106 - VIDEOGAMES AND EDUCATION UNDER A CIBERCULTURAL VIEW

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INTRODUCTION: FROM TRADITIONAL TO VIRTUAL GAMES

The leisure culture, built in games, playing and customs, that is, the general culture, have been part of the educational content since the early twentieth century. Authors who have created the Study of Games, such as Hesse and Benjamin, were the first to examine the relationship between games and the customs and culture. In the book "The Art of Idleness" there's a small collection of texts about what Hesse understood as idle time activities, in which the author already envisioned some fundamental questioning and issues arising from recreational activities (games and playing) in spare time.

In his work "Reflections on children, toys, and education", a collection of texts by Benjamin, focused on the game and the toy, which follows the chain of Historical Dialectic Materialism, the author is concerned with playing in the lower classes / working class, and investigates the cultural history of toys.

Later, the work of two more authors becomes essential to the understanding of games as cultural elements, Huizinga and Caillois. The first brings in his main work "Homo Ludens: A Study of the Play Element in Culture", the idea that playing is an original reality, which corresponds to one of the most primitive and deeply rooted notions throughout all the human reality and from it, culture is born, under the form of rituals and the sacred, of language and poetry, remaining in all types of expression arts and competitions, including the arts of thought and speech, as well as on the court, the prosecution and the defense, therefore, also in fight and warfare in general. Game and its concept, according to Huizinga (1990), are older than culture itself, because it is a part of animals' behavior.

Caillois in his book "Man, play and games: the mask and the vertigo", states that he studied the games, while Huizinga only studied the ludic spirit. Caillois in analyzing games included all of them, without ignoring those under the heading of "games of chance". These are in his view the most human of all, because animals do play, as Huizinga states, but they do not gamble; only humans do. In his analysis, he proposes four categories of classification (*Agon, Alea, Mimicry* and *Ilinx*), permeated by the characters of *Paideia* and *Ludus*. This classification permeates the entire understanding of games as a socio-cultural element inherent to the human soul.

Games often present no practical purpose. They serve as a way of releasing tension, accomplishing intimate desires, or even minimizing the desire for wishes that would be detrimental to social order. In playing, men seek a broader sense for their aspirations, they risk, challenge, and "play" as they never do in real life, in a quest for happiness and a feeling of true freedom, one in which they can restart, miss and still not be ruined for the rest of life. In it men can test and confront the rules of life in society, without putting at stake the stability of them.

Everything that was exposed so far comes from a vision of the traditional playing, of street games, ball and board games, among others. But rereading all of this considering electronic games (that is, if you haven't done it so far), everything fits perfectly. It is through this line of thought which the findings of this study are guided; that real and virtual playing intermingle and could, in fact represent the same meanings and are, therefore things which converge and not diverge as some think.

A new field of research known as "game studies" came from the need to study electronic games, and has been developing mainly in research centers in Europe and North America. This field comes to be the study of electronic games, through interdisciplinary dialogue between various lines, such as anthropology, psychology, literature, pedagogy, and others. The "game studies" is divided into two approaches: the Ludologists, and the Narrativists. The formers are followers of the thought of Caillois and Huizinga, and think of games as having very own peculiarities, in which playing itself appears as an always open set of possibilities and cannot be treated as mere narrative, which is the understanding of the latter approach. These think of the videogames as a text, as a narrative work (FERES NETO, 2006; VIANNA, 2004).

The approach adopted in this study is that of the ludologists since, the so called virtual games - either the traditional videogames or those played on a computer network can be understood as games, quite simply, equal in essence to the traditional board games and to those played in streets in company of friends. These "virtual games" are presented as an alternative for leisure (AMARAL and PAULA, 2007; COSTA and BETTI, 2006; PEREIRA, 2006) and demonstrate fundamental importance to the formation of the so-called cyberculture, which according to Lemos (2003) is "(...) The socio-cultural form that emerges from the symbiotic relationship between society, culture and new microelectronics-based technologies that have arisen with the convergence of telecommunications and information technology" (p. 12).

Confirming this position, the influences of the new Information and Communication Technologies (ICT) can be thought in an urban scope as factor of development for cities and, therefore the very people that inhabit them, in which there's a cybercity which is set within the contemporary cities and vice versa. Cities where the technical networks are presented as a cyberspace (JUNGBLUT, 2004; KIM, 2004; MONTEIRO, 2004), and the social networks as the various forms of socializing online, are a shape of the contemporary cybercities (LEMOS, 2004). The organization and development of urban spaces, for instance, "has always been determined by the confluence of technical and social networks. From water and sewer Networks to streets organization to modern wireless transmission networks" (PEREIRA, 2006, p. 1). That means there must be natural changes and adaptations, which occur throughout the historical process of social development, in a perspective that leads to virtualizations not only of urban spaces, but also in the social coexistence practices.

In order not to get confused when it comes to virtualization, it must first be understood what would be virtual; For Lévy (1996) the "word virtual comes from the medieval Latin virtualis, in turn derived from virtus, strength and power". He then defines it: "In the scholastic philosophy, virtual is what exists in power and not in act. (...) In strictly philosophical terms, the virtual is not opposed to the real, but to the current: virtuality and actuality are only two different ways of being" (p. 15).

From this it is possible to understand the virtual as something related to the real, not as something related to the "non-existing", but as something that creates a new reality, and this is what the electronic games have been creating in the cybercities. The virtual world, virtual games, as well as all of the new information and communication technologies have influenced culture in general, a clearly visible phenomenon when it comes to leisure culture, especially ludic child culture, whose games and toys are

often influenced and determined by television and electronic media, among others (Brougère, 1995; COSTA and BETTI, 2006).

One major example of something that was specifically established in ludic child culture was the video game, and understanding that the child seeks elements to feed their playing and games in the elements of the culture they are immersed, we have the picture of the video game as part of current children's culture, in a very well established way. This is, thus something that educators must make use of didactically, as those are strongly present in current infant-juvenile culture.

A good example is the spectacularization of sports by the media, especially the television, and the range of varieties in sports video games, which have led people to a vast knowledge about various sports, previously only known to few professionals who got a living by analyzing these sports, or to those who practiced or lived within a culture that valued a certain sports modality. Tennis, for instance, was not a very popular sport in Brazil, but with the "appearance" of the phenomenal Brazilian Guga (Gustavo Kuerten) in 1997 (winning the Grand Slane of France: Roland Garros), and the mediatic spectacularization emerged around this, made the rules of the game, previously unknown by the masses, become known and discussed by a considerable portion of the Brazilian population, which was often limited to the single knowledge of football.

One of the most successful video games on Tennis was released in the year 2000 for the Sega Dreamcast console (year in which Guga was the bichampion in Roland Garros and won the Masters Cup in Lisbon), the game Virtua Tennis. This was an adaptation of a homonym arcade, and reached great success in Brazilian "videogame houses", concomitantly contributing with the media to the knowledge of this sport by young people and children. In this example, the virtual proved to be a more important vector of learning than the physical practice of the sports itself, or its teaching at school.

It is important to understand this language that emerges from the virtual practices in computer, mobile and video games, because as to Alves (2005), in case this dialogic relationship between all interactions, especially the pedagogic ones, does not occur, there may be an ever-widening gap between students and teachers, the same happening with schools. "It is therefore imperative that teachers and schools be approaching these new ways of learning, these new areas of learning that are emerging in society today, giving new meaning and context to their practice" (SENA and MOURA, 2007).

METHODOLOGY

This is a qualitative research of exploratory nature based on systematic review. The analytical scheme went first through the identification and description of the terms: *Electronic Games, Education, Virtual, Cyberculture* and *Videogame*, with the digital Databases of BIREME, in which 23,428 articles were found in LILACS; 139,296 in MEDLINE; 5,074 in SciELO; and 1,629 in the Cochrane Library, Totaling 169,427 articles. In a second moment, Annals of Scientific Events, theses, and works of reference were included, objectifying to find publications approaching the scope of this study. It is in this bibliographical context, which the synthesis was composed through analysis, evaluation and description of the published literature (as to THOMAS and NELSON, 2002). Hence the study collects and shows information, permeated by theoretical reflections, seeking to recognize the contribution to the field of education.

RESULTS

Our increasingly connected world where every people become accessible anywhere via cell phone, a society living in networks, such as businesses, education, transportation or virtual ones, creates a new culture, which closely linked to the new information technologies is set in a cyberculture (DINIZ, 2005; ECHEGARAY, 2003; LÉVY, 1999). Within this new vision of cultural phenomena, the virtual spaces become extremely important, among which stand out the electronic games.

Within online gaming, one of the most important aspects, according to Vianna (2004), is the concept of "open book" in which the player can construct a reality simultaneous to thousands of others around the globe in real time. From this cybercultural reality emerges knowledge forming a new understanding of reality and therefore of social organization, being of vital importance its inclusion in school curricula.

The virtual world, the virtual games, as well as all new information and communications technologies, have influenced culture in general, a clearly visible phenomenon when it comes to leisure culture, especially children's ludic culture, in which playing and toys are often influenced and determined by television, and electronic media among others (COSTA and BETTI, 2006).

"In children and young people's sports culture both sports and 'real' body practice as the 'virtual' sports forms of videogames and computer games take part" (BETTI, 1998, p. 149). This statement illustrates well the central idea of this study. The virtual games are part of contemporary ludic culture, also forming a new culture marked by new digital technologies, which arose under the settings of cybercities: the cyberculture. This generates knowledge that, according Moita (2006) form a cultural and, thus, curricular juvenile context, in an autonomous way, whose educators must take ownership didactically.

CONCLUSIONS

One major example of something that was concretely established in children's ludic culture was the video game. Understanding that the child seeks elements from the culture in which they are immersed to feed their games, the video game can be seen as a part of current children's culture, in a very well established way. It is in this reality that sports virtualization happens through the electronic games.

It can be inferred that video games can bring the same contributions that the games "said to be real" in many respects, including the motor ones. This statement implies a lot of controversy, since body practice often ceases in electronic games, generating an unbodying of sports practices in the new generations, but the current cybergeneration know (often by the complete rules) and have experimented with a range of sports and games of such different kinds that they do not seem to have never practiced in the real fields, when they have in fact only taken the virtual ones, as to example of tennis.

The research showed that the virtualization of games is an irreversible phenomenon, and although it may undergo discrimination, it can be beneficial and should be seized didactically. As games can be an extremely educational content integrated into the proposal of course plans and class plans, then why not include all forms of games? Why deny the importance of the magnetism and multiple possibilities that the electronic games bring, once they are so closely related to children and youth culture nowadays?

Therefore, with the advent of new technologies, space is increasingly virtual, it is a cyberspace, where the differentiation of what is concrete and what is abstract / intelligible becomes subtle. With that, there are natural changes and adaptations, which occur throughout the historical process of development of human societies, in a perspective that leads to virtualizations not only of urban spaces, but also of existing individual practices and social rules.

It can be concluded that old practices of recreation are not being replaced with the advent of cyberculture, they are merely being reconfigured and accommodating new alternatives, notably based on experiences related to electronic games / video games played on a network. Moreover, the knowledge from this practice permeates all cultural and social formation of

children and young people, proving to be an important educational tool because of its high power of attraction and cognition.

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VIDEOGAMES AND EDUCATION UNDER A CIBERCULTURAL VIEW

ABSTRACT

Electronic games, especially those played in LAN Houses, became a real fever in urban areas of Brazil. Aiming to investigate the possibilities of correlation between games and the media, proposing the conversion / transfer of the virtual game in a possible educational experience, a systematic review of qualitative research was developed. The analytical scheme went through the identification and description of the terms: *Electronics Games*, *Education*, *Virtual*, *Cyberculture* and *Videogames*, with the help of the digital Databases of BIREME. With the technological innovations in information and communication come new forms of socialization, and consequently a new form of culture: *cyberculture*, in which new knowledge grows before a new social setting, where the consumption of information and images from the media presents itself as creator of contemporary culture. It follows that with the advent of new technologies, an increasingly virtual space is created, a *cyberspace* which generates new and interesting forms of learning.

Keywords: Electronic Games; Education; Cyberculture.

LES JEUX VIDÉO ET L'ÉDUCATION DANS UNE PERSPECTIVE CIBERCULTURELLE

RÉSUMÉ

Les jeux électroniques, principalement les pratiqués dans les magazins de vidéo on-ligne, les « Lan Houses », sont devenus une vraie fièvre dans le contexte urbain brésilien. Avec l'objectif d'enquêter les possibilités de corrélation entre les jeux et les médias, en proposant la transformation/transfert des jeux virtuels en une possible expérience éducative nous avons développée une recherche qualitative de révision systématique. Le schéma analytique a passé par l'identification et la description des termes: *Jeux Électroniques, Éducation, Virtuelle, Ciberculture et jeu vidéo*, auprès de Bases de Données digitales de la BIREME. Avec les innovations technologiques des informations et de la communication, il nous apparaît de nouvelles formes de socialisation et en conséquence une nouvelle culture, la ciberculture, où de nouveaux savoirs grandissent

devant une nouvelle configuration sociale, où la consommation d'informations et d'images provenantes de la média se présentent comme formatrice de la culture contemporaine. Nous avons conclu qu'avec l'avènement de nouvelles technologies, l'espace qui est de plus en plus virtuel, est un ciberespace générateur de nouvelles et intéressantes formes d'apprentissage.

Mots-clé: Jeux Électroniques; Éducation; Ciberculture.

LOS VIDEOGAMES Y LA EDUCACIÓN EN UNA PERSPECTIVA CIBERCULTURAL

RESUMEN

Los juegos eletrónicos, principalmente los practicados en las casas de games en red, las *Lan Houses*, se convirtieron en una verdadera fiebre en el ámbito urbano brasilero. Con el objetivo de investigar las posibilidades de correlación entre el juego y las midias, proponiendo la transformación/transferencia del juego virtual en una posible experiencia educativa fue desarrollada una pesquisa cualitativa de revisión sistemática. El esquema analítico pasó por la identificación y descripción de los términos: *Juegos Electrónicos*, *Educación*, *Virtual*, *Cibercultura* y *videogame*, junto a Bases de Datos digitales de la BIREME. Con las innovaciones tecnológicas de la información y comunicación, surgen nuevas formas de socialización y consecuentemente una nueva cultura, la *cibercultura*, en la que nuevos saberes crecen ante una nueva configuración social, cuyo consumo de informaciones e imágenes provenientes de la midia se presenta como formador de la cultura contemporanea. Se concluye que con la llegada de nuevas tecnologías, el espacio que está cada vez más virtual, es un *ciberespacio* generador de nuevas e interesantes formas de aprendizaje.

Palabras-clave: Juegos Eletrónicos; Educación; Cibercultura.

OS VIDEOGAMES E A EDUCAÇÃO NUMA PERSPECTIVA CIBERCULTURAL

RESUMO

Os jogos eletrônicos, principalmente os praticados nas casas de games em rede, as *Lan Houses*, viraram uma verdadeira febre no âmbito urbano brasileiro. Com o objetivo de investigar as possibilidades de correlação entre o jogo e as mídias, propondo a transformação/transferência do jogo virtual em uma possível experiência educativa foi desenvolvida uma pesquisa qualitativa de revisão sistemática. O esquema analítico passou pela identificação e descrição dos termos: *Jogos Eletrônicos*, *Educação*, *Virtual*, *Cibercultura* e *videogame*, junto a Bases de Dados digitais da BIREME. Com as inovações tecnológicas da informação e comunicação, surgem novas formas de socialização e consequentemente uma nova cultura, a *cibercultura*, onde novos saberes crescem diante de uma nova configuração social, onde o consumo de informações e imagens provenientes da mídia apresenta-se como formadora da cultura contemporânea. Conclui-se que com o advento de novas tecnologias, o espaço que está cada vez mais virtual, é um *ciberespaço* gerador de novas e interessantes formas de aprendizagem.

Palavras-chave: Jogos Eletrônicos; Educação; Cibercultura.