

Something has changed, and the Faustian, Promethean period of production and consumption gives way to the 'proteptic' era of networks, to the narcissistic and protean era of connections, contact, contiguity, feedback and generalised interface that goes with the universe of communication. With the television image - the television being the ultimate and perfect object for this new era - our own body and the whole surrounding universe become a control screen. [Jean Baudrillard, 'The Ecstasy of Communication', in Hal Foster (ed) Postmodern Culture, Pluto Press 1990] Roy Ascot, in Lucy Lippard's Six Years: The De-materialisation of the Art Object, 1973, points out to the link between previous art practices, conceptualism in particular, and contemporary media production. The issue of dematerialization and what most currently is described as immaterialisation of an art object become a key concern of current critical theory and is most evident in current media art production. Focusing on a specific example of current digital art practice (or set of practices) discuss the transformation of the concept of the 'art object' in its historical context.

New media can be described as the 'New Art'; the way in which we access and interact with art has changed over the last century. Digital gallery installations, the internet and software allow the audience to become part of the creation process. This raises a number of questions and debates relating to authorship, materiality and conceptuality. This essay is going to explore the dematerialisation of the art object over the past century and look at key changes which have influenced and shaped the way in which we interact and view art. It is very clear that the way we see the art object at present is very different from our predecessors of the last century. It could be argued that art has taken a new form since the Industrial Revolution. The Industrial Revolution not only effected the way art was viewed, but allowed easy replication of artworks. Art could be produced in a variation of edition and canvas sizes making it possible for the masses to view and collect art. Lucy Lippard, a critic associated with conceptual art in the late 60's said "Conceptual art, for me, means work in which the idea is paramount and the material is secondary, lightweight, ephemeral, cheap, unpretentious, and/or dematerialised" (Godfrey, T.1998; 14). The dematerialisation of the art object raised many questions, all of which I will be exploring in this essay. Art has now moved to a more conceptual form and has shredded all materiality aesthetic principles, in doing so we no longer see art as an object but as a conceptual object which carries meaning and reason. The concept is the idea not the object. What caused this shift in art? Which artists influenced the movement? Mainly focusing on influential artists such as Marcel Duchamp, Walter Benjamin and the impact of the Industrial Revolution on the art object I hope to discover what has caused this change in art.

In the early 1800's the Industrial Revolution arose in most of Europe. The revolution formed a large impact on society, not only in a sociological way but in art too. The effects of this revolution had some positive and negative factors but each were weighed out by one and another. A prominent product of the Industrial Revolution was the rise of the middle class. No longer was there a two way split between societies. Because of this shift artists saw a new market opportunity for art. Artists artwork, be it performance bases or material form, could be offered to the masses. The revolution created more

opportunities for the 'middle class' to collect art as production costs were lowered. Art began to change; its form and place no longer conformed to the previous era. Wall based art tended to become reduced in size. This was mainly due to middle class housing factors such wall space and size. Exhibition based art tended to be large wall based canvas. This needed to be replicated yet scaled down so it could be displayed in the average house. In this period artists such as Gustave Courbet chose to diversify from the traditional notions of art. No longer did artists like Courbet believe that art "could be religious, philosophical, moral" (Ades et al.1999; 70). Courbet chose to paint art as it really was, not what people expected or fantasized about, rather his paintings were blunt or to the point. In this period he was given an excellent opportunity for a new subject matter. His work largely consisted of "workers, merchants, and other contemporary individuals in a serious spirit" (The Industrial Revolution's Affect on Art 1998). Religious art became known for its mediated meaning and untrustworthy approaches. Arts previous form began to change into a different form. Art work started to become recognisable, no more fictitious landscape paintings and for the first time landscape scenes became "geographically identifiable" (The Industrial Revolution's Affect on Art 1998).

It was also recognised that craftsmanship lost its respect due to the Industrial Revolution. Prior to the Industrial Revolution each piece of furniture or artwork would have been created by an artist of some form, they would have been highly skilled at their profession from an early age. The effects of the revolution caused everyday objects to become mass produced, and items were disregarded as art.

However in society today we value these objects more than ever, did the revolution add value to art? It could also be argued that performance based art has benefited dramatically from the revolution with the technological advances; the audience can now view art and listen to music in the comfort of their own home. Many of the fine arts were restricted to the high society. With the aid of technology the middle class could buy art, and more importantly create art. This effect also made musical instruments readily available to 'ordinary' people.

Science too would prove a factor in the change of the art object. Key writers such as Herbert G. Wells became recognised in the late 1800's and the early 1900's for his science fiction novels and theories. Wells took Darwin's theory of evolution and recognised its negative factors, in his novel 'The Island of Dr Moreau' he noted the life of Dr Moreau's, a scientist who performed animal "vivisection" (Revisiting The Island of Dr. Moreau no date). His main theory was that if man derived from animals could we not make man from animals? Does man have animal like behaviors? This caused outrage and in effect created Anti-vivisection groups.

It was once considered that the art object was merely an aesthetic form and that the concept was over looked, however this view has changed. Artist's such as Marcel Duchamp and the Dadaist movement have reshaped the art object into a more conceptual model. The art object has been dematerialised. In 1916 a new movement initiated which would cause controversy in the art period; the knock on effect would prove an influential turning point and its impact can still be seen today in some of the most recent artworks. Branded 'Dada' and created by both Marcel Duchamp and Man Ray, it would soon be

known as a pivotal movement in art history. Dada's main argument and purpose was to challenge 'art' by creating the "anti-art" (Anti-Art Is Not Art no date), by confronting previous aesthetic ideologies associated with the art object Dadaism chose to confront art with art, challenging the preconceptions of the art object and its purpose. It raised a number of questions, mainly what is art? and challenged the point of authority and authenticity for artworks. Rather than preserving the traditional values of the art object, aesthetics being everything, it chose to focus upon the emphasis of the concept or idea behind the work. By rejecting the commercial and traditional cultural aspects, Dadaism planned to eradicate traditional culture and aesthetics. It must be noted however that Dada exists within the modernist movement, but is considered by many that some of the ideas derive from the postmodernist movement. Typically this type of work is regarded as avant-garde as it "is considered in its own time to be radical, consciously breaking from previous tradition" (Classic Music Navigator: Glossary no date).

Duchamp's ideas and principles created a panicle point in history, its presence enforced the advance of influencing the empire of the digital art scene. This transformed the way people perceived and interacted physically and conceptually with art, no longer would the audience sit back and passively admire the artists work, the audience had to work for the artwork, bringing and engaging the audience in the production of the art piece.

Duchamp's most famous work mainly consisted of ready-mades. To explain ready-mades in its simplest form "Duchamp once described a 'ready-made' as a 'work of art' without an artist to make it. In principle the ready-mades are mass produced objects that have been signed and sometimes inscribed by the artist" (Ades et al.1999; 146).

While the 'ready-mades' are of a material form, its material aesthetics are only complementary to the complete piece, these artworks could be assembled and reassembled at any time, which can be seen in Duchamp's "Bicycle Wheel" (Ades et al.1999; 147). Following this transformation, conceptually based art has attempted to throw away its visual aesthetics, trying to steer away from any material factors. This included some of his most famous pieces such as 'The Fountain', this was quite simply a urinal that he claimed was art. In 1917 he decided to exhibit this readymade as Mr. R Mutt in a gallery exhibition, which claimed to be a "free exhibit" (Ades et al.1999; 127) to any one paying the six dollar exhibition fee. However it was rejected on the basis: "Some contended that it was immoral, vulgar and that others believed it was plagiarism, a plain piece of plumbing" (Ades et al.1999; 127). This caused fury to Duchamp and he later resigned from the "society of Independent Artists" (Ades et al.1999; 127). He later suggested that a "Rembrandt painting could be used as an ironing board" (Marcel Duchamp 2003). This became recognised by many, the statement strived to raise the question, does art serve more than one function? and is there more to art than just the material?

"Duchamp recognised that the art object will have a different presence in a world where it's function is no longer ' religious, philosophical, moral', and that, in the age of facile mechanical reproduction, it will take its value from something other than mimesis in the traditional sense" (Ades et al.1999; 182). "His influence ultimately facilitated a shift in emphasis from painting to three-dimensional work" (Standard papers in History of Art and Visual Culture, no date)

Additionally various artists took the concept of dematerialisation to the extreme. American artist Ian Wilson proposed the term 'total-dematerialisation' and "created purely verbal artworks and, to escape materialization, spoke them aloud in a gallery rather than putting pen to paper" (Godfrey, T.1998; 164). This took the idea of dematerialisation and tried to take it one step further. By eliminating any form of material base it argued that the art was purely created with concept in mind. Although it could be disputed that the art of verbal poetry is in its self a material form as it is a performance.

In the 1960's Marshall McLuhan "theorized multisensory thinking" (Higgins, H. 2002; 49). This theory argued that television was the most significant media form because of its invocation of multi senses; he also argued that it had the capacity to re-tribalise and reunify aspects of modern society. He later proposed that media could be categorised into 2 groups, hot or cold media. He described 'hot media' as media which requires a large amount of sensory data. He also referred to it as "low in participation" (McLuhan's Medium is the Message 2000). On the other hand 'cold media' requires the audience to participate in the filling in of missing data. "McLuhan thinks that if we cross mediums we cause a social problem. He uses the example of radio as hot media being introduced in tribal society as a problem. He takes that into our society saying that we have a cool society and that the introduction of television has caused great problems" (McLuhan's Medium is the Message 2000). To summarise this theory it could be said that radio is classed as 'hot media' as it gives a continuous flow of data creating a passive relationship with the media and the audience. Cold media on the other hand could include television or the internet; here the user is required to participate in the flow of information. These categories were never labeled with a good or bad association.

Walter Benjamin discussed the 'aura' of art work and its loss in the age of mechanical reproduction. He argued "Photography and film..represented a crisis for painting, which, as an object for 'contemplative immersion' cannot tolerate mass viewing conditions" (Ades et al.1999; 182). He put forward the point that there had always been techniques for reproducing artwork, for example copies, forging or replicas. But because of these replications it could be seen that the traditions or 'aura' of the art work became less important to the audience. In addition Benjamin disputed that "a photographic negative, for example, one can make any number of prints; to ask for the 'authentic' print makes no sense" (The Work of Art in the Age of Mechanical Reproduction 1937), this can also be said about digital reproduction. On the other hand it's clear that artists and art dealers have found a way round this, by publishing 'authentic' prints (signed or numbered) they have tried to make some association with an 'original' by creating a uniqueness, or showing some form of direct contact with the artist, hence the signature. Artist print numbers start from anything as little as 1. Even so when a print batch is of 1000, the prints which are lower in number become 'more authentic' because it's time of print. But really has no difference from a higher print number, apart from the number of course. Can it be argued that digital files could follow this same principle? A file is a file, a copy is a copy. The copied version is in the same exact form as the original, but how do we know which is the authentic? It could be argued that they are all indeed the original, as the copy is an identical replication. Digital art designs or creations such as 3D models also raise this question. Artwork in its 3d form can obviously be replicated using the

latest in CAD CAM technology producing the object into a real three dimensional form. However this raises a number of questions. How large should the object be? What materials should be used? This makes no sense as the object can be easily manipulated and modified.

Throughout the era of postmodernism we have observed a change in the way art is signified or created. Previously cinema had a tendency to pursue a linear-narrative form, however new media has attempted to break this trend by following a database structure for the narrative. Film has been trying to diversify into a more database logic but most still follow the traditional linear-narrative structure. Looking at cinema in particular, early directors such as Dziga Vertov and more recently Quentin Tarantino have experimented with structure and narrative.

A prime example of the early style of database cinema is *A Man With a Movie Camera* (Vertov 1929), a documentary of a day in the life of the Soviet Union. “Even the editing of the film is documented. We often see the cameraman who is purportedly making the film, but we rarely, if ever, see any of the footage he seems to be in the act of shooting” (Davis G,S. no date).

Tarantino is most commonly recognised for his successful Hollywood movies. His work is categorised into the postmodern style, and this is clear in one of his most famous films *Pulp Fiction* (Tarantino 1994). The story follows a non-linear plot with a fragmented narrative. This effect causes the audience to ‘interact’, and the audience no longer passively watches. Due to its non-linear form the audience is asked to deconstruct the algorithm to fully understand the true meaning of the film. It requires audience participation as it requires the audience to rearrange the plot into time order, in turn this engages the audience. Because of this approach the overall narrative tends to steer away from the standard cinematic linear form rejecting previous conformist ideas.

Scream (Craven 1996) is a very influential piece of postmodern cinema, it did not challenge the narrative structure but it chose to reveal its construction. As the audience we see intertextuality, the film makes a numerous of open references to a number of horror films visually and orally. We see scenes from *The shining* (Kubrick 1980) quotes from *Nightmare on Elm Street* (Craven 1984) and self reflexivity throughout, in doing so it gives a sense of reality and this too asks the audience to interact with the media. Moving on to the most recent debates and ideas we have seen artist experiment with database cinema. The Legible City by Jeffrey Shaw saw users navigating a three-dimensional city, by pedaling a bike in front of in an interactive installation. This created a new way for the audience to interact with textual data; the path the user took depended upon the surrounding text in the 3d environment.

It can be said that digital art has evolved from a number of factors; technology, science and industry has forced the advances in the way art is produced, arts historical context too played a large part in the formation of this style. In the 1970’s to the 80’s many “painters, sculptures, architects, printmakers, photographers, and video and performance artists” (Paul. 2003; 21) began to experiment with computer technology to create or modify artworks. This periodic shift transformed art into a method that relies on a constant flow of information and engages the audience or participant just in the way a performance art might do. This change challenges the authorship of the piece. Who is the creator? In

previous periods the artist would have been the sole creator of his or hers work. However in a digital art era the art form often relies heavily on software. This then allows the audience to contribute to the over all art piece. This often causes debates in digital art as both the audience and the artist could be argued as the author. Is the artist merely there as the “mediator” (Paul. 2003; 21) who lays down a number of rules, giving the user the directions.

With the advance in computing capabilities, interconnectivity became a fundamental part of digital art. This influenced the way art would be experienced and would change the way the audience interacted with art. In the 1960’s a new group emerged that would be known as the Fluxus group. Coined under the conceptual arts movement yet never really clearly defined, the groups members tended to flow in a ‘flux’ manner, some members only had a “passing involvement in it. In a way it was more like an itinerant social club” (Godfrey, T.1998; 102). The groups main visions were that art should be valued more by simplicity rather than complexity. Just like Dada they believed in the anti-art and disapproved of the commercial driven art market. The Fluxus group was a key influence in a number of performance based art pieces. In 1977 Charlotte Moorman worked along side with the American artist Douglas Davis who “organised a satellite telecast to more than twenty-five countries, which included performances by David himself, Nam June Paik, Fluxus artist and musician Charlotte Moorman, and German artist Joseph Beuys” (Paul. 2003; 21). This influenced other artists to experiment with time and space. In 1977 Keith Sonnier and Liza Bear created “two way interactive satellite transmission” (Paul. 2003; 21) between New York and San Francisco. At the time this was thought of as a new innovative technology. The term interactive can be overly used in society by many. Of course all art we can see requires some form of interaction whether its hung on a wall, In a book or part of a digital installation it requires some form of ‘interaction’ between the user and the artwork.

With most digital artworks we see some form of randomness, be it controlled by a set of rules laid down by the artist or coder. The way in which the rules of randomness are controlled normally effects the end result upon interaction. This can be seen as mediating the experience

Grahame Weinbran stated “‘The digital revolution is a revolution of random access’ – a revolution based on the possibilities of instant access to media elements that can be reshuffled in seemingly infinite combinations”(Paul. 2003; 15). This idea was exactly what Nam June Paik implemented in his digital installation Random Access (1963). This was a wall based art piece which consisted of more than 50 segments of audio tape fixed to the wall. This asked the “users to play the segments” (Paul. 2003; 15) of audio tape by using an adapted tape player which would decode and project the sound using speakers.

Computers are an every day part of life, at the present time we cannot escape them, and they are going to get more sophisticated and more versatile. They have the potential to transform the visual arts by merging a number of cross medial platforms, transforming the real into virtual or even augmented reality. It is recognised by many that the way we perceive art via the form of a digital medium (on the computer for example) is highly mediated. The audience see replicated images of art work in many shapes or form, and they are every where; the effect of this cause the art objects to be worthless in the existing context. Frequently we see artwork as mediated because of its surroundings or ‘aura’.

Typically art on the internet is surrounded by not only the operating systems browser window but by the surrounding information on the web page, even internet advertising sneaks its way in.

There are many interactive internet pieces available online but one of the best known examples of collaborative art is The World's First Collaborative Sentence (1994) this was "one of the first internet artworks, to which tens of thousands of people have made contributions" (Stallabrass 2003; 60). The principles are relatively simple; the user must add to the already existing sentence (created by other users) but must never finish the sentence, thus causing an ever lasting sentence.

Over the last century there has been a clear shift in the art object, movements have come and gone, and the way in which we interact with art has changed. We now see a much more constant flow of data between the user and the artwork. Due to previous movements art has lost its material aesthetics and we now see much more conceptual based pieces where the process and idea is everything. Following this effect the art world and industry has become open to almost anybody. Any piece of work could be regarded as 'art', this opened up opportunities for many new or unrecognised artists as aesthetics are not so important. It's apparent that the way we interact with art has changed. No longer are we faced with a static object, art now requires user interactions to perform the generation of art, hence the term 'generative art'. We see art following a more random approach where the audience becomes part of the art. There is no key moment in history which changed art into this form however it could be argued that all of the discussed periods and movements played a key part in the dematerialisation of the art object.

Bibliography

Ades, D., Cox, N. & Hopkins, D. (1999), Marcel Duchamp, Thames and Hudson, London.

Godfrey, T. (1998), Conceptual Art, Phaidon Press Limited, London.

Higgins, H. (2002), Experience Fluxus, University of California Press, California.

Paul, C. (2003), Digital Art, Thames and Hudson, London.

Stallabrass, J. (2003), Internet Art , Tate Publishing, London.

Webography

Classic Music Navigator: Glossary (no date) [online] Available:
<http://www.wku.edu/~smithch/music/glossnew.htm> [date accessed: 7 Jan 2007]

Davis, G.S. (no date) Plot summary for Chelovek s kino-apparatom [online] Available:
<http://www.imdb.com/title/tt0019760/plotsummary> [date accessed: 03 Jan 2007]

Kamhi, M.M (no date) Anti-Art Is Not Art [online] Available:
<http://www.aristos.org/whatart/anti-art.htm> [date accessed: 5 Jan 2007]

Lane, J. (1998) The Industrial Revolution's Affect on Art [online] Available:
<http://www.humanitiesweb.org/human.php?s=g&p=a&a=i&ID=92> [date accessed: 23 Jan 2007]

Parkinson, G. (no date) Standard papers in History of Art and Visual Culture [online]
Available: http://www.history.ox.ac.uk/postgrad/papers/pg_ma_havc.htm [date accessed: 10 Jan 2007]

Walter, B. (1973) The Work of Art in the Age of Mechanical Reproduction [online]
Available: <http://pages.emerson.edu/Courses/spring00/in123/workofart/benjamin.htm>
[date accessed: 20 Dec 2006]

Wimbley, J. (2000) McLuhan's Medium is the Message [online] Available:
<http://www.colostate.edu/Depts/Speech/rccs/theory31.htm> [date accessed: 23 Jan 2007]

Revisiting The Island of Dr. Moreau (no date)[online] Available:
<http://www.colostate.edu/Depts/Speech/rccs/theory31.htm> [date accessed: 21 Jan 2007]

Marcel Duchamp (2003) [online] Available:
<http://fusionanomaly.net/marcelduchamp.html> [date accessed: 02 Jan 2007]

Filmography

A Man With a Movie Camera [videocassette] (1929) Dziga Vertov. Soviet Union: 80 mins.

A Nightmare on Elm Street [videocassette] (1984) Wes Craven. USA: 91 mins.

Pulp Fiction [videocassette] (1994) Quentin Tarantino. USA: 154 mins.

Scream [videocassette] (1996) Wes Craven. USA: 111 mins.

The Shining [videocassette] (1984) Stanley Kubrick. USA: 119 mins.