An Immersive Digital World

Introduction

Ever since the creation of the first computers, artists have experimented with them in an attempt to unlock their potential as an art form. A newer genre of computer technology which has recently been explored by artists is virtual reality. One such artist who has explored this new technology is Char Davies who has used virtual reality technology to create pieces of artwork she calls "immersive virtual spaces" that immerses its viewers into an ever-changing environment (McRobert, 2007, p. 4). Despite artist's attempts to use computers as an artistic tool, many art critics fail to label computers as a valid art form. This is due to "the lack of an informed public and the perspective of thoughtful critics" (Jenkins, 2000, para. 20). According to Henry Jenkins' definition of art in his article Art form for the Digital Age, Char Davies' immersive virtual space *Ephémère* is part of a new experimental art form which relies on the computer as an artistic tool.

The definition of art takes many forms. What characteristics define a piece of artwork? According to Henry Jenkins (2000) in his article Art Form for the Digital Age, "computer games are art- a popular art, an emerging art, a largely unrecognized art, but art nevertheless" (para. 3). Although Jenkins's article focuses on computer games, like computer games, Davies work is a form of digital art which also uses computer technology as a tool. In his article, Jenkins compares computer technology to cinema, a medium of art which was not originally given cultural respectability as an art form. According to Jenkins, computer games share many characteristics with cinema which make it an art from such as their expressive qualities and their reliance on the placement of objects in space. Jenkins also argues that the underlying quality that makes a work of art is human creativity. According to Jenkins (2000), like cinema, computer

games are a "lively art" which "open up new aesthetic experiences and transform the computer screen into a realm of experimentation and innovation" (para. 10).

Char Davies' immersive virtual space *Ephémère* takes advantage of virtual environment technologies. In order to immerse the viewer into the virtual environment in *Ephémère*, the immersant must wear a Head Mounted Display (HMD) which was originally created by NASA to be used in space simulations. In order to explore the virtual environment, the immersant wears a body vest which measures their breathing and center of balance. By "breathing in, the immersant is able to float upward, by breathing out, to fall, and by subtlety alerting the body's centre of balance, to change direction"

Figure 1
The immersant wearing an HMD and a body vest while exploring Ephémère.
Source
Immersence Inc., 1998

(Immersence Inc., 1998, para. 4). Davies' inspiration for the means of movement in *Ephémère* was scuba diving in which the diver must maintain buoyant control.

The virtual environment in *Ephémère* was "inspired by an actual place on the slope of a mountain in rural Quebec" which "roots and rocks, seeds and streams, blooming and withering,

Figure 2
A diagram illustrating the different stages of Ephémère's transformation.
Source
Immersence Inc., 1998

appear in Davies' work like apparitions" (Immersence Inc., 1998, para. 8). *Ephémère* is "structured into three levels: landscape, earth, and interior body" which change as the environment goes through each of the

four seasons (Immersence Inc., 1998, para. 2). The immersant's journey through *Ephémère* begins with stagnant objects which symbolize the lack of life in the winter. The environment then makes a transition into spring in which the formerly lifeless objects transform into representations of blooming, germinating and the body. When the environment reaches the summer stage, the objects begin to bear fruit and grow leaves. At the end of the journey, the objects begin to wither and decay and the objects which once represented the body turn to bone, symbolizing autumn and the end of life. *Ephémère* is described by Davies as being "a lament, an elegy, not only for the ephemerality of our own lives, but for the passing of the splendor of the natural world as we have known it" (Immersence Inc., 1998, para. 8). The interconnected metamorphosis of the objects in *Ephémère*, which symbolize mankind and nature, are used to convey this theme by showing how mankind and the natural world age over time.

Like a camera or a roll of film used in creating a cinema, a computer is merely a tool in creating a piece of artwork. According to Jenkins (2000), "the computer is simply a tool, one that offers artists new resources and opportunities for reaching the public; it is human creativity that makes art" (para. 7). In *Ephémère*, the objects, although algorithmic, appear "organic, soft-

edged, and ephemeral" (McRobert, 2007, p. 5). In the development process of *Ephémère*, programmer John Harrison created algorithms that create the effects that Davies desired. The Softimage software that artistic designer Georges Mauro has also been described as "the world's most sophisticated visual effects software" (McRobert, 2007, p. 6). Because Davies' and her team of designers experimented with computer technology in order to create objects and effects which would eventually be put into *Ephémère*, human creativity played a large role in this work's creation. Despite the use of a computer in the creation of *Ephémère*, it still contains human creativity which, according to Jenkins, makes it a work of art.

Throughout his article, Jenkins (2000) describes computer games as an "art of atmospheric design" in which the "placement of shadows, the movement of machinery and the organization of space" affect the outcome of the final work (para.12). Like a video game which contains "fantastic environments that convey a powerful sense of mood", Davies has structured the environment in *Ephémère* to convey an elegy concerning the life cycle of mankind and the natural world by placing the objects (Jenkins, 2000, para.12). Because the placement and transformation of the environment in *Ephémère* are used to convey a specific theme and to evoke specific emotions in the immersant, this digital environment is also an atmospheric design that relies on the placement of objects in order to convey its message.

According to Jenkins (2000), computer games, like silent cinema, are also an "expressive art" in which "characters defined through their distinctive ways of propelling themselves through space, and successful products structured around a succession of spectacular stunts and predicaments" (para. 12). Like a computer game in which the player controls a character through a virtual environment, Davies' *Ephémère* allows the immersant to navigate themselves through a virtual environment using the speed of their breathing and their center of balance. The speed of

their breathing also has an effect on how fast or how slow the virtual environment transforms. Because the immersant is allowed to move throughout *Ephémère* and cause changes in the environment through their movement, *Ephémère* is an expressive art that allows the immersant to express themselves through the ways they interact with the environment.

During the early years of filmmaking, "filmmakers were striving to enhance the emotional experience of going to the movies" (Jenkins, 2000). Like early filmmakers, artists who use computer technology are trying to enhance the emotional experience of interacting with the computer. According to art critic Laurie McRobert (2007), *Ephémère* is "a space that seeps into [the viewer], that we imaginatively relate to and feel, a space in which floating objects are not 'nothing,' but something, almost demanding to be touched" that "can evoke innate feelings of space and time" (p. 6). McRobert (2007) goes on to compare the experience of exploring our own "biological space" in *Ephémère* to the "space of love" a reader falls into while reading a love poem (p. 6). Davies defines *Ephémère* as an

Figure 3
A screenshot of a river and forest that an immersant would interact with while inside Ephémère.
Source
Immersence Inc., 1998

"elegy" which is defined as "a mournful, melancholy, or plaintive poem, esp. a funeral song or a lament for the dead" (Dictionary). Like an elegy, which evokes emotions of sadness concerning death, *Ephémère* is made with the intent of evoking feelings in its viewers concerning their biological status as they view the life cycles represented in *Ephémère*. Because *Ephémère* arouses emotions in the immersant concerning "the depths of feelings in their own biological

space", *Ephémère* further follows Jenkins' definition of art because of its emotional effect on its immersant's view concerning space and time (McRobert, 2007, p. 6).

A common counter-argument to labeling computer generated works as art is that computers cannot "adequately express the human spirit" (Jenkins, 2000, 6). How can a piece of technology which runs off of algorithms and polygons successfully express the emotions of the human psyche? Although computers are algorithmic, human creativity and imagination is necessary in order to create effects on the computer screen which impact the viewer in a more meaningful way than shapes floating on screen. In the case of *Ephémère*, top of the line computer software was used in order to implement and design objects and effects which Davies felt would evoke feelings in the viewer which would convey her elegy. Although the transformations in *Ephémère* are based off of computational algorithms and polygons, the objects implemented in *Ephémère* contain characteristics of Davies' previous works as painter. For example, in her paintings, Davies often used special brush strokes in order "to give the impression of enveloping space" which, she believes, "can enhance the feeling of being bodily immersed in space" (McRobert, 2007, p. 28). In *Ephémère*, objects were implemented to contain floating particles which gave objects in the virtual environment a similar effect. Although *Ephémère* is a computer generated work, it contains artistic styles which have aesthetic principles similar to that of paint strokes in Davies' paintings. *Ephémère*'s similarities to other art forms, like painting, and its use of human creativity make it a work of art.

According to Jenkins, what defines art is not what tools are used, but the human creativity that was put into it. Ever since artists first started to experiment with computers in creating art, critics failed to accept computer generated works as art because they did not believe that it could successfully be used to express the human spirit. Despite this claim, computer

generated artwork like Char Davies' immersive virtual space *Ephémère*, shares many of the artistic qualities of other mediums of art that these critics fail to see. Like cinema, which was first denied as an art form, *Ephémère* is an expressive art which allows the viewer to express themselves through the artwork by controlling their breathing and center of balance. *Ephémère* is also an atmospheric design that is dependent on the placement of objects to help develop the theme of the work which expresses an elegy concerning the life cycles of humans and the natural world. *Ephémère* also contains specific artistic qualities, such as the use of floating particles which look similar to Davies' use of brush strokes to create a feeling of "being bodily immersed in space"(McRobert, 2007, 28). Computer generated artwork, like Char Davies' *Ephémère*, is an emerging form of art, like cinema, that contains many artistic characteristics that has not yet been accepted by society as an art form because of its inventiveness.

References

Burea, G., & Coifeet, P. (1994). Virtual Reality Technology. New York: Wiley-Interscience.

Immersence Inc. (1998). Ephémère. Retrieved 1 28, 2008, from Immersence:
        http://www.immersence.com/

Jenkins, H. (2000, September). Art Form for the Digital Age. Retrieved 1 7, 2008, from Mit's
        Magazine of Innovation: Technology Review:
        http://www.geocities.com/lgartclass/handouts/ArtfortheDigitalAge/ArtFormfortheDigital
        Age.html

Krueger, M. W. (1983). Artificial Intelligence. Menlo Park: Addison-Wesley Publishing
        Company.

McRobert, L. (2007). Char Davies' Immersive Virtual Art and the Essence of Spatiality. Toronto:
        University of Toronto Press.

Paul, C. (2003). Digital Art. London: Thanes & Hudson Limited.

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