# CONCEPTS AND APPROACHES OF MATERIAL AND IMMATERIAL IN NEW ART MEDIA

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#### **Abstract**

Some of the art of the 20<sup>th</sup> and 21<sup>st</sup> centuries is what is understood as such by means of an essentially conceptual approach, a different contact with the materials. These are more and more numerous and diversified and their exploration possibilities and their potential richness must be understood.

Materiality in Art has been questioned since Marcel Duchamp. Other artistic movements like Dada Movement and the Russian Suprematism were the first to make their way through paths leading to different experiences of Immateriality in Art. The Suprematism artists insisted that there is just a step from the material to the immaterial, and they made several attempts to release Art from material realization. As a consequence, new ways should be discovered to reach what is the essence of Art, the expression of a pure spirituality.

With the new Technologies, the increasing artificialization and dematerialization of plastic material reinforce a trend to a form of conceptualization and rationalization of part of the current artistic production. Among the components of the immaterial we can find the transparent materials, – glass, light –, as well as the ones that result from speed and movement, making the shapes explode and diluting the materials in a never-ending metamorphosis process – kinetic energy, video –, what results from the spirit and the thought, – language, concept –, what is necessary to the operating method of the virtual work – computers, the internet, holography.

**Keywords:** New concepts; Immateriality; New Media in Art; Light.

### 1. Introduction

"In 1917, Marcel Duchamp (France – 1887-1968) had already defined an artist as someone capable of rethinking the world and remaking meaning through language rather than someone who produces handcrafted visual objects for "retinal" pleasure. He established a conceptual direction for art in his defence of readymade *Fountain*, a urinal that he turned upside down and signed R. Mutt"(Stiles; 1999). When Duchamp removed the object from its ordinary context, put it in a different context and renamed it, he also altered the identity and the value of the object providing a new concept of it. As Duchamp was one of the *non-artists* of the *non-art* Dada Movement, it opened the path for the conceptualism in art during the two first decades of the 20th century. Other artists, like Robert Rauschemberg go through this way. In 1953 he presented the *Erased de Kooning*, demonstrating with this work how conceptual construction determine an aesthetic category and establish its visual meaning. But "it was not until Sol LeWitt published "*Paragraphs on Conceptual Art*" (1967) and "*Sentences on Conceptual Art*" (1969) that conceptual art began to be considered a stylistic movement" (Stiles; 1999).

"In 1968 Lucy Lippard and John Chandler argued that the ideational emphasis of some new art had resulted in the dematerialization of art" (Stiles; 1999). So the work is a medium rather than an end in itself, the communicated idea by the art rather than its formal aspects. Since then artists have been more concerned with new media aesthetic language, related colour, light and kinetics. In the 1970s the

Conceptual Art became a topic of enlarged theoretical discussion among the artists and critics, and the idea became more important than the object of art, carrying out the dematerialization of art. Issues concerned with ambiences were made, and the presence and participation of the viewer began relevant. In this context, many artworks were conceived to involve the viewer or invite him to pass through.

In the 1980s many kinds of materials and equipment like laser, holography, electrograph, scan TV, video, etc., started being used for artistic purposes, more often and in more and more different contexts.

The use of computer can be amplified in many areas of knowledge and carry out new artistic creations (digital holography, artist's software, tele-presence-art, telematic installations, Web-art, immersed ambiences, virtual reality, art tracking, etc).

In the beginning of the 1990s the Internet expansion allowed artists to make their work of art visible and known worldwide and to be involved in net projects. Nowadays the access to the new media has made this type of interactive art works almost common, which implies a communication art, events that only exist with the viewer's participation. Existing in a virtual world, a work of art can be accessed or potentially manipulated by the viewers, who now have the chance to participate, have their own directions, make new art proposals, thus becoming co-authors of the work.

## 2. The material and immaterial: very important issues in contemporary art.

In contemporary art the works grouped under the term "new media art" are rethinking the nature of object of art, the research is challenging perception and presenting information about today's world. Many times the relationship between the artist and the observers is based on strategies that involve the participation of viewers as if their interaction were part of the work. This increasing participation of the observer has been amplified especially in video and computers.

Installation art is part of these strategies conceived to show the dialogue between the artist, the space and the viewer. This kind of art also makes an interpretation of the environment and society where the artist is trying an approximation to the life experience. The desire of sensory overload, by integration of different materials, also expands the borders of the concept of art. The sources and motivations are multiple and often ephemeral manifestations. Installations may be an assemblage of objects that are carefully arranged in a special integrated composition, or may consist in no objects at all but a spatial experience. In these works artists are engaged with the experience of human perception, testing its limits and expanding its possibilities.

Several Installations are designed for just one location; however, others are prepared for different locations and for different publics. This continuous mobility allows the Installation art to reach new types of viewers, resulting in different modes of participation and interaction (Shanken; 2009).

All the questions that involve the process as form of dialogue between artists and observers through the project are of paramount importance in many contemporary new media art. Different technologies that are available nowadays provide several types of proposals that engage artists and scientists in seeking new approaches of artworks. "Scientific formulas and equations have been described as being elegant and beautiful, just as an artist's works may be scientifically informed and technologically constructed. Artists and scientists act in the intersection between the natural and the constructed". (Popper; 2007)

The material and immaterial issues are very important in art. In art.net the place is changed in no-place, as the artwork is posted in the World Wide Web, a virtual but accessible place to a wider range of publics who can interact with the work, an open-ended artwork, and also become co-authors (Albuquerque; 2010). The process of dematerialization in the art has been an artists' concept for long time, as said before, and introduces us to a cosmic vision of the world (Paul; 2003). With such a widespread use of communication electronics and technologies, art also goes in a less and less concrete direction, where the distances are replaced by a notion of an instantaneous diffusion. The relationship between space-time suffers an alteration that is reflected in the artwork. Our civilization is going beyond the appearance of the real matter, interacting in a complete dematerialization of the real world, as we understand it, up to the use of technologies. The sceneries created induce the observer in a reality sometimes so different from the known world that is difficult to understand. This artificial environment, which is a virtual world, allows an immersive interaction that changes the human capacities of perception (Rush; 2009).

Time is another of the important themes of today's art. In a rapidly changing world, time and memory are a very important concern for contemporary artists. Artists usually depart from personal experiences to build their own narratives, focusing on stories of everyday life. Performance, video and multimedia installations

mediated by computer are often used as the way of putting in a different context the everyday experiences building new narratives and interaction with situations or objects.

Artists like Bill Viola (fig. 1) or Nam June Paik (fig. 2), for instance, have dealt with themes of perception, memory and self-knowledge. Through video and computer-editing technology, they transform direct observations into complex yet seamless constructions. Viola's approach couples his uncommon empathy with the viewer's conscious experience and a deep scientific understanding of the neurophysiologic mechanisms of perception. He has a strong interest in the connections between the science of the cognition and the metaphysical implications of consciousness.

Viola's transparent use of video apparatus is masterly: he has transformed the now omnipresent video technology into a medium capable of presenting images of extraordinary subtlety. We perceive his complex understanding of time (and timing), his absolute control of the video image itself, and his singularly inventive understanding of sound. Like several other contemporary video artists, Viola increasingly renounces the use of classical means of representation in the medium, namely the TV monitor, and instead creates spaces – even in those works where he still makes use of monitors. And even in these cases, they are often employed by Viola in unusual ways. In "The Sleepers" for instance, the sleeping people are shown on black-and-white monitors lying at the bottom of seven white tin barrels, filled to the brim with water.





Fig. 1 - Bill Viola, The Sleepers, 1992

Fig. 2 - Nam June Paik, TV Buda, 1974

No artist has had a greater influence in imagining and realizing the artistic potential of video and television than Nam June Paik. Korean-born video pioneer was a classically trained pianist and a serious student of history. Through a vast array of installations (Fig.2), videotapes, global television productions, films and performances, Paik has reshaped our perceptions of the temporal image in contemporary art.

Other artists like James Turrell (Fig.3) or Bruce Nauman (Fig. 4) create installations where the light and space are the main concern.



Fig. 3 – James Turrell, The Light Inside, 1992



Fig. 4 – Bruce Nauman, One Hundred Live and Die, 1984

## 3. Light, pseudo-colour and immateriality: resources in artistic holography practices

The material used in holography is coherent light. "The holography is not only a product or a tool but a statement of specific effects based on an autonomous structure of its medium, light. As light is not only a generative principle but a subject and the basic substance of the holographic image as well, the self-reference of light represents an essential form for the articulation of the holographic message" (Popper; 2007). Artists using holography as an art medium can record all the information contained in light at the moment of recording the object or scene on a light sensitive emulsion which is coating a glass plate or film sheet (the hologram). That information is stored and remains invisible until the moment it is revealed by illuminating the hologram in the right angle by a source of light (white or with the same wavelength of the recording, depending on the type of hologram). In the case of the holography media materiality is reduced to the support. And there is no other energy that is more dematerialized than the light itself, which is the essence of the holographic image.

Holographic immateriality is an inherent quality of this technique that allows artists to express some types of subjects impossible to obtain in the other media used in artworks. The real world and the fantastic imagery are possible to mix in the ways that are very difficult to achieve in other media as well as mix recorded images with real objects in the same conceptual artwork.

The holographic space is also a quality that changes the traditional physicality and volume of the object. It is possible to overlap different holographic images in the same space (fig. 5). The orthoscopic space is no more the unique option in holography because the object can be recorded as if it were seen from outside as well as from inside. The authors' research in light as plastic material produces other types of works (fig. 6).



Fig. 5- Rosa Maria Oliveira "Stereoscopic Leaves",1992

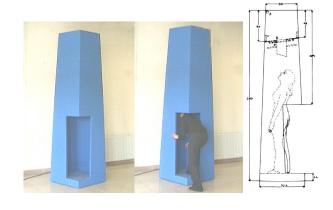


Fig. 6 – Isabel Azevedo, "Kinestesic Observer", 2005

#### 4. Resources and artistic practices in school

At school, concepts as material and immaterial in art are usually studied in video and multimedia installations.

Using video, photography and computers for the production of their works, it is possible to explore the poesis through the practice, reflecting and building visual narratives. Students have the opportunity of producing their own works, relating the theoretical with the experimental parts. There is a great participation and involvement of students, because they feel that they are doing new projects and participating in new challenges.

Some of the works carried out by the art teachers Ana Lobo Soares and Ana Coutinho Santos for participating in the *Comenius Project* under the theme "IDEAlaboratories: How to integrate Contemporary Art and Art Education?" were exhibited at the Eksperimenta! in Talin, 2011 (fig. 7, 8, 9 and 10).







Fig. 8- Students working



Fig. 9- Sofia Filipe, "A need, a desire, a will", Installation, 2010



Fig. 10- Edna Loureiro and Patricia Gonçalves, "Urban Time", video, 2010

#### Conclusions

Artists have not only introduced technologies into their work, but they have also made new aesthetic proposals as well as reflections on the society problems brought out by technology itself. The artistic interest in light, kinetic art, electronic art, video art, new media art, and the different itineraries followed by artists are based on new concepts in art. New materials, the participation and interaction between the artist and the observer through the art work, are issues that have being brought to art discussion.

Nowadays these themes are very important for art and art education, being studied and researched in universities, schools and in individual research or art production. The different artworks are developed depending on the level of students or the available technologies.

The skills achieved by young people in new technologies help their interest in producing this type of works, mostly in new media art, video and installation. Their adhesion to the technological media will increase the participation, the research and the production of new concepts and multifaceted narratives.

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