

INTERNET ART AND THE UNIVERSITY: HOW TO INTRODUCE THE RELATION BETWEEN ART, SCIENCE AND TECHNOLOGY TO MASTER STUDENTS

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ABSTRACT

The relation between art, science and technology is a reality of contemporary art specially acknowledge when we contact with current artistic production. Nevertheless, how should it be taught in a university context? This paper will address some issues regarding the teaching of Internet art in a theoretical perspective under the context of Art, Science and Technology class of Master degree in Contemporary Artistic Creation at University of Aveiro.

The students' participation, and their theoretical reflections around the subject of Internet art, reinforces the necessity to clarify those subjects, which are imminently contemporary, contextualized in a specific reality such as the art, science and technology. It can also be perceived as a very challenging instrument to pose some of the main questions of Internet art and explore some of the possible answers.

Through this theoretical approach of teaching net art, and with the reflections from the students, this paper will state that the contemporary artistic education can be an important tool to explore contemporary art.

KEYWORDS:

artistic education, university, art, science, technology, Internet art

INTERNET ART

Internet art is a specific art form created in, for and with the technological tools available in the Internet, concerning exclusively the visual arts (Fourmentraux, 2005: 19) and should be seen as a continuum in art history (Greene, 2004: 9). Nevertheless, it can also be seen as an example of the relationship between contemporary art, science and technology due the use of a technological communication media such as Internet and to the virtual and immaterial existence of the artwork, related with its digital characteristics and the necessary use of a physical or/and virtual interface such as computational devices.



Fig. 1 and 2 – Class of Art, Science and Technology about Internet Art, November 2010

Nowadays, more than 15 years after the creation of the first works of Internet art¹, it is possible to understand this artistic expression in two, maybe three, distinct moments. These moments can be understood through the use that artists make of Internet, in spite the existence of different ideas as claimed by Dieter Daniels and Gunther Reisinger², who states the end of net art referring to the initial period of Internet based art.

[...] this particular chapter of art history appears to have closed. The final indication that Net-based art was not to become another genre in contemporary art canon was perhaps the discontinuance of the “Net-vision” category in Prix Ars Electronica 2007. (Daniels, Reisinger, 2009: 5)

The pioneers of Internet art, artists like Heath Bunting, Alexei Shulgin, Vuk Cosic, JODI and others, frequently used the medium to explore its communication possibilities, trying to misunderstand the communication, blocking interactivity and creating works where the public could feel trapped in a virtual world of unrecognizable visual references or where those visual references were completely different from what would be expected. This was a time of critic, intervention and active public/social/political participation of the artists, and identifies the first moment of Internet art between 1994 and 1999 approximately.

Inspired by these artworks we find an article by Michele White, 2002, where the author explores a new aesthetical approach called “Aesthetic of Failure”³. This idea states how it is still possible to develop new reflections around the subject of Internet art since in this article are explored the possibilities of disorientation, illegibility, lack of visual references or communication difficulties to establish a specific aesthetics related with public participation.

Example of this active participation, from the first years of Internet art, is the work

¹ The File Room, by Antoni Muntadas, is known as one the first Internet art works (Greene, 2004): <http://www.thefileroom.org/>

² Daniels, Dieter, and Gunther Reisinger. 2009. Net Pioneers 1.0 Contextualizing Early Net-Based Art. Berlin: Sternberg Press.

³ White, Michele. “The Aesthetic of Failure: Net Art Gone Wrong”. Angelaki: Journal of the Theoretical Humanities, 7, 2002, 173-194.

Brandon⁴ by Shu Lea Cheang. Commissioned by the Guggenheim Museum, New York, this work of 1998 confronts the public with a real story: Teena Brandon was an American young girl who wished to be born as a boy and tried to create her own new identity as Brandon, a young boy in a small town of United States. But, unfortunately, her real identity was discovered and she was murdered. The work of this artist from Taiwan acquires an intervention aspect when it forces us to contact with the reality of our own beliefs and ideas about the others.

BRANDON [...] was the first web site to be commissioned by the Guggenheim Museum. [...] Cheang's BRANDON explored issues of gender, identity, crime and punishment, challenging the viewer's ideas through multiple interfaces. Probing text, including question-and-answer sections and fictional narrative, was supported by various striking images, such as pierced nipples and tattoo-covered bodies. (Greene, 2004: 112-113)

The work of Jenny Holzer, Please Change Beliefs⁵, 1998, follows this idea of preconceived beliefs. In this interactive work the artist requires public participation to change preconceived ideas expressed in phrases.

The work divides itself into three parts, each named for one of the title words, Please, Change and Beliefs. Please refreshes unsettling aphorisms, such as 'Humanism is obsolete' and 'Murder has its sexual side' across a web page. Change allows users to modify these aphorisms, and Beliefs aggregates the now modified truisms. (Greene, 2004: 58)

The second moment of net art can be placed around 2000 and 2008. After the period of intervention regarding the medium Internet, there was a new interest from the art institutions and the relationship between artists, institutions and Internet started to change. The artists began using Internet not just in a critical way, but also in pursuing of a poetical aesthetics that allows to the observer a position of art appreciation. From this specific moment, we find works such as Wordtoys⁶, Belén Gache, 2006. This work is a virtual (and visual) poetry book, where the artist relates text, sound and image, through the use of hyperlinks, allowing the public to choose how to read and interact with the book.

Esfera de las Relaciones⁷, by Colombian artist Santiago Ortiz, 2004, can be understood in this period as well. It is a collaborative work where the public is invited to explore new concepts of the relationship between two words amongst the several words available. The ideas from the public, regarding the relationship between the chosen words, are registered and displayed for other users. However, in spite of the obvious interest in interactivity and public participation, this work shows an aesthetical concern that pervades our subjective knowledge.

⁴ <http://brandon.guggenheim.org/>

⁵ <http://adaweb.walkerart.org/project/holzer/cgi/pcb.cgi>

⁶ <http://www.findelmundo.com.ar/wordtoys/>

⁷ <http://www.moebio.com/esfera/>

The sphere of relations is a space of stimulation and participation. It is an invitation for poetry-based text and the humour of relations. The randomness and the arbitrary selection of words stimulate the creativity. (Ortiz, 2004)



Fig. 3 – Students interacting with Esfera de las Relaciones, November 2010

Finally the third moment is happening now, and it is related with the use of Internet as a social medium with social networks such as Twitter, Facebook, and others. These social networks are changing completely our social relationships and the use of Internet itself. An example of this moment is *Tweeting Colors*⁸, a work by Brian Piana, 2009, which can be understood as an example of something as “social-networking art”⁹. This work uses Twitter as an interface, and the public that wants to participate should follow the artist’s instructions: to choose a number from 1 up to 20 and a colour from the chart given and post it on a public tweet. The results can be appreciated in the original webpage where the impact of the participation can be seen.

The overwhelmed and constant evolution of Internet tools and applications makes hard to prognoses the impact in days to come, though some authors reclaim an Internet and World Wide Web’s evolution from the so-called Web 2.0, where we stand today, to a Web 3.0, Web 4.0 or even Web 5.0 (Fayon, 2010), where the artificial intelligence will, supposedly, overcome the human intelligence. Nowadays, with Web 2.0, we have more information exchange, a user-friendly, more intuitive and easy navigation, and a dynamic and interactive participation through several social networks with specific features. However, it is possible to expect that in this fictional future Internet remains a space for artistic creation and distribution, where the contact with the work of art could be simpler and more intuitive than today, expecting that Internet remains an interesting expression tool for artists.

⁸ <http://www.tweetingcolors.com/>

⁹ Albuquerque, Inês and Oliveira, Rosa. “Art as Knowledge: Internet Art”. *Making Reality Really Real*, 2010, 14-16

Internet art as an artistic expression highlighted some of the major questions in the context of contemporary art, related to the public, the artist, the work of art, the market and the institutions, the preservation and distribution of the work, as a perfect example of the current moment with the digital world invading our daily life.

ART, SCIENCE AND TECHNOLOGY

The relation between art, science and technology defines a tendency in contemporary art, and explores several fields such as biology and medicine, nanoscience and physics, networks and virtual reality, among others. It is primarily, but not just, characterized by a multidisciplinary authorship, distributed between artists, scientists, engineers and others. It also explores a relation between our living experience and art, reinforcing the idea of “ready-made” by Marcel Duchamp, with the use of quotidian objects as works of art.

In the current undergraduate or graduate studies about contemporary art should be included some approaches to this particular relation. At the University of Aveiro we find a clear preoccupation with the contemporary artistic reality in which the Master degree in Contemporary Artistic Creation offers to the students the possibility to contact with this artistic field through the class of Art, Science and Technology¹⁰. This class, coordinated by Professor Rosa Oliveira, aims:

- To comprehend the disciplinary and interdisciplinary features of Art and Science, as well as the nature of its plural expressions;
- To enlarge the students’ knowledge in an holistic training;
- To develop their skills in new transdisciplinary perspectives;
- To promote experimentation in new technologies by the concept of relation between these two knowledge fields, through small projects.

To achieve these goals, this class works on the following topics:

- Characterization and dynamics of the relationship between art, science and technology;
- Different approaches and artistic languages using technology;
- Contribution of new artistic experiences to the discovery of new languages and publics;
- Contribute of science and technology to the development of creative abilities and expressive media such as: creation of electronic images, virtual reality, special effects, artistic holography, video art and others.

In this context was decided to present two lectures on the subject of Internet art. The lectures were dedicated to highlight some questions about the identification and definition of this artistic expression, its characteristics and the major questions regarding the artist, the public, the work of art and the institutions, simultaneously allowing students to approach the subject of artistic influences on net art, specifically those related with

¹⁰ <http://www.ua.pt/mestrados/PageDisc.aspx?id=5423&b=1>

the use of communication media in the art practice, such as Mail Art, Telephone Art or Satellite Art. In both classes the analysis of several net art examples was a helpful tool in order to illustrate the range of expressions available in the Internet environment.

This interest in the relationship between art, science and technology is not only manifested in undergraduate or graduate studies. In 2009 Lisbon received an exhibition on Art and Science called *Inside*, commissioned by Leonel Moura and with the participation of artists as Eduardo Kac, Stelarc or Ken Goldberg, among others. This exhibition stated the artistic interest in the exploration of the specific relation between art and science. The current interest of universities in exploring, with the students, the contemporary specificities of art is a reflex of what is happening in the world of art.

IDEAS FROM THE STUDENTS

When Internet art was presented to the students, it was asked to them to collaborate in a simple exercise: after the class they should access to five different Internet art works, and register what was the feeling when contacting with those works, and if the works appeared to them as art. The chosen works were: *A Visitor's guide to London*¹¹, Heath Bunting, 1995; *Please Change Beliefs*, Jenny Holzer, 1998; *Wordtoys*, Belén Gache, 2006; *Esfera de las Relaciones*, Santiago Ortiz, 2004 and *Tweeting Colors*, Brian Piana, 2009.



Fig. 6 – Internet Art class, November 2010

This exercise generated a discussion with the participation of students and some of the conclusions are quite relevant. *Esfera de las Relaciones* was the preferred work of all students with the following justifications: it is fun and playful; it seems to work as a game; its visual appearance, as a sphere of connections between ideas and concepts is similar to a celestial map and therefore transmit a calm and tranquil sensation; the

¹¹ <http://www.irational.org/heath/london/front.html>

relation between two different words can be seen as if they were the planet earth and we were only details¹²; it allows an immediate affinity between public and work. In this context a question rise in the discussion regarding this work: it is art or game?

By last, in what concerns to the work “Esfera de las Relaciones” from Santiago Ortiz, it was to me the most interesting discovery, because besides its appealing concept and content which is possible through the relations established between several words and concepts and the answers that can be found in that same relations, it shows a high preoccupation with presentation, it looks like a celestial map, which is aesthetically pleasant. (Patrícia Bastos)

Internet art refers to expressions that range from web, software, video, telepresence, game art works and others. Although, in spite the playfulness that this work offers, there are no recognizable characteristics of a game art work: appropriation of the digital games language, in order to create an aesthetic proposal that allows new approaches to it.

About all the works accessed, the students understand it as art. Nevertheless, an idea was identified in all their comments: when interacting with the net art works and in spite the feeling that effectively that interaction could seem to them as a quick walk in a museum[®], it was not possible to take much time interacting with those works[®] because of what is expected from the Internet: constant access to new information in real time and use of the Internet with a specific purpose that range from researching to contact with friends. This idea shows that still exists a difficulty in recognizing Internet as a space for artistic creation and distribution.

The contact with Internet art allowed these students to pose some other questions that were concerning them and that are quite challenging for the research under this subject. One of their main preoccupations was related with the non-materiality of the virtual works: how it could be possible to access to the work of art if Internet fails? In fact, the Internet art works are defined by its virtual and ubiquitous existence and its creation only in and for Internet. There are currently several attempts to study and create preservation strategies for digital works, but there are no certainty that Internet will forever work properly due the constant progress and innovation in technological communication media. This is a very disturbing question, because it means that we can loose all the net art works. In fact some works from the earlier times are already lost, due to the evolution in hardware and software, which turned impossible to access those works with the actual conditions.

¹² Juliana Alvarenga.



Fig. 4 and 5 – Some moments stating the discussion generated around the subject of Internet Art, November 2010

Other ideas were proposed related to interactivity. Interactivity and participation of the public are two of the most important characteristics of Internet art by now. Probably net art characteristics will need to adapt to the evolution of network, but for now interaction is still the most defying possibility of this media and is what turns these works contemporary, in the understanding of students. Nevertheless, interactivity allow another different idea:

In time, even if the work of art is still active, there is a retraction of the interactive proposal, which is the base of the quoted works. The novelty and the power of dissemination are essential factors, or the work will only exists as a register of something. (André Lopes)

CONCLUSIONS

As frequently happens with art, there were no objective reactions to the proposed works. All reactions were subjective, meaning that there is always a subjective interpretation of art, no matter how scientifically we try to explain the artistic phenomenon. Related to this subject Christopher Frayling^[6] said, in Encontro Ciência 2010^[7], Lisboa, that art and design should seek for their own scientific methodology: these disciplines are obviously different from science and if we create specific methods for the research in art and design, probably it would state their importance in our contemporary society and in contemporary research. But more important than that is the contribution of the discussion generated between teachers and students to explore the main questions of contemporary art.

In fact, the discussion generated around the subject of Internet art allowed the comprehension of some ideas that were not yet researched, or even new ideas: the students experience in a contemporary reality pervaded by so many stimulating ideas and art forms, apprehended in a more playful and relaxing context than the one researchers and professors are used to, allowed them to explore and to present different ideas free from any standard. This is extremely useful and can contribute to discover new approaches to a specific subject and to help students to structure a scientific thought adapted to the theme in appreciation.

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