car is placed in the virtual world of this animation. This process is like that of an installation artist finding and appropriating readymades in his artefact. Like an installation artwork, the image of the car that is shown on screen can be used in different ways, and represent alternative functions and meanings, depending on the context that is created by the animation.

Four existing works are discussed in the following section to illuminate the diverse forms of found materials applied in animation.

### (i.) Logorama

Logorama (2009) is a short animation with strong features of installation art. Different logos are collected, appropriated and re-designated as other objects, the work is thus an example of the use of found objects in the digital space. Logorama takes advantage of the visual similarity between the logo and other images, and uses logos as characters, objects and landscapes (see

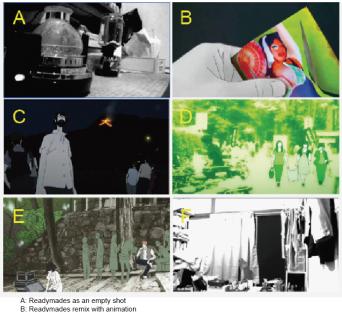
Fig. 2). In this animation, all the logos are found objects, and the designation is accomplished by visually linking the logos to the images in ordinary experiences. In the signification system of the logos in *Logorama*, the relationship between the signifier and signified is designated as visual similarity, with the original signified replaced by the object that the logo looks like. For example, in this animation the logo of MSN (Windows Live Messenger) represents butterflies rather than the MSN software; it therefore becomes an icon rather than a symbol or index. The remixing of readymades, the replacement of the signified, and the change on the signification system make all logos in this animation found objects. The focus of this work is on the redesignation of readymade logos, and the story is less important; it can be considered as an installation artefact in itself.



Fig. 2 The found works in *Logorama* (2009)

#### (ii.) The Tatami Galaxy

The Tatami Galaxy (2010) is a TV anime piece that combines multiple production techniques and visual styles. It uses different types of "found" materials, and merges them with 2D components (see Fig. 3). On some occasions live-action segments are also used as single empty shots (in which no main character appears). The animator filmed these shots, however the image of landscapes and objects are "found" and used to construct the virtual world of the anime, which aligns with the second layer of appropriation. Some of the landscapes and objects within the virtual space do not equate (or are connected) to reality. For example the anime uses a photo of old apartments as the background of some scenes. However the photo does not represent the same buildings in reality, instead it forms part of the hyperreal world of the anime. From this perspective, the image of the apartment is found and digitally appropriated in the anime work.



- Reproduced images of realy landscapes

  Live-action shot remixes with animated characters
- Photo remix with other elements

Fig. 3 The readymade works in *The Tatami Galaxy* (2010)

## (iii.) I Am MT

I Am MT (2009) employs multiple production techniques, and appropriates the readymade digital space of World of Warcraft (WOW) as the setting of the story. It is a work of fan-fiction, with the machinima background directly captured from WOW. Filters are applied, but audiences can identify the landscapes of WOW. This combination of cute characters and 3D machinima backgrounds is controversial, and thus resisted by some audiences (Huang 2010).



Fig. 4 The original characters in machinima backgrounds in I Am MT (2009)

The main characters are not readymade models from WOW but designed by the producer. These characters are not WOW realistic but in the 2D cute style with iconic facial emotions, as shown in Fig. 4. However, all characters are designed based on the identities of WOW classes, and WOW elements are inevitably borrowed. This appropriation influences the level of visual images as well as modes of action.

As fan-fiction, the story of I Am MT is set within the framework of WOW. The space of I Am MT strictly represents WOW. For example, the Ashenvale scene in I Am MT (see Fig. 3) represents the Ashenvale map in WOW, and the races (e.g. tauren, orc and troll in Fig. 4) in I Am MT refer to those in WOW. The borrowed machinima elements have not been redesignated, and therefore are not found works.

## (iv.) The Hero's Journey Project

The Hero's Journey is the animation production practice of my doctoral research project, wherein I attempted to bring the concept of "found" from installation art into animation. This research project is a practice-based research that draws inspiration from my experience of installation art practice (The Endangered Earth) to the creation of a post-apocalyptic animation (The Hero's Journey, <a href="https://vimeo.com/102311705">https://vimeo.com/102311705</a> password: huangwww3boxcc). In The Endangered Earth, I used various found objects, and combined them with other elements. This artefact is composed of five works including The Metal Casket, which forms the context of the found objects in it. This space does not represent but creates its own reality in which the original functions of found objects are deprived, and the found objects are endowed with new meanings. For example, the computer cases in The Endangered Earth cannot function as they used to, instead they are used as caskets (see Fig. 5: The Metal Casket). The computer cases link The Endangered Earth to daily experience (in this case the experience of modern technology and digital life) in a critical way, and drives viewers to critically reflect on the abuse of technology.





Fig. 5 The Metal Casket (Installation artefact)



Fig. 6 The replica of *The Metal Casket* in *The Hero's Journey* 

The artefact of *The Metal Casket* is to a large extent dependent on the appearances of found objects. The found objects are likewise influenced by their positions in the artefact and the relationship to others. Some of the found objects collected were further processed, but most of them were kept in their original state. In *The Metal Casket*, the computer cases of different

shapes, colour and sizes are collected. They are piled haphazardly, the process of assemblage demonstrating flexibility and a degree of randomness. The use of found objects also leads to the feature of the flawed statue, as in the process of assemblage there is no intention to create a perfected form for the artwork. New meaning is endowed by the context that is created by the artwork, as well as the designated title of the work.

This installation artwork is digitally reproduced in *The Hero's Journey*. From this perspective, the image and concept of *The Metal Casket* are found and appropriated in this animation. The digital replica is placed in the post-apocalyptic world. The scale of this artwork is enlarged and combined with other materials such as bones and doodles (see Fig. 6). Similarly, images of readymades in *The Hero's Journey* critically connect the artefact to daily experience, some used as "found" to symbolically express ideas. The forms and sources of readymades in this project are various and cover a range of disciplines, and the ways of adapting and using them are flexible. In *The Hero's Journey*, readymade are placed in the fictional world. Some scenes of *The Hero's Journey* are significantly influenced by the appearances of the readymades.

However, an essential difference between the two artworks is that the space of *The Hero's Journey* is virtual, thus the concept of "found" also exists in the virtual form. In the post-apocalyptic context of *The Hero's Journey*, some readymade images lose their original functions and meanings. For example, in a post-apocalyptic world, the image of cash may lose the function of currency and the traditional meaning of wealth. They are endowed with new functions and meanings (e.g. "cash" as "fuel" or "trash"). These readymades are combined with others, and are re-designated in this particular context. Based on the concept of found objects, these readymades are found.

#### 4. Machinima in Two Animation Production Practices

All the machinima segments in the two artistic practices (*The Hero's Journey* and *The Corridor*) are captured directly from original videogames. The two projects demonstrate different extents to which machinima can be used as found.

## (i.) Machinima Components in The Hero's Journey Project

*The Hero's Journey* is a non-dialogue short animation project that employs multiple production techniques. This work is additive as I have created a large number of details and imported many posters, illustrations, doodles and photos.

In this project machinima footage is combined with other components to create background and visual effects. As a production technique, machinima is not sufficient to express the complicated facial emotions required, but could be an excellent technique to make 3D based backgrounds. However, I noticed that it is difficult to find high quality videogames that reproduce contemporary Chinese urban landscapes, thus the use of machinima is limited in this project.

In order to find proper machinima components, I collected resources from several games including Fallout 3: New Vegas (2010), Call of Duty 4 (2007), and Metro: Last light (2013). Other games such as Grand Theft Auto 4 (2008) and Second Life (2003) were viewed but not used due to their inappropriate visual styles or qualities. I chose photo-realistic games that contained modern urban landscapes or post-apocalypse scenes, since these games are additive and can satisfy my requirements for the style. However, since most high quality videogames are made by Western studios, their virtual worlds were the Westerner's imagination of China rather than representations of real Chinese cities. This limited the scope that I could choose for this project. Materials from Call of Duty 4 and Metro: Last Light were mostly used, since some stages of these games are ruined Russian cities, which are more similar to Chinese cities than the wasteland of USA in Fallout. Most machinima segments are clouds, abandoned buildings and city ruins. They are combined with other components displaying a strong Chinese style. In most occasions they are not used as major figures in the layouts but as parts of the whole; they contributed the whole visual effect and helped to shape the atmosphere of the post-apocalyptic world (see Fig. 7).



**Fig.** 7 Machinima components in the background of *The Hero's Journey* 

I also used found footage to create visual effects. The sources varied, becoming difficult to identify after remixing with other works. Some of them are selectively exposed to express particular meaning or emotions.



1 a Neolithic art work; 2 Newspapers of squeezing bile from living bears; 3 my previous work; 4 a found footage from my friend. 5 a found footage from my friend, 6 machinima (Skyrim); 7 machinima (Fallout 3:New Vegas); 8 machinima (Metro:Last Light). 9 machinima (Fallout New Vegas)

Fig. 8 The found works in the segment of montage pictures

For example, in the pictures montage segment I experimented with using found footage and images of found objects to create visual effects (Fig. 8). Different works are collected and remixed in this segment for specific purposes. Some of them (the Neolithic artwork, the newspapers and my previous illustration works) are used as a single shot to link to other scenes according to the screenplay, while others are used to create visual effects.

In the process of viewing videogames for machinima production, I found many interesting scenes. They could not be used directly as scenes in this project, but provided strong impressions related to the theme of *The Hero's Journey*. I wondered whether I could use these impressions to help express my ideas. As an experiment, I added a machinima segment which was captured from Fallout 3: New Vegas (2010). It was a first-person shot in which the character runs in a dark narrow corridor. In this process, I found that the translucent machinima layer affected a split-second and discontinuous impression as it was overlaid above other layers, occasionally disrupting, and in turn disrupted by, the other images. Thus I tried to add more elements and made this segment even more fragmented. This segment was considered as a set of fragments of impression. I captured videos of running, shooting, killing and missile launching from different videogames, as I wanted to display fragments that related to the selfdestruction of mankind. I explosively exposed the information, and deliberately overloaded fragments so that audiences could not capture all the details. The speed of shifts between images increased, and different footage overlapped with each other. This process was random, as I remixed multiple segments without a pre-designed order. Through controlling the transparencies of different layers, the fragments of impression such as running, shooting and killing were interwoven together.

### (ii.) The Corridor

In order to explore the layered use of machinima as found in animation, I created an installation artwork, and reproduced it in the digital space of a videogame. The replica was represented in the form of machinima. This installation artefact was first designed in the process of creating the post-apocalypse world of *The Hero's Journey*. It was a corridor with a huge number of tableware covering the ground, through which the protagonist passed while walking down the corridor (see Fig. 9).



Fig. 9 The sketch of the corridor scene in section 2

This scene was initially designed as an alarm system set by another survivor the protagonist would encounter. Within the post-apocalyptic context, this scene expresses ideas that transcend expected functions in the ordinary world. As the tableware is "found" for characters in this virtual world, the objects lose their original functions, and adopt new functions and meanings (a part of an alarm trap, and a critical reflection on over consumption). I realized that the idea of this scene can be used to create a real or an animated installation artefact. In animation it is possible to provide the experience of interaction with the artwork through the character as avatars of audiences. As Rheingold states, "at the heart of VR [virtual reality] is an experience – the experience of being in a virtual world or remote location" (1991, cited in Bolter & Grusin 1999: 22). This interaction between artefact and character provides the experience of viewing and physically participating in the artefact in the virtual space of *The Hero's Journey*. Therefore, this corridor has double identities: a scene of this animation (an alarming system for the survivor who lives in the building); and an interactive installation art which expresses my anti-consumerist ideas.

I then created this installation artefact (a real craft). I collected empty bottles, containers, tableware, and other wasted industrial products and piled them in a corridor. This artefact was not publically exhibited, instead an actor was recruited to walk through the corridor. A recording of the interaction between actor and artwork was produced, and the video uploaded to YouTube (https://www.youtube.com/watch?v=pLxjxpyoeiY).



Fig. 10 The Corridor (real craft)

The artefact was reproduced in *Fallout 3: New Vegas* (2010) (available online at: https://www.youtube.com/watch?v=3vDGixsh5fE). I found a corridor, collected a large number of tableware and bottles, and placed them on the ground (Fig. 11). The game engine provided great freedom, and the scale of the digital version *The Corridor* was significantly enlarged. In this process, I exploited the mechanics of *Fallout 3: New Vegas*, with the in-game objects were considered as "found objects." All the digital components (empty bottles, etc.) are provided by the videogame developer were assembled in the digital space. Due to the limitation of the game engine, I could not place the objects precisely, and the remixing process created random consequences. This whole scene is significantly greater than the sum of its parts, while all components of this work are in relation to others.



Fig. 11 The Corridor in Fallout 3: New Vegas (2010)

As a part of the experience that is provided by this artefact, I used the game character to interact with this work. I controlled the player character (PC) stepping through the corridor (Fig. 12), and the experience of physical participation was created in this process. The in-game action and the ephemeral experience were recorded by machinima. I also recorded the interaction between the artefact and the non-player character (NPC) (Fig. 13). The artefact was unwillingly set in the routine of one NPC; this process was similar to that of placing an installation artefact in the routine of spectators in a museum).



**Fig. 12** The interaction between the controlled game characters and the digital installation artefact



Fig. 13 The interaction between NPC and the digital installation artefact

### 5. The Identity of Machinima as Found

Based on the two-level system of digital appropriation in animation, the machinima in *The Hero's Journey* and *The Corridor* as found works have two identities: (1) the video segments (the vehicle of readymades) that are created by the animator; and (2) the images in the digital space of the games. The vehicle is seemingly not found or readymade in itself, yet it is closely related to found works; the use of these machinima segments is similar to that of an installation artist remixing found objects to create an artefact. Therefore, despite the fact that the vehicle of a machinima component (a digital video segment) is created by the animator, some machinima works can still be considered as found.

The Hero's Journey project illustrates how machinima segments can be used as found works in different stages of animation production. A singular shot can be directly created within the videogame engine, or through combining machinima with other materials in various ways. In this process, machinima is deployed according to the narrative and/or visual requirements of the animation. In *The Hero's Journey*, the story space breaks the connection between

machinima components and their original videogames. For example, in the photo montage segment, the appropriated machinima components lose their identities of combat in *Fallout 3*: *New Vegas*, *Skyrim* and *Metro: Last Light*, becoming part of the protagonist's memory in *The Hero's Journey*. In other scenes, the objects created by machinima (e.g. a collapsed building from *Call of Duty 4*) are detached from their original games and merged into the world of *The Hero's Journey*.

The machinima version of *The Corridor* is created within *Fallout 3: New Vegas*. It thus retains a visual connection with the original videogame, which also becomes part of the context. However, this does not mean that *The Corridor* represents or reproduces a space from the digital world of the videogame, nor is the machinima a recording of game-play. On the contrary it builds its own post-apocalyptic space, which highlights the independence of this particular scene. *The Corridor* does not equate to the corridor scene in *The Hero's Journey*. The visual differences can be easily perceived, but the disparity also exists on other levels. In *The Hero's Journey*, the corridor is an alarm system set by a survivor. However, this function works only in the specific context of the story of *The Hero's Journey*. When the context changes, the function of the corridor as alarm may disappear. The exterior environment of the corridor (the ruin of the amusement park) has been removed along with the function of being an alarm system.

The digital version of *The Corridor* shares fundamental idea and images of the real craft. However the two works are not equal, as they exist in different spaces and particularly as the embodiment process creates a new digital context arising from the videogame. The environment of the digital artefact (the atmosphere of the post-apocalyptic fiction) provides a dramatic context within the *Fallout* visual style. As a subgenre of science fiction, a post-apocalyptic work possesses strong post-modern features (Ostwalt 1998; Pearson, 2006; Gomel 2010; Napier 2008; Rosen 2008), which helps to link this animation to installation art. In the post-apocalyptic hyperreal space, everyday experiences are removed and audiences are forced to confront the dead world that is depicted by the science fiction genre (Fisher 2010). The daily functions of many industrial products are deprived, and their new functions collide with ordinary experience. This appropriation is similar to that of an installation artist collecting readymades and putting them in the space of the artwork. From this viewpoint, the idea of *The Corridor* as a whole is also a found work.

### 6. Using Machinima as Found in Animation

Based on the machinima practices in animation projects discussed above, as well as previous literature on readymades and the found object, several key principles of using (as well as identifying) machinima components as "found work" can be reached.

(i.) The animator uses original works of the game, or other readymade resources (such as mods that are made by other players). The readymade works can be found within the game, or within the development kits such as map-editor. In this process, the animator

records the gaming experience that is provided and framed by the game developer. However, if the animator makes new models, texts, textures or other components specifically for his project, this segment should be considered as original rather than a readymade.

- (ii.) The machinima component is put in a new context through re-editing and remixing. This process is similar to that of an installation artist placing found objects in new environments and remixing them with other materials.
- (iii.) The machinima video should be re-designated and thus adopt new meaning. As a found work in an animation, the machinima segment is usually detached from its original game. It is put in a new context, or creates a specific hyperreal space, in which the machinima component is endowed with new meanings.

These three principles apply to machinima materials that are sourced from a single videogame. For machinima works that combine multiple games and/or other materials as a whole, the principles do not work, as this remixing process makes the animation an original work. However some of its materials could still be identified as found works. It should be noted that some machinima works are not strict readymades and found works. In machinima works, the animator may create new materials such as models, textures, scripts and plots. On other occasions, the contexts of the original games remain completely intact, meaning these works are more likely to be trailers or recorded gameplay videos. The former is not readymade but is created by the animator; the latter has not been set in a new context and re-designated.

In conclusion, machinima animations can constitute "found art" when they come from readymade resources and are used in other contexts to express new ideas. In this process of appropriation, the machinima segment is usually detached from its original game by an artist whose function is to collect the materials and to reassemble them in new contexts. In a broader sense, these criteria may also apply to appropriations to and from other forms of digital artworks.

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