

Game_Art – Learning Objects in Visual Arts

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Abstract

This paper presents a reflection on the development of learning objects in arts by the usage of computer games. The games in analysis are art oriented. The games are developed in either a 2D or 3D environment which integrates learning objects in arts and that are thought as learning objects repositories. There is an exposition of computer games used in education environment. It presents a direct approach of games in arts, by revisiting authors whose researches are directed to new technologies and game possibilities. By analyzing works that share common elements with games, it develops the approach of visual arts in computational games.

Key-words: learning objects, games, arts

I - LEARNING OBJECTS IN ARTS

The development of information and communication technologies (ICT) and new medias enhance technological and communicational learning processes.

The utilization of digital means as a way of art expression is very expressive. In Brazil many artists work with digital medias, however there are not much researches and works focused on learning objects to training sessions in visual arts, either distance learning or traditional education. The lack of learning objects viewing the increasing utilization of educational technologies creates an open space that when fulfilled will take to the exploration of other possibilities in art-education.

The development of learning objects has been gaining strength because they turn possible gathering important characteristics to the learning. It explores the ludic side, reasoning, research, creativeness, connections, and the catharsis that leads to learning. Visual arts offer consistent material that allow the development of contents as learning objects in digital media which involves different visual languages to approach contents in theory and art history.

LO allow gathering several medias: text, hypertext writings, videos, sounds, exploring the recourses and tools of the software, aiming at stimulating the student on the search and construction of knowledge. LO can be developed in 2D or 3D depending on the pedagogical objectives, on the experiences that are expected the student to have, or on the possibilities and perspectives to is wished exploring. The important is to think in objects that can be used, as it makes possible its reuse and that it functions as dynamic complement in classes.

The purpose of GAME-ART is to combine the consistency of the contents the softness and dynamism of the digital media. It must remember that “games and arts are image makers and they load in its contexts cultural questions, as both have implications of personal order, social, educational, psychological, philosophical, mystics, economic, and historic” [1]. Contents of theory and art history developed in either a 2D environment, being developed in Flash, either in 3D, being developed in Blender or even in 3DMax.

As they integrate different medias, searching equilibrium of elements of audio, video, interesting animations, illustrations and texts, they try developing a proposal that is interesting to the student and they create problems that represent challenges that motivates learning. After Anna Christina Nascimento and Carmen Prata [2], “activities that are relevant, that have a meaning, and that present challenges are those which have more probabilities of gaining the interests of students than those that are easier”. It is not enough to develop a game that functions as LO, it is necessary choosing contents and activities to be made in such a way that the game becomes interesting, challenging, and problematic, it must makes the student curious, and motivates him to pass to new phases.

The game offers problems and challenges that are important to objects to characterize them as LO. The purpose of GAME-ART is to explore the

potentialities of the games, beginning from techniques and technologies that were already used and tested by artists of the digital media, aggregating to the study of LO repositories, turning RIVED as a reference, and turning to a proposal that is targeted specifically to the contents of works in visual arts.

Firstly, by imagining the LO, it needs to make a complete simplification, using game design, choice of the contents, interface definition, implementation and tests, adjusting collaborations and making adjustments in order that the game is adequate to its purposes. Exploring theory and art history with the intent of elaborating screenplays that orientates a GAMEBOOK represents a guarantee that focus is maintained.

II – WHY SHOULD COMPUTER GAMES IN EDUCATION BE USED?

Games are dynamic and offer many possibilities of interaction and socialization. By them, students can acquire knowledge and information, they can make simulations and experiments, they can participate in History, and they travel through geographic spaces... On this issues, Mendes [3] claims that “read, count, memorize, take notes, register, differentiate, and identify are some of the routines of human beings that are present as techniques in games as well, which are understood in this context as intellectual techniques that participate in the constitution of a sort of player”.

With the help of the games, students are able to assimilate contents of several subjects. At the same time, teachers gain a powerful pedagogical recourse to establish a syntony with the younger’s universe.

Tarouco [4] claims that “games reveal autonomy, creativeness, originality, and the possibility of simulating and experiencing situations that are dangerous and forbidden in our quotidian”. In this way, through games, students can learn about their historic-economic-and-social context. They can also simulate other contexts, living situations that would be impossible in other ways, which turns possible enrichment of the learning process.

There are many computer games in the marketplace that possess great educational potential. Some were developed to be used in education, while others were revealed as an excellent learning tool. The choice among existent games in the marketplace is favored by the fact that these games are in a

constant process of updating and implementation. There are teams of developers and designers that focus in improving interfaces, updating contents, and bringing new elements, that are challengers and creative, that maintain players always motivated and interested (fact that has not always happened with the didactical material available to teachers and students at schools, as general). However, no game is found that develop visual arts contents, or that work more directly with visual languages within commercial games, but is possible finding art games developed by artists in a constant process of experiencing visual languages.

To Wang [5], computer games can help in the construction of a learning friendly environment. The interest in electronic games is justified as they allow adjustments in difficult level adjusted to the player ability. They also provide players with a fast and immediate feedback. They also give players choice and control over their actions. On the ludical side, games awake fantasy and curiosity, besides creating opportunities of collaborating, competing, and socializing with each other. Computer games thought as LO possess particularities due to the combined use of different medias, searching the interaction between the student and the game and between the student and the other instructional contents available in the game area.

It is important to the teaching-learning process that there is a tool turns possible the adjustment of levels of difficult because it could be used in different series. It is also important that games can offer different ways that he student could accomplish his learning, as different students will search distinct solutions using the same tools.

As Negroponte [6] points, the problem is not necessarily on the child that does not learn, but in the inappropriate environment to learn. Approximating this environment to the child/teenagers turning it more adequate to the learning process is a challenge that can be won by the use of computers, equipped with LO that are used to help classes, complementing them.

Games offer interfaces that allow students to exercise different learning ways. This he uses reading, writing, reasoning, strategy, mathematical logic, and knowledge construction in a non-boring way; on the contrary, it is a fun and pleasure learning. Developing games in visual arts still offers the challenge to promote interactivity in different degrees.

Games are closer to students interests and offer more motivational factors than books or long preaches from teachers. In his text, McLester [7] backs in James Paul Gee, author of the book “What videogames have to teach us about learning and literacy”, by developing on the importance of being clear that games are part of the educational project, contributing as a pedagogical recourse. Games function well as LO, if they allow players making use of good training. Gamers must be guided and supported in the construction of knowledge in virtual environment of the games [7].

Games, developed as LO, fun, motivate, ease the learning, and enhance the capacity of retention of what was taught, exercising mental and intellectual functions of the gamers. Applying potentialities of the game, allying its pedagogical factors implies aggregating knowledges and structures maintaining the focus on the dynamic contents of visual arts.

Games developed to contextualize themes of theory and history of art and exploring visual languages tend to propitiate more than a creative exercise and to lead the gamer to exercise mental and intellectual functions.

III – Visual arts through computer games.

By thinking in approaching aspects and proposals in visual arts through electronic games it is necessary starting from the borne of a new digital aesthetics. Priscila Arantes [8] rethinks aesthetical questions that encompass new technologies, starting from the aesthetical idea of how an area that makes emerge new forms of perceiving and understanding the world that we live, questioning aesthetical parameters of contemporary world, besides producing knowledge. It develops the inter-aesthetic concept, a hybrid aesthetic that abolishes limits, and demotes every idea of a rigid frontier, revealing a way of art comprehension in which different artistic possibilities mix and hybrid continuously.

Arantes [8] (p. 172) claims that “arts in digital medias manifest in a interfaced way though the contaminations with different areas of knowledge to develop its aesthetical proposals”. Computer games represent a fertile domain to art metamorphosis.

Games present interaction possibilities present in computer art. To Suzete Venturelli [9] it is in the interaction that spectator does not face the work,

but he is in the work. Gilberto Prado [10] dives in the successive interactions and claims that artistic interchanges in the web open a new area of the game and a ludical social space, in which each artist, in each participation contemplates a certain possibility of the same world.

Tânia Fraga [11] points to several possibilities that are not yet explored in the artistic camp as “transform concepts as virtuality, unstable equilibriums, dimensionality, morphic camps, dynamic systems, time-space, self-organization, among others”. Games due to their artistic and aesthetical flexibility allow to be explored in many of these possibilities.

Games in arts represent artistic environments that invite spectator that establishes new paradigms beyond artistically creation. In this perspective, games offer several possibilities of interactions and constructions. It is possible to structure a game in an open artistic environment, allowing that interventions cause modifications and the artistic environment change and transform itself in each new intervention. It is possible to structure to be a closed artistic environment where there is interaction, instant modifications, choice of the ways to be paved, trajectories paths, and artistic environment returns to the initial stage at the end of each intervention.

The game as open space that allows changes in, also allows a continuous let it be. The player is no longer a spectator and becomes part of the creation of artistic work. In a open proposal the author is lost within his own work. While playing the player through multiple interventions, it ultimately eliminates the initial game and develop other works, which no longer carry the characteristics of its creator.

Already in a closed system, it has the right to develop a navigation system in the midst of virtual exhibitions, of which the player may have to seek information on hypertext trails. Labyrinths of texts, images driven by avatars that experience discoveries around works previously catalogued and fed the artistic environment. But this is one possibility, another possibility is to let the player carry out interventions, manipulate abstract art, or make concrete abstract works, deconstruct and reconstruct the area of consistency of the work. The player to intervene inaugurates new artistic possibilities that can be saved out of the atmosphere of game, or abandoned in the game. Meanwhile the original artistic environment will be reconstituted ex-player, so that new players have the

opportunity to interact and enjoy the sensitive under conditions similar to the first player.

To reflect on the productions of artists who directed research and work for digital media, to see the potential of digital technologies for the development of an interactive virtual environment, GAME-ART, incorporating the practice receptive operative who drives the player to a both leisure activity, as creative as well as cathartic. To reflect on the use of games in education and develop support so they can be learning objects, the GAME-ART integrating media, integrates opportunities, allowing experimentation, through which the student complements their learning process.

IV – CONCLUSION

The game offers a dynamic field for the arts as a way of expression, construction, completion and interaction. To paraphrase Tania Fraga [11], the artist in the context of the game becomes the person who rescues universes of possibilities aimed at provoking on other person the sensory qualities of concern. The player is no longer spectator and, through interaction, it is one element of the game.

The challenge of GAME-ART is not in the use of different forms of language, of different media and different courses of action, participation, interaction, and neither of observation and contemplation, it is in establishing a dialogue between these possibilities for the establishment of a dynamic of the game. Developing GAME-ART following the basic principles of the learning objects would also enhance the game for use in teaching courses or online presence.

The development of learning objects in visual arts, focusing on content of Theory and History of Art aims to fill a gap as it explores the dynamics and interactivity of the game, with the consistency of content. If interactivity is now one of the major issues that permeate the discussions between art and technology, the GAME-ART represents the convergence of these reflections in building a dynamic of interaction in interactive virtual environment, space, digital expression of the arts.

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