

The Art History Department of the University of Barcelona organizes research groups integrated by teachers, scholars and Ph.D. students who share their intellectual interests in order to create a common space for debate and exchange. The working group gathered under the name *Art, arquitectura i societat digital* explores on the latest connections between new digital technologies, art and architecture. For this reason, the team is organized as an interdisciplinary venture integrated by researchers from the Art History Department and from the Anthropology Department of the University of Barcelona, but also by members of the Architecture School of the International University of Catalonia in collaboration with other foreign universities.

The international symposium "Art and digital architecture, net.art and virtual universes" is the third one organized by this research group and has helped to create a forum for debate where the participation of students from our Department, from other members of the university and from the general public has been considerable.

This publication offers some of the papers presented during the symposium, although it does not cover all the comments and debates that arose on the course of the days in an extensive manner. More information is available on the research group's Web page, in the participants' blogs and in other media that allow for the exchange among researchers interested in the new technologies that promote artistic creation as well as social and cultural innovations.

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THE IMAGINARY IN DIGITAL ART: BACKGROUND

[LOURDES CIRLOT]

From the 1990s to the present day, numerous digital art exhibits have been held, both in museums and foundations, as well as in virtual spaces. Digital art can be presented either in a traditional or in an innovative manner. Among the former we can include manifestations of graphic art, photography, sculpture, installations, video, films, animation, music and performances. Innovative presentations are produced exclusively in virtual reality, software art and net.art. Therefore, digital art is intrinsically linked to science and technology. For many art critics and curators, digital art emerges from the evolution of the mechanical and electrical process of photography, film and video. Having said this, we must always take into account that photography refers us back to drawing and painting. (1)

The exhibit "*Vertigo, il secolo di arte off-media dal futurismo al web*", curated by Germano Celant and Gianfranco Marianello, displayed in 2007 at the MAMbo (Museo d'Arte Moderna di Bologna) is especially interesting. This exhibit shows how to interrelate digital art with previous artistic manifestations, from the 20th Century. (2)

In the first chapter of the exhibition catalogue, entitled "*Le ragioni di Vertigo*", Celant points out that the art system, after a period of unbridled euphoria is experiencing a crisis and is riddled with insecurities. According to Celant, this is due to the fact that art's projects have decayed, as well as their critical role. On the other hand, the Italian critic adds that given that art has lost its political meaning, could nevertheless, be compensated by its greater proximity to the masses, even when this implies the limitation

that artistic manifestations will be restricted to purely decorative functions. In any case, popularity carries with it both the concealment as well as the dissolution of the representative and utopian structure of art. Consequently, we can observe a certain degree of homogenisation in the artistic imaginary, as art has adapted itself to the inherent process of consumer goods. We can therefore state that the present range of innovations is infinite and unimaginable.

In this extremely complex context, where all kinds of references intermingle and superimpose themselves, digital art's imaginary seems to be based on a perspective that actually enables its delimitation and even the determination of some of its characteristics. Firstly, we can highlight as an essential aspect, particular to digital creations, the desire of the artist that creates it to get closer to the public. One of the most frequently used strategies by artists that employ new technologies is to resort to images of the past, often with images from the Renaissance or Baroque periods belonging to renowned artists. The advantage of such images is that they have been studied by art historians throughout different eras and are already endowed with a specific status in the historiographic context. Furthermore, the fact that they have been reproduced in innumerable occasions, from the field of research to dissemination, gives them a particular nature, that produces admiration and even veneration among the public.

APPROACHING THE PUBLIC

Therefore, we can state that approaching the public is a goal in itself. Indeed, many contemporary artists remit themselves to pieces from the past with their digital images or holographic installations. For example, Harriet Casdin-Silver (1925-2008), carried out an installation of this kind in autumn 1990 with her *Venus of Willendorf 91*, which of course evoked the prehistoric statuette known with that same name.

One of the most renowned present-day artists, Canadian, Jeff Wall (1946), executes pieces that can be inscribed into the so-called photo-conceptualist movement that is characterised by using well-known paintings or sculptures of the past as a starting block. It is worth recalling *Picture for Women* (1979), a piece that he executed based on Manet's famous painting, *A Bar at the Folies-Bergères* (1881). In the same way that Edouard Manet, and other impressionists "radically transformed traditional composition and *mise en scène* reflecting the contingency, partiality and intrinsic subjectivity of the modern gaze" (3); thanks to photography, Jeff Wall manifests how new technologies influence him through the detailed montage of his photographic images' scenography, as well as their value as procedures.

Throughout the 20th Century, numerous artists in different contexts and in the midst of various avant-garde movements based their pieces on important works of art of the past on which they executed their contributions. This would be the case of Duchamp or Dalí –to quote just two- and their respective interpretations of Leonardo's *Gioconda*. In the 1980s, North American artist, Lillian Schwartz (1927) started to digitalise images of paintings, sculptures, drawings and engravings from the MoMA's collection in New York. Storing them on her computer's memory she produced new collage processed images. We can mention her piece *Mona-Leo* (1986), a symbiosis between Leonardo da Vinci's self-portrait and his rendering of the Mona Lisa.

One of the most significant artists in the field of digital art is British artist Victor Burgin (1941), trained in the Royal College of Art in London, and the University of Yale (USA), he lectured in California between 1988 and 2001, and later in the University of London's Goldsmiths College. Author and artist, Burgin is influenced by Marx, Freud, Foucault and Barthes. It can be said, that the origin of his images was clearly evident –in fact, he himself made it known to the public- from his

very first digital creations. Therefore, pieces spanning from Manet's *Olympia* to John Everett Millais' *Ophelia* became the starting point for some of his pieces. One of his best known digital creations is his interpretation of Edward Hopper's *Office at Night* (1940) in the 1980s; a very popular piece on the Net. Vera Molnar (1924) is a Hungarian artist that has been working with computers since the end of the 1960s. Following from the kinetic art tradition, Molnar's interests have focused on the construction of digitally created geometric structures endowed with real movement. Her *Variations Sainte-Victoire* (1996) are very well known, in these, her starting point was Cézanne's series of paintings on the Sainte-Victoire mountain.

It is therefore obvious, that there are many artists that work in the digital sphere, basing their work on pieces from the past, be it from antiquity, the medieval world, the renaissance or the baroque periods, or more recent eras. In most of these creations, there is a clear desire to transpose a given theme that arises in a particular context, to another time and place, with the profound transformations that this entails.

In any case, it is evident that these pieces are practically always, based on highly significant works of art from the past. These creations constitute a referent, not just for art historians, critics and artists, but for the general public that profoundly admires them. Therefore, it could be claimed that the digital artist takes advantage of the baggage that such manifestations carry with them to facilitate the comprehension of their own work among a broader public, which surfs the Net, and discovers new artistic proposals, on a daily basis.

THE RISE OF COMMUNICATIONS TECHNOLOGIES

The first years of the 20th Century were especially productive in terms of developments in communications technologies. As we know, in the art world, the futurists granted a vital role to the means

of communication, as it was through them that news could travel rapidly, and they loved speed, above all.

In their manifestoes, they constantly proclaim their interest in speed and movement, to the extent that they transform these concepts into goals that they set themselves for their own artistic creations. This is the origin, therefore, of the series of pieces by Umberto Boccioni known as "*Plastic Dynamisms*" or the abstract compositions that Giacomo Balla signed in 1914 under the name "*Futur Balla*".

The futurists idolised the machine, thereby it is not surprising that they were the first artists to be aware of the importance of radio, invented by Guglielmo Marconi at the end of the 19th Century. Thanks to this device, it was now possible to eliminate "the distance that separates an emitter from a potentially unlimited number of receptors, and its capacity to evoke images and emotions through sounds, were going to excite the imagination of avant-garde artists." (4)

In the digital pieces of North American artist Jim Campbell (1956) there is a clear sense of the themes developed by the futurists. For example, in pieces like *Church on Fifth Avenue* or *Motion and rest # 5 (white)* (2002) –especially in the latter– it is clear that the artist was inspired by Eadweard Muybridge's photographic creations of the end of the 19th Century. Having said this, let us not forget that Muybridge was himself a source of inspiration for the futurists. Among Campbell's pieces, it is worth focusing on the piece in which he pays tribute to Boccioni's famous painting, *Dynamism of a Cyclist*, as we can clearly perceive within it, the changes and distance that exists between both pieces. This distance can, in turn be understood as a metaphor of the distance that exists between radio and the Internet. Campbell considers that his "piece incorporates electronic memory, recorded images and moving images. Using technological tools and scientific models as metaphors for memory and illusion, my work aims to interpret, represent and evoke psychological and

processual conditions with their corresponding ruptures. Time and memory, individual and collective, electronics and reality are the elements of my work." (5)

At the beginning of the 1960s, Michael Noll (1939) had already carried out similar experiments based on Mondrian's paintings –already considered classic-, as can be observed in *Computer Composition with Lines* (1964).

TOWARDS AN AUTONOMOUS INTERDISCIPLINARY ART

When viewing some of the digital creations of one of Japan's most important current artists, Yoichiro Kawaguchi (1952) who also lectures as professor of Computer Art, we can see that there are no longer any specific references to the art of the past, at most, there are certain allusions to a manner of conceiving abstraction.

Images of nature –flora and fauna in their respective sceneries- are Kawaguchi's starting points. From these and with the use of high definition technology he produces his *Metaballs*, spheres with a viscous density with which he constructs monochrome or chromatically exalted spaces. "Personally", says Kawaguchi- "I would like to be able to physically feel the new and fresh images that can be achieved with the advances made by high definition image computers. I want to describe sub-tropical warm water as a purified object that exists in a kingdom of overflowing brilliance."(6)

It is clear that nature has always been a favourite starting point for artists to execute certain works of art. Notwithstanding, it was in the 17th Century that scenery acquired its thematic independence. As time progressed it became one of the essential genres that could transmit moods and states of mind. A large distance separates the Romantic period from our present day times; an interest in scenery did not characterise the 20th Century avant-garde movements, except for a few exceptions, such as, for example, some pieces by artists that worked within surrealism:

Max Ernst, Salvador Dalí or Yves Tanguy. The latter, is credited with the creation of wonderful and enigmatic oneiric sceneries, which border, in most cases, on abstraction.

One of the pioneering artists in the development of artificial life and evolved software systems is the North American, Karl Sims (1962). Although considered one of the best artists in the field of digital art at the moment, Sims did not study art, but rather biotechnology at the Massachusetts Institute of Technology. As Xavier Redo has stated, "the definition of artist to define a person like Karl Sims may seem rather odd. In many fields, he would be known as a researcher, in others a graphic animator, and in most, he would be a mere programmer... The idea of creating evolutionary art started to ingrain itself in Karl Sims' mind together with the awareness that his knowledge was as of yet incomplete in the field of design. He therefore returned to the Massachusetts Institute of Technology to study for a Masters in Visual Studies, which he concluded in 1987." (7)

At present, Sims directs Gen Arts, the company he founded in 1996, which has developed very relevant projects for the creation of special effects in movies such as, *"The Lord of the Rings"*, among many others. Furthermore, Sims continues to work on important projects for the evolution of digital art. One of these is *Genetic Images*. This project aims to create the "evolution of two-dimensional figures taking into account the aesthetic parameters given by the piece's observers." (8)

Another very significant artist in the world of digital art is John F. Simon (1963). Beyond his art studies, Simon has extensive knowledge of planetary and terrestrial sciences. He started doodling on pieces of paper and soon moved on to do so through the computer.

Mondrian is one of his main referents, and especially his painting *Broadway Boogie Woogie* (1942-43). This last piece inspired him to create *ComplexCity* in the year 2000. What is most interesting about this piece is

that it reveals the dynamism of digital images and their inherent transformations. While viewing it, the spectator truly does assist to the consequences of Mondrian's theory and practice, author of the well-known text *Natural Reality and Abstract Reality*. Nonetheless, despite the fact that Mondrian awakened Simon's interest in a specific artistic concept it is obvious that the latter's software pieces cannot be considered a mere extension of the master of abstraction. This is something that is different, which has its own identity, characterised by the undeniable feeling of attraction experienced by the person that observes and studies it. It could even be said that the piece has a life of its own, given its capacity to generate different configurations, colours and structures in the different states that it goes through. The artist himself claims that one of the artists from which he has learnt the most – especially in terms of linear dynamism in drawings- is Paul Klee. (9)

At present, the number of artists that work in the field of digital art is growing. It is sufficient to enter DAM (Digital Art Museum) to recognise many of them and see their work. The virtual museum is a wonderful place to research this vast and magnificent world that is loaded with creativity. Names such as: Dennis H. Miller, Manfred Mohr, Char Davies, John Klima, Charles A. Csuri, Victor Acevedo, Paul Brown, David Em, Helen Golden, Víctor Koen, Juan Antonio Lleó, Karin Schminke, Javier Roca, Michael Wright, Dan Collins, Christian Lavigne, Corinne Whitaker, Jeremy Gardiner, Victoria Vesna, Opy Zouni and a long etcetera are all a part of this vast and yet unexplored world known as digital art.

NOTES

[1] See Wands, Bruce, *Art of the Digital Age*, Thames and Hudson, London 2006, pp. 8 and following.

[2] AA.VV., *Vertigo. Il secolo di Arte off-media dal Futurismo al Web*, Exhibition Catalogue,

Museo d'Arte Moderna di Bologna, Skira, 6th May – 4th November 2007.

[3] Carrillo, Jesús, *Arte en la red*, Ediciones Cátedra, Madrid 2004, p. 160.

[4] *Ib. Id.*, pp.162-163.

[5]vSee Wands, Bruce, *op. cit.*, p. 147.

[6]vKawaguchi, Yoichiro, *Arte-pensamiento*, <http://www.artfutura.com/02/kawaguchi.htm> (Consulted on: 03-03-2008.)

[7] Redo, Xavier, *Karl Sims*, http://www.iaa.upf.es/~berenguer/recursos/ima_dig/5/estampes/1_15.htmf.es/ (Consulted on: 03-03-2008.)

[8] *Ib.id.*

[9] Ploug, Kristine, *Interview with John F. Simon Jr.* (19th November 2003), <http://www.artificial.dk/articles/simon.htm> (Consulted on: 11-05-2008.)



FROM CINEMA TO CELL PHONES: CONTEMPORARY TRANSFORMATIONS OF IMAGE-MOVEMENT

[ANNA CASANOVAS]

Over the last decade information and communications' technologies have accelerated so much that personally, I have difficulties in recognising the relation between the world I am currently living in and the one in which I grew up.

At present, the numerous screens that surround us are responsible for most of our knowledge and thoughts about the world. Cinema, television, computers and finally, the tiny screen on our cell phones are windows that bring us closer to a kaleidoscopic representation of our environment, although distancing us from the direct life experience of it. In 1968, Guy Debord rightly prophesised