Games as expression – On the artistic nature of games

Daniel Pettersen De Lucena[1]*   Rosilane Ribeiro da Mota[1]†

Universidade Federal De Minas Gerais, Departamento de Artes Visuais, Escola de Belas Artes

Figure 1: From the trailer for Hideo Kojima's upcoming game Death Stranding at E3 2016.

ABSTRACT

Based on the idea of video games as a powerful medium of expression and as a form of language, this paper aims to identify how elements from digital games enable artists to create potent pieces of work to give voice to their questions and desires and to tackle the topic of games as an art form. After researching the opinion of institutions, media, game designers and professional critics on the debate about the artistic nature of games, arguments against games being art seem to focus on the fact that they are products, question how interactivity would affect the expression of the artist or argue that games lack the power to incite critical reflection or deliver meaningful experiences. The criticism directed towards this medium seems to derive from an understanding of art that if extended to other artistic forms would also put their legitimacy to question. Thus, this paper tries to assess the expressive elements present in games and argues for the importance of engaging in the debate to secure the validity of this medium as an art form by comparing video games with other legitimate works and movements as well as trying to assess the current concept of art and how it contemplates games, analyzing how games give society another opportunity to agree on a broader and more inclusive awareness of artistry that the art world can benefit from.

Keywords: video games, expression, art, legitimacy.

1   INTRODUCTION

Discussions about video games as an art form and the potential of this relatively recent medium have been around for some time now. Institutional consideration of this subject can be traced back to the late 1980s, with a variety of museum exhibits of video games. One of the first exhibitions was the show called "Hot Circuits: A Video Arcade" from June 6, 1989 at the American Museum of the Moving Image [7]. While it is understandable that art critics would face such exhibitions with some resistance at the time, one should wonder why there was seemingly little progress

in reaching something close to a consensus on the artistic nature of video games among critics.

The institutional credibility for attributing art to video games is improving [7], but there seems to be a long way to go before reaching the point in which studying games and their themes and impacts on society or on the art world is taken as seriously as studying paintings, literature, films and others.

This lack of consensus on the matter can be illustrated by the arguments of critics as Joseph Jones [29] who wrote an article for *The Guardian* decrying MoMA for including a selection of computer games in its design section, only to be later criticized by Keith Stuart from the same newspaper in 2014 for dismissing the worth of an emerging art form [32].

Jones' position, as that of many critics and journalists, seems to derive from late film critic Roger Joseph Ebert's [47] famous statement that "Video games can never be art." That he defended and explained in a blog post at the *Chicago Sun-Times* after game designer and producer Kellee Santiago took the stage of TED Talks in 2009 to respond to his critique.

According to Ebert [47], one obvious difference between art and games is that one can win a game. It has rules, points, objectives and outcome. One cannot win art, only experience it, and he argues that if an immersive experience lacks objective and rules, then it is not a game.

Later, Kellee would also respond to this critique, but since there are many arguments in both ends of this discussion that are worth contemplating, now it is better to focus on the discussion Ebert's position helped to incite and see how it shines some light to the lack of consensus on this matter. Therefore, the opinion of other game designers besides Kellee should prove useful. Here is what *Metal Gear* series creator Hideo Kojima, a game director regarded as an auteur and one of the most recognized creative minds of the gaming world had to say about Ebert's position in an interview for the Official Playstation Magazine: for Kojima, a game is not art because it is a service, no different, in a sense, than a car. A conceptual car could be considered art, but we do not consider the cars we drive every day to be art [14].

*e-mail: pttlucena@gmail.com
†e-mail: rosilane@ufmg.br

So, it should not be a stretch to assume that for the director, the relation of utility, in other words, the game being something that must be entertaining and the goal to please the audience, prevents games from becoming art since this practice would hinder the artistic freedom. If that is the case, he is not the only game designer who thinks this way. Shigeru Miyamoto, creator of some of the most critically acclaimed video game franchises of all time such as *Mario*, *The Legend of Zelda* and *Donkey Kong*, does not see his works as art either. He believes he creates products for people to enjoy [24].

However, if games were just a product, that would not mean they could not be studied by their aesthetic proposals or the reflections they inspire. After all, most of what is currently understood as legitimate art has its roots in entertainment [26]. Kojima's games openly embrace relevant discussions such as illusion of choice, language and confirmation bias, so it is curious to see the director's opinion, as one of his quotations when talking about a game of his is that "Games shouldn't only be fun. They should teach or spark an interest in other things." [31]

Throughout history artists have always created products to be displayed by their patrons. With a few exceptions, Renaissance artists were happy to paint almost anything [10]. Surely one would not disregard Shakespeare as an artist for his goal to please an audience, nor would Kubrick be considered less of an auteur because he needed to sell movie tickets.

There is also the fact that games such as the ones from Kojima and Miyamoto are hardly the work of a single person. Musicians, art designers, character modelers, actors and other staff involved in the process may not agree that they are not producing art, and individual expression can come from any of those pieces.

Since under this context expression seems to be relevant to define the artwork, then what about games that are proposed as art by their creators? Are they also products aimed to please an audience? Should art critics not study them? To answer these questions, it is important to contemplate how these games can be art to understand if games are already art, if none of them can be, or if some of them could be.

2 METHODOLOGY

From a belief that it is important to understand the impacts of games on the art world [1] and that reaching a definition of art still proves to be a complex philosophical endeavor, the first aim of this study was to attempt to assess how critics and creators see art when discussing video games.

Therefore, considering other legitimate art forms and where the current debate of the definition of art stands proved useful to demonstrate how legitimate arts fail to meet the same criteria that are commonly used to hinder video games as non-artistic.

The next step was to assess the philosophical discussions that led to the legitimization of practices as artworks and having found no impediment for games to be art under such definitions, study video games as a form of expression and what they can bring to the art world and to creators.

To view games as a form of expression, this study relied on the four elements of expression from the digital medium identified by Murray [27], and proposed that game mechanics is a central fifth element for games since they can be used as metaphors, define how the player feels and interacts with the game world, besides being the main differentiator between this medium and others.

Each of these expressive elements is briefly explained followed by examples on how they were used by game creators so that it becomes clear that not only creators are already exploring the possibilities of games for expression but they are also inspiring a whole generation of students and creators to ensure that this growing medium can deliver meaningful experiences.

3 THE PROBLEM OF ART AS A VALUE JUDGMENT AND THE IMPORTANCE OF LEGITIMACY

In recent years critics recognized the emergence of the "*art games*". Normally associated with conceptual/aesthetic concerns, *art games* include a distinctive or highly stylized audiovisual aesthetic. Since the features that define these games vary greatly, Felan Parker suggests it is more productive to frame them as a discursively constructed site of struggle and cooperation over meaning and value [16].

Similar to the idea of "*art films*", these games are identified as independent works aimed at a niche market. While some, such as Felan Parker [16], argue that this genre is driving video games towards a legitimation as an art form, there is also concern that the term creates the idea of a superior type of game. When talking about his work, indie game developer Pedercini questioned this idea, "By calling some games 'art' you sort of institute an old distinction between high and low culture" [44]. It is important to pay attention to why Pedercini said that this is an "old distinction", as this implies that games are involved in a discussion that was already contemplated by art critics and artists.

This would not be the first time old notions found their way into the art and games debate. To avoid criticizing Ebert, it is fair to say that he eventually took back what he said about games being unable to become art by saying that he was a fool to mention video games when he was not prepared to play them in the first place [48]. Nevertheless, given the proportions this debate took after his initial statement, analyzing another argument of his is relevant to this discussion: Ebert and other critics raised the question of how video games can be art when one has control over the experience, and Jones echoed a similar belief in his article on MOmA. They defend that art must be a personal vision [29] and that one cannot have art if the narrative is malleable [47]. Some even argue that a game is not art, but the act of playing it can be [43].

This logic understands that the artist vision is in detriment when the player decides the outcome and progression of the game. While the same could be said of every legitimate art form in some level, there is no need to go that far. If other forms of interactive art are to be considered, ranging from installation art and interactive architecture to the entire Neo-Concrete Movement that described the work of art as something that can only be understood phenomenologically [3], then thinking a game is not art because of choice or interactivity could lead one to question all New Media art legitimacy.

Today, there is a myriad of approaches to game creation, from those interested in the photorealism who believe that it will open new game genres to those who deem this not to be the case [30]. From those who think a cinematic approach to game with *cutscenes* can provide better experiences [18] to those who argue that the best stories can be told through game mechanics [15]. In their search for legitimation, perfecting the medium or simply for expression, game creators are dealing with different mindsets from all types of art discussions throughout history at the same time.

This is remarkable, since it is a sign that this is an interested community, but when it comes to the arts debate, it seems that many critics and creators alike are struggling with something more fundamental than the issue concerning video games as art or not: The complex definition of art itself. This is not a new problem either. The rise of any new form of expression that threatens to stress and expand our notion of art was always faced with resistance from critics, artists and the public [34].

This problem may have much to do with the fact that the term "art" is used not to refer to the medium, but as a value judgment [37]. People will dispute that a work is more artistic or less artistic based on how they subjectively feel towards it instead of focusing on art as a mean of expression [25]. A similar problem was even

extended to the word "culture" in 2013, when the current Brazilian Minister of Culture at the time Marta Suplicy claimed that games are not culture [5].

This happened in a context in which games were being considered for a benefit called Vale-Cultura. This benefit intends to facilitate access to culture, as it is believed it can inspire critical reflection and promote growth in cultural production [36]. The fact that games were not contemplated is a significant example of how the lack of legitimacy of a medium can affect the way society sees it and creates barriers for those invested in such medium. This is also an example of how people tend to bend concepts to fit their feelings toward specific subjects, which seems especially true in debates about art [51].

While the notion of value *per se* is important to voice what one understands as a quality of a technique in each context and to elevate aspects that he or she thinks should be praised from a critic position, it is irresponsible to use the notion of art not to discuss or contemplate a work being proposed as such, be it by its author or by critics. Therefore, the legitimacy of a medium is important not only to secure investment, but also to guarantee its vitality through criticism, studies that encourage experimentation and innovation [19] as well as to ensure preservation.

Arguably one of the biggest challenges of the digital medium is preservation [54]. Games are not immune to this problem and if they are only seen as products, then the titles being preserved will mostly be the ones being remastered and resold. Conversely, if the importance of studying the impacts of older games on the cultural scenery and on newer titles is asserted through the medium legitimacy as art, preservation becomes an obligatory effort.

The entire digital medium can probably benefit from this since video games seem to be the most equipped to deal with this problem given how gamers are so interested in keeping old games alive that they take this matter in their own hands by creating emulators that allow users to play old titles on new computers [54]. Jon Ippolito argues that such effort plays an important role in solving the problem of preservation in the digital medium [54] and this is a topic that presents great challenges since many companies consider this endeavor in most cases to be illegal, with big companies like Nintendo arguing that current availability of a game in stores is irrelevant to its copyright status [41].

Preservation, investment, critique, studies and how the medium is viewed by society are all aspects that demonstrate the importance of legitimacy for the video games medium as art and the examples provide a glimpse on how there is still much ground to be covered.

4 ON THE ARTISTIC NATURE OF GAMES

"The great archetypal activities of human society are all permeated with play from the start." [26]

The relation between games and art became clearer after the work of Johan Huizinga [26], who studied the importance of the play-element in culture. Nevertheless, it is curious to see how quick some artists and critics are to separate art from entertainment [4] when this play-element can be easily identified in collective games such as the *cadavre exquis*: a technique employed by surrealists in which words or images created collectively by a group of people are assembled in a composition. These works, along with Marcel Duchamp's *ready-mades* in the beginning of the 20th century helped to create a rupture with traditional practice of art, which was interested in questioning the role of the artist [42].

By the 1960s, it became easier to find works that question the silent contemplation of the aesthetic object by the observer [42]. While it is debatable whether such relation is of pure contemplation, these new pieces bring the public to explore the work of art with senses other than just sight. This concern with integrating the observer, the use of new artistic mediums and a rupture with the concept of mimesis are a few of the elements that guided the artistic production of the 1950s [42].

For artists behind these works, this marked the end of a way of doing art that was based on radical separation between art and life, painting and sculpture, spectators and work. Art mingled with life and spectators are invited to "live" the work [42].

It is no wonder that theorists seemed obstinate to bring back the idea of the death of art [42]. This concept also called "end of art" is attributed to Hegel [17], and Argan once employed this idea to voice an apocalyptic view of the future of arts when facing questions posed by Contemporary Art in his time. Argan expressed how he felt unprepared to tackle this problem because there was no longer a notion of value he could use; after all, it was precisely such notion that was being contested [34].

A core element of these discussions is observably the philosophical and endless search for a definition of art that can separate the artworks from the non-artworks, apparently more related to an effort to elevate a style or practice. To free artists of this concern, Danto [1] defends the end of art thesis as a declaration of artistic freedom. For him, the end of art means a transformation of artistic practice in which everyone can pursue different directions, hence the impossibility of any further large narrative. In a sense, the end of art means that it is pointless to say something is not art, when there is no definition of art that can encompass every artwork while excluding alleged non-artworks [1].

While surely a divisive opinion, instead of apocalyptic, the view of Arthur C. Danto can be optimistic, since under his perspective artists can pursue whatever ends – by whatever means – that seem important to them or their patrons [1]; thus, the notion of a correct or higher form of art is invalidated.

While Danto's take on the end of art seems to lead towards an understanding that artworks would be so closely merged with reality that we would not be able to tell the difference, it is hard to imagine that society would not hold a distinction between the two of them. We do not conduct our daily lives thinking everything we see is art. It is not something observable at this moment with the video games and art debate.

These discussions appear to be resilient enough to matter, since new movements and ways of doing art are born from them. Therefore, the concept of art seems to be more related to a consensus on how we understand it as a society [25]. The only way to see Warhol's *Brillo Boxes* as artworks is to be under a mindset that understands them as such, to be engaged in the discussion or to inherit a mentality that sees this work as legitimate. Danto would later define the art object as embodied meaning [2].

The crisis of representation and the need to question the position of the artist and the relation between the participant and the piece would drive creators to seek new ways to express themselves, with various factors such as the progressing development of technology that brought a substantial change in all aspects of society [42].

Consequently, art became interested in recognizing the importance of the observer; as a result, interactive arts arose. This idea is present in Lygia Clark's Bichos and Hélio Oiticica's Parangolé Capes [42]. Analogous to games, these pieces invite the viewer to engage as an active participant. There are studies that draw a relation between Oiticica's work and video games. Poltronieri [34] proposes that games aspire to become "digital Parangolés", considering that they are capable of inspiring critical reflection and should aim to do so.

Harrell [11] shows how computational media characteristics can be effectively used to prompt construction of imaginative and expressive meanings, calling it *"Phantasmal media"*. Phantasms are to be understood as a combination of imagery – mental or sensory – and ideas. Harrell explains how someone contemplating

a large mansion with Greek columns in the front might not only admire the architecture, but also immediately understand that it connotes other ideas such as wealth, power or privilege. The image of the house, influenced by social and cultural concepts, is a phantasm – a combination of a mental image and ideas [12].

Accordingly, "*Phantasmal media* are media systems that prompt phantasms"[11]. Harrell proposes a discussion about the artful nature of the computational medium to create new phantasms while prompting or challenging users' preexisting ones.

"A special way that the computer can serve this function is through its ability to model dynamic systems that enable active user participation. This modeling can be especially powerful use of the computer to have an impact on society when system development is coupled with cultural and critical awareness" [11].

What is especially interesting for the current discussion is how Harrell considers digital mediums, such as games, for their expressive powers, disregarding an idea of high and low art while also arguing how phantasms can be used both to oppress and to empower participants, hence the importance of studying these works [12].

"My vision of the possibilities of phantasmal media puts aside distinctions between highbrow and lowbrow art" and "many computing systems are already aimed at prompting what I call phantasms, especially the types of expressive computing systems being developed in areas such as gaming, computer-based art, and computational narrative" [11].

By bringing video games into the art world, the scope of art expands to include in the debate a new generation of students, artists and interested parties, as well as legitimating studies and explorations of a new practice of expression filled with its own complexities and possibilities that seems capable of inspiring critical reflection, feelings, and delivering aesthetic experiences.

5 INCLUDING THE SPECTATOR – ELEMENTS OF EXPRESSION IN THE VIDEO GAME WORLD

To understand digital games as a language implies analyzing the elements within that can be used to express feelings and ideas. However, what exactly are those elements? Focusing on the narrative aspect Murray [27] identifies at least four essential properties of digital environments that make them a powerful vehicle for literary creation. They are: procedural, participatory, spatial, and encyclopedic. "The first two properties make up most of what we mean by the vaguely used word *interactive*; the remaining two properties help to make digital creations seem as explorable and extensive as the actual world, making up much of what we mean when we say that cyber-space is *immersive*" [27].

These properties alone may not suffice to cover every possibility of videogames as expression but they offer a good starting point to examine expressive elements that are hardly found outside the digital medium. Akin to a painter's palette, they present possibility and problems to be solved by creators. For this reason, games can be seen not only as a tool to empower the artist but also as a challenge.

The procedural property, for instance, is well known to game creators by now, yet it can be used to achieve different goals ranging from generating environment and entire game worlds to enriching narrative by adding depth and detail to characters and systems [49].

5.1 THE PROCEDURAL PROPERTY

Sometimes called random generation, procedural generation of content is a method in which data is created via algorithms, or to put it simply, a set of rules. From these rules, a computer program can automatically create large amounts of content. The seemingly random nature of this process may seem compromising to the

intent of the artist, but it is the opposite. It is a tool not found outside the digital medium that enable creators to deliver unique experiences to every participant and, many times, to make them co-creators of the piece.

Despite the apparent lack of control over the process, it is possible to convey an intent or message through procedural-generation. It is arguable that the artist may intend precisely for this randomness, but it is not necessary to sacrifice design choices to create content, since it is the creators' responsibility to set the rules operating behind the scenes. Worlds can be created combining and recombining elements in a process that can be compared to a computer assembling Lego blocks [49]. An idea easily understood when considering the successful game *Minecraft*, in which players are invited to build constructions out of textured cubes and survive in a 3D procedurally generated world that is unique to every player and that they can share with friends. The aesthetic choices of the game are preserved since the building blocks that compose the world are created previously, they are the "Lego blocks" the computer is given to generate content.

A similar idea is present in *No Man's Sky*, a game about exploring an open universe with over 18 quintillion planets where every planet is procedurally generated, many with their own flora and fauna. Despite using procedural generation to similar ends, both games look and play differently and were intended that way.

The procedural element was employed with a different goal in *Middle-Earth: Shadow of Mordor*, a game based on Tolkien's high-fantasy epic *The Lord of The Rings*. In this case, procedural generation is applied to enrich the relation between the player's character and its foes, the orcs. The orcs are algorithmically created by the game Nemesis System, from their names and appearance to the way they speak and their relationships with other orcs. If an orc kills the player's character, he will remember the encounter next time they meet and will boast. Conversely, if he is killed or injured, he will come back with new talents, a grudge to settle, and even a procedurally generated scar like a plate over his eye as seen in Figure 2 [49].
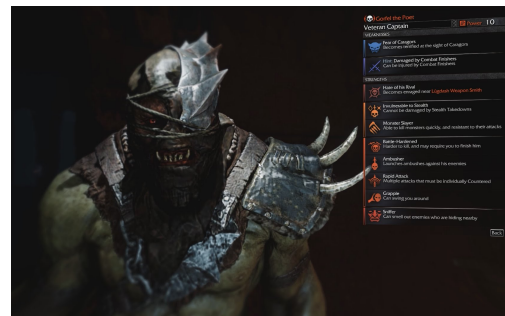

Figure 2: Orc with scars generated by the Nemesis System in *Middle Earth: Shadow of Mordor*

"This results in rivalries and feuds and leaves the player myriad opportunities to exploit orc social connections for their personal gain (by turning someone against their boss, for instance); it pushes you into emotional relationships with the bad guys" [49]. Moss argues that this is an important step forward in creating traditional game narratives that genuinely adapt to a player's choices rather than merely ramifying as in a 'Choose Your Own Adventure' book [49].

There is still a lot to be done and discovered regarding creating procedurally-generated experiences, from how they can enhance more restricted approaches to storytelling such as *Middle-Earth: Shadow of Mordor*, which has a scripted story to tell but allows

for rich player's stories concerning how they interact with the game and how its world and enemies respond to this interaction, to approaches like *RimWorld*, a game driven by an AI storyteller in which stories are generated by simulating psychology, ecology, combat, climate, biomes, relationships, art and more.

This demonstrates how computers can deliver compelling stories and unique aesthetic experiences if one can write rules for it that are recognizable as an interpretation of the world [27]. "The challenge for the future is how to make such rule writing as available to writers as musical notation is to composers" [27]. Today, video games seem to be the best candidate for that.

5.2 PARTICIPATION – THE PLAYER'S ROLE AND THE ROLEPLAY

The second property Murray [27] describes is that the digital medium is participatory. This property is deeply related to the first one since "procedural environments are appealing to us not just because they exhibit rule-generated behavior but because we can induce behavior. They are responsive to our input" [27]. This is especially true in games, in which gameplay is directly related to how the game responds to the actions of the player [9]; therefore, participation lies in the nature of games, since they can only exist if the player exercises a will to make something happen.

Playing is a voluntary activity and one of its main characteristics is that "it is free, is in fact freedom" [26]. Since interactivity is an intrinsic characteristic of video games, in which players will usually prompt actions to occur by pressing keys in a keyboard or joystick to input commands, then one may see it more as a consequence of the nature of the medium than something that can be considered a toll for expression, but that is far from truth for experiences that are shaped around the fact that they are participative such as choice based games.

Choice based games such as *Mass Effect*, *Life is Strange*, *Deus Ex*, *Until Dawn* and many others from the visual novel and interactive narrative genres excel at recognizing the importance of the participant and the relation of actions and consequences. These narrative-driven experiences tell compelling stories by presenting the participant with choices that determine the outcome of the experience.

While this does not exclude the possibility of using procedurally generated content, scripted stories such as these present the writers with the ability to tell more controlled stories, making it easier to guarantee a deep experience to every participant while still acknowledging the importance of player interactions for the outcome of the story, usually inspiring them to critical reflection. It is no surprise creators will use this approach to propose more explicit moral challenges to players, sometimes giving them the option to choose between becoming a hero or a villain and to question if the end justifies the means [33].

In a GDC 2016 talk, *Life is Strange* directors explained how they use interactive storytelling and game design to tackle real world problems such as loneliness, domestic violence, *cyberbullying*, teen pregnancy, euthanasia and others in meaningful and respectful ways [38]. In this game, Max, the player character, discovers that she has the unique ability to go back in time for a few seconds after she witnesses her former childhood friend Chloe being shot and saves her. With this power Max will realize that every time she tries to change the past to fix things, this will have unwanted consequences in her world. This power works as a catalyst that serves the main narrative of the game: "To grow up and become an adult you have to stop looking back wanting to fix everything but instead you should accept that life cannot be perfect and move on" [38].

In one of the game events, Max uses her power to go into the past and change the destiny of Chloe's father saving him from a car accident, but the outcome of her actions puts Chloe in a situation in which she ends up paralyzed with a degenerative terminal respiratory illness. Developers argued that since they wanted to push the idea of responsibility, a strong and difficult choice was needed to show the player that sometimes there is no easy way out of the situations they created. At this point, the story, the themes and the narrative pushed the developers to talk about the controversial subject of assisted suicide [38].

"Video games for us are a very strong media, mostly because it is interactive. Video games can be much more impactful than movies or TV shows which can be more passive sometimes. In a game the player becomes the main actor of what is happening and for this reason video games are a great thought-provoking media. It can be used to bring some awareness to the player about important subjects and real world issues and also push them to develop some personal opinions about those subjects" [38].

This does not mean that games that do not present choices are less inviting and effective in inspiring critical reflection or delivering powerful experiences. Once one acknowledges the participant as a crucial and necessary element of the experience, there is no guidebook as to what elements one can use to reach their audience.

Hideo Kojima's games are famous for using every element the game designer can put his hands on to reach his audience. From game bosses messing with the player's memory card – the data storage device for the original *Playstation* console – to talk about what games he or she likes, implying that the boss is reading the player's mind, to fake glitches and game over screens that prompt the player to capitulate and turn off the console, fulfilling the desires of the villains to hinder player's progression. Kojima's games demonstrate an interest in how the user approaches the work and uses this to play with expectation.

There is a clever lie told in *Metal Gear Solid 2: Sons of Liberty* regarding the main character of the game. Since this was a sequel, Kojima knew players would be expecting to play as Solid Snake, the main character from the previous entries in the series, therefore, he created all the trailers, posters and advertisement to the release of the game featuring Snake as the main character. When the final game was released, however, its protagonist proved to be a naïve soldier trained in virtual-reality called Raiden who, analogous to most players, idolized Solid Snake and believed he knew everything about the "*Legendary Mercenary*", as he knew of his former operations and was supposed to take his place. Even the original box art for the game on the Playstation 2 seen in Figure 3 shows no sign of Raiden and the description of the game only says that "Solid Snake is back", implying that he is the main character.

Figure 3: The box art for the original Metal Gear Solid 2 Sons of Liberty [Konami 2001] with a picture of Solid Snake.

Through Raiden's journey, the player finds out that he is reenacting the events of the previous game in a conspiracy to create the perfect simulation in which every person can be transformed into a super soldier like Solid Snake. It plays to the

benefit of the narrative that Raiden was trained in VR in the way the player thought he knew how to handle the game and understood about espionage from playing video games and his knowledge of previous *Metal Gear* games.

The synergy between Raiden and the player works as a message for both player and character to question their actions through the game, since both seem to be trapped in a big conspiracy, and Kojima uses this to tackle on subjects like illusion of choice, identity, and Richard Dawkins's [46] theory of the meme as a recurrent idea or behavior in culture. "Who am I really?" Raiden asks by the end of the game. To which the real Solid Snake responds: "No one quite knows who or what they are. The memories you have and the role you were assigned are burdens you had to carry" and "I know you didn't have much in terms of choices this time. But everything you felt, thought about during this mission is yours. And what you decide to do with them is your choice…" [35]

Despite being part of a fictional story, Solid Snake's statement to Raiden recognizes a powerful characteristic of interactive mediums also contemplated by Murray [27]: "Enacted events have a transformative power that exceeds both narrated and conventionally dramatized events because we assimilate them as personal experiences" [27]. Thus, the roles one plays as a video game character are no less important than the role of the player to drive the story forward.

This ability to integrate the player into the story led to interactive dramas such as award-winning games *The Walking Dead* and *Heavy Rain*. Despite winning multiple Game of The Year awards, these interactive dramas rose questions about the works being games or not [39; 40] since they resemble movie storytelling and deliver the story visually to the player. Quantic Dream co-CEO David Cage refers to his game as an "interactive movie" [40].

While it is not the goal of this paper to attempt to discover if interactive dramas are games or not since it would not be fair to contemplate arguments on both ends so briefly, it is safe to say that these experiences benefit from expressive elements and design choices from video games as they were born from this medium. Despite how "interactive narrative" sounds, *Heavy Rain* is not telling its story through *cutscenes* [23; 45].

Unlike a movie, these experiences do not rely on editing to conduct the pace of the narrative and to evoke feelings. Instead they seem to reject editing in favor of player interaction. The player needs to move the characters through the level, control how sequences of the narrative appear through quick-time event actions, grab or not important items to change the outcome of the story, collect clues and others [23]. Dissimilarly to movies, games rely on interactivity to promote a deeper connection between players and characters.

Heavy Rain contains plot holes and problems that would normally face intense criticism in a movie, but for many, being in control of the characters and the necessity to make choices that could determine whether some of them lived or died made players feel more responsible and relatable to those outcomes, sometimes excusing plot limitations [45]. It seems that not only the story and the *cutscenes* but also the gameplay elements were responsible for the overall impression of the experience.

Bogost [23] describes how what would be a bad scene in a movie benefits from the player being in control of the action in one of *Heavy Rain's* scenes, in which Ethan (controlled by the player) loses his son in a crowded mall after buying him a red balloon and needs to follow similar balloons in the scenery to try to locate his missing child. He argues that narratively speaking the scene is forced and unbelievable, however narrative success is not needed to appreciate how frenzied the scene feels. "In a film, that frenzy would be best carried out through a series of quick cuts. But as anyone knows who has actually lost a child in a public

place, even if only briefly, the central sensations of that experience are not rapidness but slowness. The slow panic of confusion and disorientation, the feeling of extended uncertainty as moments give way to minutes. While its narrative fails to set up credible reason for the chase, the chase itself captures this panic far more than a sequence of cinematic edits might do. If the edit is cinema's core feature, then *Heavy Rain* does the opposite: it lengthens rather than abridges" [23].

Prolonging and lack of editing here are a consequence of making the player more than an observer. For that end, Heavy Rain allows moments when the player is part of the routine of the characters and learns more about them. While some movies may allow a slower approach, most of the time directors need to worry about pacing and telling a story within a given amount of time, always deciding what viewers must see, what is relevant and how long to spend on moments that do not seem to progress the narrative. Conversely, in a game, players decide what to see by controlling a camera, choose how much time to spend appreciating the beauty of a scenery, how to move through spaces and if routine activities such as opening an almost empty refrigerator to drink juice is worth their time. Deciding how they want to approach the narrative through these moments plays an important part in how they connect with character, feelings and situations [23].

"If 'edit' is the verb that makes cinema what it is, then perhaps videogames ought to focus on the opposite: extension, addition, prolonging. *Heavy Rain* does not embrace filmmaking, but rebuffs it by inviting the player to do what Hollywood cinema can never offer: to linger on the mundane instead of cutting to the consequential" [23].

Exploring game environments not only allows the player to feel that he or she is there, but can also help him or her to care about what he or she sees since the player is the one deciding how to approach these spaces to discover new things. *Life is Strange* directors talked about a similar concern after Chloe becomes paralyzed in the game [38]. They knew the player spent a lot of time as Max in Chloe's room in previous chapters and was familiar with the environment of her house when Chloe was not handicapped. For the new timeline after the accident, developers had to rethink the whole organization of the house. Chloe's bedroom was emptied as she cannot go upstairs anymore, thus, finding about the state of this room in the new timeline is disturbing for the players [38].

These changes in the scenery also reinforce the idea of player agency and push the notion of responsibility [27; 13]. Through this technique, the game creators wanted players to realize what happened in that world and the consequences for the family [38]. This realization that the player cares about the places he visits in a game and how to approach them leads to the next property of this study.

5.3 SPACIAL PROPERTY AND ENVIRONMENTAL STORYTELLING

"A well designed world could tell its story in silence." [21] Digital environments are characterized by their power to represent navigable space [27], thus, game environments serve diverse purposes. They can guide the player's movement through physical properties such as walls and staircases establishing an idea of restriction and access that encourages decision-making and meaningful play; use familiar visual reference or affordance so that the area itself communicates with the player in a way he or she understands its purpose and can deduce what he or she should be able to find within that place; reinforce player identity by contextualizing the experience, sometimes exerting influence over the identity the player takes during play; and they can provide narrative context [22].

In a game as *Bioshock* that deals with social experiments related to greed and morality, themes concerning collapse and decay

conveyed through the scenery make players feel free to bash and loot, therefore, they help to shape an identity or role for the player [22]. Dissimilarly, the environment of Portal 2 – with its almost empty white rooms mostly filled with the objects the participant will use to solve puzzles – makes players feel as lab rats, which is suitable for a puzzle game [22].

"Environmental storytelling is the act of staging player-space with environmental properties that can be interpreted as a meaningful whole, furthering the narrative of the game" [22]. In *Silent Hill*, environment and creatures are used to reflect the minds of the main characters, complementing the psychological nature and themes of the game. These changes in the scenery enhance the feeling of insecurity for the player [8]. For some creators, this technique is the backbone of their craft.

As a child, Japanese game designer Hidetaka Miyazaki – known for his work as director and creative mind behind the *Souls* series – was a keen but not talented reader. Growing up in a poor family in the city of Shizuoka, he describes how his office-worker parents could not afford books or manga, so he had to borrow whatever he could find in the library, ending up with works beyond his reading capabilities. He would reach passages of text he could not understand and would allow his imagination to fill the blanks using the accompanying illustrations [52]. Miyazaki said that this made him feel he was co-writing the fiction alongside the author, and that the thrills of this process never left him [52]. It is easy to understand why the director would want to convey these feelings through his games.

In Miyazaki's critically acclaimed *Bloodborne* the story takes place in the decrepit city of Yharnam inspired by Gothic and Victorian architecture of late 19th Century. The player's character wakes in a clinic after travelling to the city in search of a cure for an unspecified disease to find out that the city once known for its medical advances and for housing an old medicine that could cure any disease is now plagued with a mysterious illness; moreover, beastly creatures roam the streets. After being killed by one of the creatures, the player's character will be transported into a dream and from there they can be sent back to the "Waking World" to keep exploring the city and unraveling its secrets.

If that seems to be little information, the game gives players even less. The only objective piece of information available to the player at the start of the game is a small note found in the clinic that states he should seek paleblood to transcend the hunt. After the game ends, there is no text or dialogue explaining what paleblood was. To find that along with answers to many mysteries such as what happened to the city, why the hunter is sent to a dream after every death and what "the hunt" is players must piece together the narrative through an almost archeological process of studying scenery – such as statues, architecture, tools – items collected and non-playable characters' clothes, accessories and names since every bit of information can be crucial to understand the whole.

From a clear notion of cause and consequence, storytellers can present the environments of these games after a given event and provide hints for players to reverse engineer the cause of what they see. This technique works well for mystery and subjective storytelling. While it may seem to be a cheap way to tell a difficult or badly planned narrative, which makes the participant fill the blanks or plot holes, this requires a lot of planning and understanding concerning the causes behind the events.

Successful approaches as Miyazaki's *Souls* series thread a fine line between giving information in excess or insufficient data, which requires planning and control. "At the most basic level the story is a puzzle, and one made up of different varieties of piece. From Software expects players to pay attention to architecture, enemy placement, armor details, item placement, item descriptions, geography, NPC dialogue, and a hundred of little one-off touches that are easily missed" [50].

Players are invested in discovering *Dark Souls* mysteries because the hints found do not contradict themselves or point to settings not supported by the story. To make it work, attention to detail is essential since the participant will start searching the smallest of the assets for meaning.

Game environments such as the ones found in *Bloodborne* and *Metroid* can also support player agency. "Agency is the satisfying power to take meaningful actions and see the results of our decisions and choices" [27].

In many modern games the world does not change to support the narrative, which is regrettable given the potential impact of doing it. Metroid Prime makes the player feel he or she is making a concrete impression on the world while also implying that such world will continue to exist whether or not the player's character is there [13]. "One example, early in the game, is that of Flaahgra boss and the Sunchamber from which it poisons the surrounding ruins. Before you encounter it, all of the water you find is rank, poisoned and murky. You've no reason to believe that there's any reason why it wouldn't be like that, but the game soon reveals that there's a source of the poison, and once you defeat it, not only the Arboretum arena is cleansed, but the entire surrounding area is swept free of the poison. It is a spectacular way of offering the illusion of player agency" [13].

Bloodborne does something similar with its scenery and with the moon, a central element of the plot. Moon phases change depending on specific events and conditions during the game. Defeating Rom, the Vacuous Spider and approaching the blood-soaked lady in white will trigger a Blood Moon phase that changes the game environment, creatures and NPC actions, making beings once invisible to the player become visible.

5.4 A BRIEF VIEW OF THE ENCYCLOPEDIC PROPERTY

The final property Murray [27] describes is the encyclopedic. Similarly to the participative element, this property is so deeply involved in the digital medium that examples of its use in games as a tool of expression is bound to overlap with the characteristics discussed in previous topics. It occurs because the fourth property is "more a difference of degree than of kind". [27].

Because of the efficiency in representing words and numbers in digital form, it is possible to store and retrieve an immensurable quantity of information with an efficiency that was unheard of before. As important as the capacity of electronic media is the encyclopedic expectation they induce [27].

Procedural techniques in games as the ones discussed in topic 5.1 rely on modularity. Procedurally generated levels found in *XCOM 2* are assembled with modular assets, benefiting from the encyclopedic property since numerical representation and modularity also contribute to the encyclopedic nature of digital environments [11].

"Murray's encyclopedic property is enabled by increases in the capacity of data storage hardware, the economy of data representations, and the efficiency of accessing data." [11]

Branching stories come to mind and this is the concept behind choice based games such as the ones discussed in topic 5.2. In *Mass Effect*, the game will load prerecorded audio dialogue for characters depending on the choices the player makes when engaging in conversation with NPCs.

It is simpler to view the encyclopedic property as the seemingly endless potential of the digital medium to store content in many forms ranging from text to pictures, sound, animation and 3D meshes. Nevertheless, no less important is its ability to convey any process through logical symbolic representation, including simulations of highly complex systems [28].

"When the encyclopedic affordance is appropriately exploited, large information resources are semantically segmented at multiple levels of granularity, sorted, classified, and labeled with controlled vocabularies." [28]

Murray [27] explored the benefits – and challenges – posed by this property when talking about hypertext and hypertext novels. Since hypertext presents an opportunity to quickly access stored information, they change the way users approach those data. Some games use this to their benefit. Instead of inserting chunks of exposition in character dialogue to explain complex concepts, science fiction visual novel *Remember 11* relies on hypertext to guide the user to a glossary referred to as the "TIPS system". Every time a less known term derived from philosophic, psychological or scientific theories appears, the term will be highlighted in the dialogue box so that if the player does not know what the characters are discussing, he or she can read a basic explanation of the concept.

Compendiums and bestiaries found in role-playing games are another use of the encyclopedic property. When a player sees a new creature or produces a new item, an explanation about the creature – such as its habitat and behavior – will be detailed inside a bestiary accessible via one of the game menus and sometimes included and given context inside the game story, as the *Pokédex* from the *Pokémon* game series.

There is the risk of overloading users with data when trying to approach fragmented information but when the technique is used right, filling these compendiums can provide meaningful gameplay moments. *The Legend of Zelda: Breath of The Wild* prompts players to fill its *Hyrule Compendium* by using an in-game camera to surreptitiously approach monsters and animals and take pictures. This mechanism not only allows for a more meaningful relation between the player and the information he gathered, but also encourages a connection with the game environment that enriches the experience. There are also rewards implemented in the system, since players can use data found in the compendium to track resources.

"When informational spaces or virtual worlds are well organized with clear boundaries, consistent navigation, and encyclopedic details that reward exploration they create the experience of immersion." [28]

5.5 Game mechanics as metaphors – The game changer element

What differentiates games from other forms of expression in the digital medium? Murray's [27] four properties provide a good starting point when trying to find expressive elements in digital mediums, but while the author openly discusses video games, her approach is interested in the entire digital medium and is centered in the narrative aspects. Thus, it would not do justice to video games as a medium not to contemplate its most fundamental aspect, one that is exclusive to games but not to video games; therefore, it is not a characteristic of the digital medium but something enhanced by its possibilities instead: gameplay.

"Not all games tell stories. Games may be an abstract, expressive, and experimental form, closer to music or modern dance than to cinema" [20]. Jenkins explores how the experience of playing games can never be reduced to the experience of a story as many factors, which have little or nothing to do with storytelling *per se*, contribute to the development of great games [20]. Therefore, one needs to broaden their critical vocabulary to discuss games to approach those other topics [20].

For this paper, gameplay is discussed as the nature of the experience of a game, how the user approaches it, its rules, mechanics, and how the game world responds to this interaction. The objective here is to analyze the experience of playing a game that is not exclusive to the digital medium since it extends to other types of games, such as board games or sports. Thus, every title discussed in this paper and every element of expression they benefit from is directly impacted by gameplay as it defines the experience of playing.

"Not every game needs a story, every game needs gameplay" and "A game doesn't need to have a story, and yet it always has a story" [53] are two statements that may seem contradictory, but in his books on game design Rogers [53] expresses the fact that people are good at generating narratives for what they see; moreover, the sequential nature of events in a game will create a narrative, although it will not necessarily be its major point. Perhaps for this reason many designers wish to tell stories with their games and complement their meanings.

This is not a discussion about whether games should focus on mechanics or storytelling. Dissimilarly, as gameplay is an essential and defining element of games, it must be considered when referring to them as expression since "if some games tell stories, they are unlikely to tell them in the same ways that other media tell stories" [20].

Ebert's [47] dismissal of the artistic nature of games contemplated at the introduction of this paper fails to comprehend how rules and objectives can be used as a metaphor to any discussion and trigger emotional responses. Many game designers believe that everything can be turned into gameplay [53] and this was clear for the games explored in this paper since in the examples used to discuss Murray's expressive elements, these were conveyed through – or had direct impact on – game mechanics.

While the search for knowledge along with the search for power that players are subjected to, given the ruthless and unforgiving nature of *Bloodborne's* world, are directly related to the story themes, it is due to game mechanics that they are elevated to something that the participant can feel through the journey and verify through actions and consequences instead of being told.

Bloodborne operates under two currencies, "blood echoes" and "insight". Blood echoes are the reward for defeating monsters. They work as experience points players can trade to increase their character's statistic such as strength and speed or to buy weapons. Conversely, insight are points obtained by making discoveries related to the nature of the world, as finding a hidden area filled with its own secrets or discovering important creatures to the story. Insight can be spent summoning other players to help or buying specific equipment such as clothes or ritual materials.

However, there is a secret regarding insight. If the player chooses to keep it instead of spending it, the more insight he has, the more things will be unveiled in the world, giving hints so that the players can make sense of the narrative. On Yharnam streets, where abandoned baby carriages can be seen, baby cries will now be heard. The game music for a place might change to reflect a new emotion. Monsters will behave differently and giant creatures will become visible hanging from the tall churches implying that they were always there but that the player's lack of knowledge concerning the nature of that world prevented him or her from seeing those creatures.

Through its scenery and mechanics, *Bloodborne* tells a tale of civilizations that fell in search for power, knowledge or both. It works as a commentary on human struggle over meaning through religion, science or power and it achieves that by trusting the participants' curiosity to explore this world and to connect with its questions, emerging from the experience with something of their own.

Brothers: A Tale of Two Sons is praised by its innovative use of the controller. It is an emotional game about two brothers that assigns each of them to different sides of the controller via individual analog sticks. The player needs to coordinate and many times control the two brothers at once, acting as the bond between them that is necessary to overcome the adversities presented by the narrative.

This idea of game mechanics as metaphors is the basis of applied or serious games, which are intended for educative purposes, many of which rely on feedback systems to prompt

reflection of actions and motivate students through reward mechanics that stimulates learning practices [33]. Jordan Magnuson's *Freedom Bridge* and *Loneliness* also try to covey feelings through game mechanics, relying little on semantics. Arguably, the title of the games is all the information the player needs. In *Loneliness,* a game created by Magnuson for his Korean middle school students, the player controls a small black square as seen in Figure 4. If he tries to approach other square groups, they will move away from the player's square.
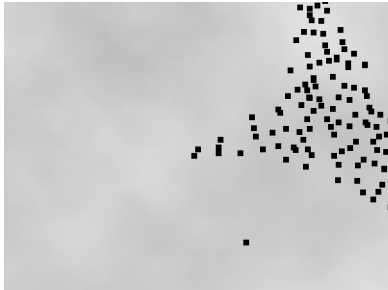

Figure 4: Screenshot from *Loneliness.* A game created by Jordan Magnuson for his Korean middle school students.

Jenkins argues that games memorable moments do not depend on spectacle. After all, spectacle refers to something that stops one suddenly and completely, forcing them to stand still and watch [19]. Conversely, gameplay becomes memorable when it creates the opposite effect, when it makes one want to be a part of the experience and convinces them that they are one with the character [19].

6 CONCLUSION

When art can be understood from a cultural context and from its expressive qualities as a language [2; 25], some definitions and the use of the term as a value judgment fail to contemplate emerging interactive art forms and the digital medium. Therefore, it seems that the notion of art has become a shield for critics to avoid discussions, after all, if some of the arguments being used to delegitimize games were to be considered true, other legitimate art forms would be at risk. Thus, it is important to use this opportunity to discuss the artistic nature of games and to bring the art debate to a larger public and to a new generation.

In his critique against video games, Ebert asks why gamers are intensely concerned about games being defined as art and why they cannot continue playing and enjoying games instead [47], but as a critic, he seems to ignore the impacts of legitimacy and its importance for emerging art forms. Gamers should not care about self-justification to their parents, spouses and others as Ebert suggests [47]; they should care because legitimacy is essential to secure the vitality of the medium through engaged critique, investment, game studies and preservation effort.

Games provide a myriad of tolls and different approaches to expression, from elements intrinsic to the digital medium to their own characteristics hardly contemplated by this paper in these few pages. Much could be said about their power to bring communities from different countries and mentalities to work together, about their effort in tackling education from different and engaging perspectives, and about the potential of games to create awareness for art questions, society questions, and inspire critical reflection. Hopefully future researches by groups engaged and interested in the medium can verify those topics.

As for the expressive elements, it is expected that this paper shows how each of them can be joined to create different approaches to games. There was no intent to elevate a particular game approach or genre over another since, as many game designers believe, "memorable moments emerge when all of the elements of the medium come together to create a distinctive and compelling experience" [19].

Jenkins argues that there have been real creative accomplishments across the first three decades of game design but we have not comprehended what they are and why they matter [19]. Therefore, it is important that constructive discussions help to cement awareness and institutional legitimacy to expressive approaches and questions raised by game creators.

Criticism and game studies will play a fundamental role on that, as there seems to be a need for two types of critique to coexist: one concerned with games as a market, so that the commercial pressure insures accessibility; and one that offers a measure of success without considering that, encouraging experimentation and innovation so the medium remains alive and the voices of those who plan to use it for expression can be heard [19].

On that account, it is important to question our understanding of art in the same way critics and artists did concerning other emerging art forms, but this time through the medium of digital games. It is crucial to envisage games as a form of expression and engage in the debate.

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