Revista Letras Raras
ISSN: 2317-2347 – v. 7, n. 1 (2018)

Videogames and Literature: From Nimrod to Neuromancer/ *Video Games e Literatura: De Nimrod à Neuromancer*

*Naiara Sales Araújo**

ABSTRACT
The present article aims to reflect on the relationship between videogames and literature, from the fifties to the eighties, showing how the interface between these two vehicles has provided important dialogues in the techno-scientific and artistic fields contributing to a vast production of electronic games developed by a constant reconstruction and adaptation process. It is known that literature has provided the process of technological development with the impulse that every agent needs to initiate an action. Such an impulse has occurred in several spheres of human knowledge, manifesting itself in the most varied forms, especially in the artistic-cultural field. In this sense, videogame can be pointed as an important element of measurement given its changeable and innovative character. If one take into account the trajectory and improvement of the techno-scientific discoveries over time, one will see that there is a continuation of what was idealized with the industrial revolution. In this context, there is also a trajectory of literary narratives that, through fiction, anticipated, accompanied and continue to follow this process, while being adapted or reinvented to other media.
KEYWORDS**:** Videogames; Literature; Dialogue

RESUMO
O presente artigo visa a refletir sobre a relação vídeo game e literatura, dos anos 50 aos anos 80, mostrando como a interface entre esses dois veículos tem proporcionado importantes diálogos no meio tecno-científico e artístico, contribuindo para uma vasta produção de jogos eletrônicos criados a partir de um constante processo de reconstrução e adaptação. Sabe-se que a literatura forneceu ao processo de desenvolvimento tecnológico o impulso que todo agente precisa para iniciar uma ação. Tal impulso se deu em várias esferas do conhecimento humano, manifestando-se das mais variadas formas, sobretudo no campo artístico-cultural. Nesse sentido, o videogame pode ser apontado como um importante elemento de mensuração dado seu caráter mutável e inovador. Se levarmos em consideração a trajetória e aperfeiçoamento das descobertas tecno-científicas ao longo do tempo, veremos que há uma continuação do que se idealizou com a revolução industrial. Nesse contexto, há também uma trajetória de narrativas literárias que, através da ficção, anteciparam, acompanharam e continuam acompanhando esse processo, ao mesmo tempo em que são adaptadas ou reinventadas para outros mídias.
PALAVRAS-CHAVE: Vídeo games; Literatura; Diálogo.

1 Introduction

Thinking about the relationship between man and technology at the present moment can be as complicated as reflecting about future changes through which the so-called post-modern man might go. In fact, the current moment is marked by uncertainty and doubts and, at the same time, a lack of questions, camouflaged by the illusion of

* PhD in Compared Literature by the London Metropolitan University and Professor at the Federal University of Maranhão. Endereço eletrônico: naiara.sas@gmail.com

ISSN: 2317-2347 – v. 7, n. 1 (2018)

constant questioning. Unlike the project of modernity, the post-modern man does not question by his own, instead he only accepts and is taken on the waves pushed by diverse media outlets: *Facebook*, *WhatsApp*, television, and other vehicles that can rise at any moment and spread in uncontrolled fashion.

A careless observer may believe that the technologically-connected youth is more skeptical, challenging, and prepared to face the adversities generated by the social, political, family, economic and cultural environment. However, what is observed is a false perception of time and space mastery caused by the impression of controlling of technological means. It is worth mentioning that this current scenario was firstly idealized in the literary texts, even when there were not enough instruments to think about such a reality, which makes us wander that all technological advances seem to emerge from the purest and more intimate utopic desires of man.

It would not be an exaggeration to say that literature has provided to technological development the impulse that every agent needs to start an action. If we take into consideration the trajectory and improvements of technological discoveries through time, we will see a continuation of what was idealized with the industrial revolution. In this context, there is also a trajectory of literary narratives that, through fiction, anticipated, followed, and are still following this process.

Based on the Science Fiction chronology elaborated by Paul K. Alkon (2002), it is possible to affirm that several literary narratives that preceded the first stage of the industrial revolution during the middle XVIII century were built through speculative futuristic projects that resemble the ideas nourished in the scientific communities of previous centuries. The novel *Utopia* by Thomas More (1516), for example, can be pointed as the first literary narrative with a scenario that emerges from the man's need to idealize, build and adapt his surrounding environment, transforming it in an ideal and perfect place. More's fiction dialogues with the techno-scientific inventions that surpass the space and time limits. According to Frederic Jameson in *Archaeologies of the Future* (2005):

> Such generic starting points are always somehow included and *aufgehoben* in later developments, and not least in the well-known shift in Utopias from space to time, from the account of exotic travelers to the experiences of visitors to the future. But what uniquely characterizes this genre is its explicitly intertextuality: few other

ISSN: 2317-2347 – v. 7, n. 1 (2018)

> literary forms have so brazenly affirmed themselves as argument and counterargument. (JAMESON, 2005, p. 2).

In other words, utopic narratives dialogue with dilemmas inherent to man and attempt to resolve social problems that dismantle and deform the ideal community environment. In this same perspective, one can cite the works *The dream* (1634) by Johannes Kepler, *The Man on the Moon* (16387) by Francis Godwin, *Comical History of the States and Empires of the Moon* (1657), by Cyrano de Bergerac, and *Epigone*, *a future century story* (1659) by Jacques Guttin, whose narratives regard man's concerns about the unknown. In the same way that literature was born from this desire to externalize dreams, utopias and curiosities, scientific discoveries rise from the incessant pursuit for answers to phenomena which are apparently indecipherable, or empirically impossible to understand.

Tracing a parallel between these literary productions and the scientific and technological advances that resulted from the industrial revolution, one see that the XVII century was marked by important discoveries. Instruments developed to measure air temperature by Galileu Galilei, and air pressure, by Evangelist Torricelli, the hypothesis that weather variations are linked to atmospheric pressure changes, by Pascal, are examples of how this century was a period in which knowledge allied to dreams and utopias to provide real discoveries, but were still far from the ordinary man's routine.

The present study aims at reflecting about the relationship between literature and videogames from the 1950s to the 1980s, demonstrating how the dialogue between these two vehicles provided important advances in the scientific and artistic environments, contributing to a vast production of electronic games created through the constant reconstruction and adaptation process. Through this symbiotic process, electronic games gained space in the world entertainment market and are pointed as one of the most lucrative products in the global economy.

2 Videogames and Literature: Revisiting history from *Nimrod* to *Neuromancer*

In this paper, we do not intend to evaluate, judge, or even qualify Literature and Videogames as major or minor art. What is intended in this endeavor is to make a

ISSN: 2317-2347 – v. 7, n. 1 (2018)

reflection on the posture of these as elements in constant process of symbiosis. In this sense, we share the same thinking of Bogost (2012) when affirming that, for video game lovers, for example, who have been doing, studying, using and defending videogames for a long time, the simple fact of the exhibition and its publication counts as a success. In fact, it is more than proven that video game is a reality in the daily lives of children, adolescents, youth and adults and it makes little sense to let it go unnoticed in academia.

In this perspective, there is a confrontation, still not overcome, on the debates and intellectual production that justify especially by sociocultural and economic factors in which age, sex, social status, and intellectual development play an important role. It is common to find assiduous literature readers, especially those between 50 and 60 years old that point out videogames as the great villain for Literature, attributing educational failure and little reading practices to the excessive exposition of children to the virtual environment. What many people do not know is that the actions allowed by the virtual environment were primarily idealized in literary narratives which broke barriers of space and time enabling the visit to other worlds or times. It is also worth noting that the first electronic games were born with the goal of expanding and improving the mind and, consequently, brain development in scholar activities, a fruit of computer science research, giving rise to the first studies about artificial intelligence.

Production and trade of the Universal Automatic Computer (UNIVAC), the first computer built, in 1951 in the United States of America, enabled a discrete advance of experiments and studies carried out by academic institutions, research agencies, and companies in developed countries. Since it was an equipment that required high maintenance costs as well as trained labor to use, experiments done with UNIVAC were initially limited to great organizations. In this way, incentives for electronic game elaboration favored only tests and demonstrations of theories related to human interactions with computers, military defensive and offensive strategies, and adaptive learning.

Within these limited possibilities, the first electronic games were created, among them *Nimrod* (1951), a machine that simulated the mathematical game MIN, ordered for the Great-Britain Festival. In the following year, *OXO* (1952), which simulated the famous hash game, was created. In 1955, the war game *Hutspiel* was created with the goal of enhancing war techniques of the American army. Still in this first electronic

ISSN: 2317-2347 – v. 7, n. 1 (2018)

games generation emerged *Tennis for two* (1958), which aimed at entertaining guests in the annual visit day that occurred in Brookhaven's National Laboratory, one of the most important scientific laboratories of the United States. The game served as a lure to increase the number of visitors to the laboratory because the government wanted to exhibit its nuclear potential to the population; its creator, the physicist William Higinbotham, was also one of the atomic bomb creators.

The 1960s witnessed a videogame evolution through the effort of a student group from the *Massachussets Institute of Technology* (MIT) from the United States which, inspired in the Science Fiction literary work *Lesman*, from the north-American writer E.E. Smith, decided to invest time and knowledge in the production of *Spacewar* (1961). Created by Steve Russel and reviewed by colleagues, *Spacewar* is a concrete evidence of literary Science Fiction's transposition to other media. From then on, the partnership between Literature and Videogames was instituted. Emphasizing the collective and utopic-literary character of *Spacewar*'s production, the writer Steve Kent (2001) highlights:

> These strange college students, with their funny jargon and nerdy ways, did more to start the computer revolution than any Silicon Valley engineering team. Naturally curious, these MIT students had devoted their lives to intellectual tinkering. They believed in a cooperative society and imagined themselves living in a utopian world in which people shared information-sometimes without regard to property rights. (KENT, 2001, p.32).

One can here perceive the influence of utopic literary works such as *Utopia* (1516) by Thomas More, which explores the collectivity spirit of the primitive man.

Still in the 1960s, the engineer from *Sanders*, Ralph Baer, created *Ping Pong* (1967), a two player game system for television. However, according to Kent (2001), the game project had no entertaining value. The first game's model consisted in a switch which the players pumped furiously to change the color of a box from red to blue in a television monitor. Although Baer later proved it to be an excellent electronic game, at first his work was considered more of an engineering equipment than an entertaining game.

In 1971, based on Ralph Baer's ideas of creating an interactive TV with games, Magnavox hired a group of engineers to develop a promising project and made Baer's

ISSN: 2317-2347 – v. 7, n. 1 (2018)

dream a reality; Magnavox launched its first videogame connected to a television: *Odyssey* (1972). In Baer's words (*apud* KENT, 2001):

> Magnavox did a really lousy engineering job-[they] over-engineered the machine. Then they upped the price phenomenally so that the damn thing sold for $100. Here's this thing I wanted to sell for $19.95 coming out at $100. Then in their advertising they showed it hooked up to Magnavox TV sets and gave everyone the impression that this thing only worked on Magnavox TV sets. (2001, p.41).

In fact, *Odyssey* (1972) opened a new era for the game industry due to the commercialization power that started to become an important attraction to investors of the field. In 1973, Atari launches *Pong*, an arcade game, and sells the idea to Sears, Roebuck and Company, becoming a selling phenomenon and a model for several game companies to launch their own games. In 1975, Midway Games imports *Gunfight* from the Japanese game industry Taito, thus expanding worldwide game trade. Taito industries, an absolute leader in game production, created about 80 games during the 1970s.

Although several games had been produced during the 1970s, we highlight *Space Invaders* (1978) and *Lunar Lander* (1978), recognizably inspired on the works of H.G. Wells. *Space Invaders* (1978) was produced by Taito Corporation and drawn by Tomohiro Nishikado. After a not so promising launch in Japan, it started being traded in the United States by Midway Games, generating an immediate success. Its unbelievable acceptance in the United State surprised even the most optimistic Wells reader, Keith Egging (*apud* KENT):

> I was exceptionally confident that it would do good in this country. I had just started with the company [Taito of America], and they thought I was a nut. I said we could sell tens of thousands, and they said, "You can't sell that many (2001, p.133).

The explanation for such success was in the gamer's familiarity with the game's theme. *Space Invaders* searched in the literature the ideal thematic for its success. The gamer's goal was to destroy waves of ships with a human spacecraft in order to gain the greatest number of points possible. The gamer had to stop aliens from reaching the inferior portion of the screen. When dominating and destroying most of them, the others started to march more rapidly towards the player. When all aliens were wiped out, a

ISSN: 2317-2347 – v. 7, n. 1 (2018)

new formation was set, beginning at a line under the former. The game's aliens were inspired in the invader descriptions done by Wells in *The War of the Worlds* (1898), according to Tomohiro Nishikado.

Also inspired in W.G. Wells' work, *Lunar Lander* (1978) was the first commercial game with vector graphics. Its first version emerged in 1969 as a computer game based in texts, and went by the names *Rocket, Lunar*, *LEM* and *Apollo*. Lunar was originally written in the programming language FOCAL for the *Digital Equipment Corporation* (DEC). In all versions, the player controls a spaceship while it falls towards the Moon's surface or other stars, and must maneuver it to land safely before running out of fuel.

Uncontestably, 1978 was an important year for the partnership between videogames and literature and this can easily be proved by the titles chosen for the games, sometimes due to loaning parts of narratives or simply as a way of honoring a literary piece or its author: *Othello*, *Space Invaders*, *Space Wars*, *Lunar Lander* are examples of this complicity relationship. For the writer Janet Murray (2003), the emergence of videogames enabled the development of a new type of fictional narrative which impacted, one way or another, the literary narrative field.

The 1980s also left this partnership registered in important advances of the videogame industry. In 1980, Atari launches *Defender* under Jules Verne and H.G. Wells' scientific fiction mold. In *Defender*, the player controls a spaceship armed with laser beams with the task of defending a city against an alien attack. In 1981, *Pac-Man* and *Tempest*, both bringing some of Jules Verne and H.G. Wells` fantastic narratives. According to Araújo (2016), many other games were launched in the 1980s, such as *Pitfall* (1982), *E.T.* (1982), *Dragon's Lair* (1983), among others; but *The Hitchhiker`s Guide to the Galaxy* (1984) deserves special attention. According to Araújo (2016):

> *The Hitchhiker's Guide to the Galaxy* by INFOCOM uses Douglas Adams' work as an inspiration source, whose contributions went beyond the literary piece; the writer also helped idealize and develop the game's plot. In 1988, the known novel *The doctor and the monster*, by Robert Louis Stevenson, was transformed in a game for the frenzy of the gamers. Even though this adaptation did not intend to follow the literary narrative strictly, the loan was well accepted by the genera fans. Using a technique that contemplates dynamism and hyper texting, the producer dares and projects a hybrid main character, a junction of Hulk with Dr. Jekyll, which wanders through town towards his marriage, but is stopped by people and animals and, as he

ISSN: 2317-2347 – v. 7, n. 1 (2018)

> grows upset, he gets angrier and turns into Mr. Hyde, while facing diverse creatures to continue his path. The game's dialogue with the Incredible Hulk from the comic books and movie screens becomes an even greater attraction for videogame lovers. (2016, p.172).

Recognizably, it is a piece that uses all available resources in the universe of hyper texting and reinterpretation that, according to Bauman (2013), are fundamental elements for the contemporary arts. According to this author, the best of the contemporary arts is, on last instance, the several steps in the endless process of reinterpreting the common experience already in place, and being able to provide effective dialogues that lead to new narratives, regardless of the vehicle.

In this perspective, the 1980s witnessed the rise of what would become a watershed to digital cultures, literary, cinematographic and videogame productions: cyberspace. Revisiting the concept and circumstances in which the term cyberspace was created, its pillars were based on the literary piece *Neuromancer* (1984) by Willian Gibson. The term was used to designate a nonphysical and artificial environment where data, actions, and social realization travelled, where the real and imaginary confused themselves indiscriminately. The work preconizes the future as a place where humans and machines interact naturally and technology invades human life in several ways: grafts, implants, cloning, and substances that enable a getaway from the physical space to nonphysical or unreal one. Inversely, machines become smarter and more human, artificially recreating someone's intellect, image, and personality. Artificial intelligences are capable of transforming and adapting to new environmental conditions, either real or not.

As one can realize, we cannot talk about cyberspace without mentioning *Neuromancer* as a work that gave rise to the term and the idea, since it served as inspiration for several games from the 1980s and 1990s. In Lévy's definition:

> Cyberspace is the new communication term that arose from the worldwide computer interconnection. The term specifies not only the material infrastructure of digital communication, but also the oceanic universe of information that it holds, as well as the human beings that navigate and feed in this universe (LÉVY, 1999. p. 17).

From this conception, the improvement of digital technologies that have internet as their main fuel for production arose. Cyberspace's dimension and amplitude enables acceleration and immediate dissemination of data and information generated by

ISSN: 2317-2347 – v. 7, n. 1 (2018)

different physical environments, which gather in nonphysical environments and form a trade and compensation chain. For this reason, cyberspace has a collective intelligence as a core element for good functioning and improvement of the virtual environment.

If we consider that the post-modern man's speech tangencies collective intelligence, virtual environment or cyberspace is the right place for the trade of information and knowledge. According to Pierre Lévy (1999):

> Cyberspace as a support for collective intelligence is one of the main conditions for its own development. All cyber culture history largely witnesses this positive retroaction process, that is, regarding the self-maintenance of the revolution of digital networks. This phenomenon is complex and ambivalent… Due to its participative, socializing, emancipative aspect, the collective intelligence proposed by cyber culture constitutes one of the main medicines for the destabilizing, sometimes excluding, rhythm of technical mutation. (1999, p. 29-30).

In other words, cyberspace enables the super-valorization of trades, sharing, and collective confrontation that subdivide into several types of forms. Citing some of these forms, Lévy (1999) highlights isolation and cognitive overload, domination, exploration and collective nonsense. This last one deserves attention for being present in a speech sometimes found in academia, especially among those who see virtual environment as an enemy of artistic representations such as literature, theater, painting or even as an important vehicle of depreciation of formal and normative language, as well as tradition and important identity elements. This is, without a doubt, a wide and complex discussion that is taking form in academia since the late XX century, but is still a fertile and sometimes unstable ground.

Although involved in heated discussions that qualify or disqualify videogame's role in society, the interface between literature and videogames has demonstrated to be viable and productive through time, and has been revealing itself as a two-way path, because while videogame industry has searched the literature to inspire their productions, the opposite has also happened. In this regard, Araújo (2016) comments:

> ...if it is true that game industry benefited from literary narratives as an inspiration source, it is also true that games have been inspiring writers worldwide in the construction of their literary narratives. An example of this new tendency are pieces such as: the seven book saga *Assassin's Creed* which was first launched in 2011, the series *Diablo* composed of four books, the first of which was published in 2012.

ISSN: 2317-2347 – v. 7, n. 1 (2018)

> Among a long list one can also cite *Battlerfield: the Russian, God of War, Halo, World of Warcraft, Star Craft, Uncharted* and *Mass Effect* (2016, p.168).

That being said, it is pertinent to highlight that games themselves have narrative structures, linear or not, that somehow depict elements present in the gamer's routine. For researcher Katie Salen (2008), every game means something, since they are meaningful systems that can be read, interpreted and lived by the players. In this perspective, gamers have an active and decisive role in game narrative, thus asserting the collective character of games.

Final Considerations

The rising of electronic games was, without a question, a paradigm shift for conventional and linear narrative structures, enabling and silently breaking what was recognized as space and time. If literature through its utopic narratives idealized the possibility of this break, technology appropriated itself of this idea and made it possible through cyberspace.

In this double-handed way, the emergence of multiple narratives that go beyond time, culture, and society limits is more and more frequent, and what could be mere repetition, becomes the reconstruction from something already seen or said into something never conceived before. This is the feeling that game lovers experience when running into a new version of something so visited by them. Electronic game industry has been advancing every day, taking its space and developing in individuals potentialities that few methods can. Each year, elements that make possible the realization of impossibilities arise and evolve at enormous speed.

It becomes undeniable that physical reality adds to the virtual and the virtual adds to the physical, making little sense to live on the margins of this process. Contemporary artistic production presents to the reader, player or viewer a multifaceted speech, in which verbal language articulates with nonverbal and these modify that, explicitly or implicitly to the receptor's eyes. The digital era provided the basis for auto-reflection about the active-passive role of the reader, receptor or audience as a whole. In

ISSN: 2317-2347 – v. 7, n. 1 (2018)

this context, interaction becomes a key element for a collective intelligence development so needed in the virtual world.

REFERENCES

ALKON, Paul K. *Science Fiction Before 1900.* Ney York: Routledge, 2002.

ARAÚJO, Naiara S**.** Literatura e Video Game: Adaptação e Reciprocidade. In SANTOS, Marcio C. *Tecnologia e narrativas digitais.* São Luís, LABCOM DIGITAL, 2016.

BAUMAN, Zygmunt**.** *A Cultura no mundo líquido Moderno.* Rio de Janeiro: Zahar, 2013.

BOGOST, Ian. Critical Review of The Art of Video Games, by Chris Melissinos and Patrick O'Rourke. In *The American Journal of Play* (2012) 5:1 p. 128-130.

_____ Persuasive Games. The Expressive Power of Videogames. In *Literary and Linguist Computing* (2008) 23 (4), p. 502-504.

JAMESON, Fredric. *Archaeologies* of the *Future*: The desire called Utopia and Other Science Fictions. London: Verso, 2005.

KENT, Steven L**.** *The Ultimate History of Video Games:* from Pong to Pokemon and beyond. New York: Three Rivers Press, 2001.

LÉVY, Pierre. *Cibercultura.* Trad. de Carlos Irineu da Costa. São Paulo: Editora 34, 1999.

MURRAY, Janet. *Hamlet no holodeck:* o futuro da narrativa no ciberespaço. São Paulo: Itaú Cultural; UNESP, 2003.

SALEN, Katie; ZIMMERMAN, Eric. *Regras do jogo.* São Paulo: Blucher, 2012.

SALEN, Katie. Toward an Ecology of Gaming. SALEN, Katie. (Org.). *The Ecology of Games:* Connecting Youth, Games, and Learning. Cambridge, MA: The MIT Press, p. 1-20, 2008.

Data de recebimento: 04/03/2018

Data de aceite: 10/04/2018