The 6th International Conference on Computer Games; Challenges and Opportunities (CGCO2021)
February 2021 – University of Isfahan, Isfahan, Iran

Postmodernism and Popular Video Games:

Interactive Narrative in *Inside* (2016), *Metal Gear Solid* (2015), *Elder Scrolls: Skyrim* (2011), *Detroit: Become Human* (2018)

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***Abstract*— The overall aim of this article is to examine whether four selected games can be construed as postmodern narratives by applying theories of game studies, specifically those on interactivity, by benefitting from works of critics such as Wolf, Jenkins and Montfort. Furthermore, we benefited from by the aid of post-modern narrative theories and critics namely, McHale and Baudrillard on the significance of the gamer in progression of the story. For this purpose, four games were examined. These games were chosen since they offer different levels of interactivity and player's interference with the game world, from the most limited, *Inside* (Playdead, 2016), where the avatar only moves in a two-dimensional world, *Metal Gear Solid V: The Phantom Pain* (Kojima Productions, 2015), in which the player can customize the character and have more freedom in choosing objectives, and *The Elder Scrolls V: Skyrim* (Bethesda Game Studios, 2011), an open world game, to *Detroit: Become Human* (Quantic Dream, 2018), where the gamer can choose the fate of the characters and have many different endings. To date, no study has been done on these specific games from a postmodern narrative and interactivity point of view. This study concludes that video games, due to their interactive nature, can be considered post-modern narratives.**

Keywords*— *video games, postmodenism, interactivity, postmodern, narrative, simulation

I. INTRODUCTION

This paper aims to detect relevant story telling techniques in the aforementioned games. Then, it attempts to show how the story is told in the four video games with an eye in interactivity, immersion and game space, and the influence of these factors in the narration of the story. Also, this study will detect the elements of post-modernism in the narrative of the four games of the study.

Video games started flourishing in the 1970s and since then they have grown phenomenally in popularity to become one of the most popular forms of entertainment in the recent years [1]. As a consequence, this industry has attracted the attention of the academia. The literature in the first years was more interested in violent behavior studies, social studies and psychological implications and effects of games. In the recent years though, digital games have been acknowledged as a medium. This in turn has given birth to ludology, which is roughly defined as the study of principle of games [2]. Since they have gained significance in the recent years, the approach of researchers has also undergone some changes. This means that now games are studied not only in relation with other majors, but also themselves as an independent branch of study [3]. Three of the analyzed games in this work are relatively new, therefore, there has not been much academic studies on them. What can be found is mostly reviews and ratings in different game websites. *Inside* and *Detroit: Become Human* are more unconventional and innovative games; however, there are a few if any, academic studies on them. *Skyrim* on the other hand, has enjoyed some attention of researchers in different areas, given the fact that it was produced in 2011.

The Elder Scrolls V: Skyrim (2011) is an action adventure role-playing game launched in 2011 by Bethesda Game Studios. It is directed by Tom Howard and it was well received by both critics and gamers. Furthermore, it won many awards namely Game of the Year, and has sold over 20 million copies so far. The character's name is Dragonborn who is prophesied to be the only one who possesses the power of The Voice and is able to withstand and kill dragons. In the open world of the game, this hero goes on different quests and ultimately he or she will save the realm and aids the Empire. *Metal Gear Solid V: The Phantom Pain* (2015) is an action adventure game that was directed and written by Hideo Kojima. It received 91 on Metacritic [4] game rating website and 9 on IMDB [5]. In the game, the player assumes the role of a professional mercenary known as Big Boss or Venom Snake, attempting to locate those responsible for destruction of his army called MSF, short for Militaires Sans Frontières. The game includes completing missions to gather resources to tackle down the main enemy called Skull Face. *Inside* (2016) is a puzzle-platformer adventure game directed by Arnt Jensen. It was well-received by critics, for example, it obtained a high

score of 10 of 10 on IGN [6]. The character is a boy starting the game in the middle of a dark forest. He must avoid guards, spotting lamps and dogs and solve mechanical riddles to finish the game. *Detroit: Become Human* (2018) is an exclusive PS4 game written and directed by David Cage which was launched in the market in 2018. Three different androids are the leading characters in the game, all of which are controlled by the gamer. They serve their purpose in the futuristic Detroit in 2038. One of these robots starts a rebellion against humans and the other two play their roles in the events. The story is not straightforward since the high degree of interactivity allows numerous storylines [7].

II. REVIEW OF RELATED LITERATURE

A. Post-modernism and Post-modern Narrative

A postmodern narrative has certain qualities and features. McHale (2010) asserts that postmodern narrative is interested in ontological aspects of the world; the possibility of multiple worlds and the chance of their interaction and collision. The quality of the fiction world and how the reader interacts with it is also of concern in postmodern narrative. This narrative does not abide by traditional definition, and may well merge and violated previous restrictions [8].

To understand what postmodern narrative a brief summary of postmodern theories is required. There are two most influential ones; one concerning consciousness, and the other in economics. The first one is put forth by Lyotard (1979), which reflects incredulity toward master narratives of progress, enlightenment, and human liberation that served to legitimate modern culture [9]. Postmodernism values little narratives of minorities and little groups and cultures. The second theory is Jameson's Marxist account of postmodernism as the cultural logic of late capitalism. According to Jameson, postmodernism represents the latest tendencies in capitalistic productions in economic sphere. Jameson (1990) recounts the features of postmodernism: the 'depthlessness' of a culture based on simulation and the circulation of images; the weakening of a sense of history; 'schizophrenic' disjointedness and an intensified form of collage; a new experience of the sublime, identified with technology instead of nature; and a new experience of architectural space, or what Jameson calls 'hyperspace'[9]. Postmodernists seem to recycle old culture, genre and style and recycle it to create parody, pastiche, recontextualisation, and revision [8].

Baudrillard (1995) introduces the term simulacrum, as a reproduction of real. He argues that a loss in communication has led to elevation of this phenomenon. It gives way to a hyperreality of communication, a simulated one, which feels even more real than the real, leading to abolishment of the real. He introduced the word hyperreality as a means to depict 'conditions whereby imitation or reproduction of reality acquire more legitimacy, value and power than the original things'. In these conditions, the distinction between the representation and the referent seem to have vanished. In other words, the reality presented in hyperreality seems more real than the actual reality. Therefore, there is no reality, only simulacra. In a postmodern world, 'model of reproduction has been replaced by cybernetic model of simulation, a cybernetization of society.' Baudrillard gives a simple definition for Simulacrum: 'a copy or a reproduction of the real' [10].

B. Game theory

Tavinor (2005) in *Videogames and Interactive Fiction* explores different aspects of interactivity and their effect on gamers, and specifically story telling in games. Feeling guilt or pleasure in games is much more intense in comparison to more passive forms of exposure as occurs in reading a novel. Unlike other form of narration, whose aim is creating a feeling of sympathy in the reader, video games bring a far more active engagement by using 'the problem spaces or kinetic narratives of gameplay. He also argues that action and emotion are cognitively related: these emotions experienced by a gamer while playing, are by far greater and different from other forms of fiction [11].

The literature on this game pays attention to its story telling and cultural and racial significance of its content. For example, Puente and Tosca (2013) investigated social dimensions of storytelling in the game; reaching the conclusion that collective social dimension plays a key role in the storytelling process of the game [12]. Another study by Champion (2014) took interest in the fact that the appreciator can actually read books in this game and whether this can make gamers appreciate the literature presented in the game and its influence on their general interest in books and reading. In this game, the avatar can pick up books and trade or store them. The gamer can read these, which include few pages of narratives [13]. One study on *Metal Gear Solid: The Phantom Pain* analyzes the way by which the game persuades the player to progress the game and how their way of thinking is influenced by it [14].

Interactivity in games studies is defined as "A feed-back loop through which user input affects the behavior of a text, especially regarding the choice of information to be displayed. A feature found mainly in digital narratives, interactivity may be either selective (clicking on links) or productive (contributing text, performing actions), and it may result in the real-time creation of a story" [15]. To be more specific, Interactivity in games can be defined in two ways. Firstly, it is the way the gamer uses the props and objects in the game. For example, opening doors and picking up different things. On the other hand, while other forms of narrative involve their appreciator in an interpretive, sympathetic and symbolic way; video games demand a greater deal of engagement of the gamer. Actions and emotions are closely linked, which can mean that a gamer's experience of a narrative in a game can be quite different from a reader's appreciation

of a story in a novel or in a story. The level of interactivity and the role that gamer might play in the progression of the story differs greatly in games of this study. In other words, in an open world game the gamer is presented with a virtual environment, which allows them to explore and make use of the structure at their own pace [16]. That is, the player can move around in the world of the game and go on its different quests at the order they wish. Technically, there are infinite numbers of quests in this genre. This means that there are different appreciations of the game and the story, since going on quests can level up and can be done in any order. This is also true for online games where the narrative is pushed forward by different participants. Therefore, there can be countless little narratives in open world games [17].

Immersion is a term frequently used in game speech. It can be applied in its both figurative and literal sense. Most games create an illusion of virtual space where the player explores and fulfils the quests and the narrative of the game. As a result, the player feels that they have been transported into another place. The gamer's sensory perceptions, visual, auditory and even kinesthetic will focus on the game and they will 'shut out' the physical world to different degrees. Immersion has also other manifestations in games: 'motor skills, navigation and cognitive problem solving, and social and emotional involvement' [18].

III. DISCUSSION

A. Simulation and Narratives

Cyber culture is a term used much in postmodern studies. It is difficult to determine when exactly it was coined but probably in the 60s or 70s. Cyber culture has come to existence by the aid of the internet and digital communication. McLuhan describes a world while we are suffocated by the sheer volume of information and the way television and telephone are making communication happen is actually transmitting the communicator rather than the message. This will lead to recreation of identity and self in a system and space that is always present and ubiquitous. This culture created by digital media is a simulation of the real world. This means that whenever we are connected to this world we set foot into a simulation. This culture and simulation has resulted in the transcendence of the body, meaning the boundaries of biology and technology have been moved. Examples of this can be found in stories and fictions where one person would upload their bodies into a computer system [19].

Similar to cyber culture, digital culture is another phenomena connected with postmodernism and possible by the advancement of digital technology and computers. The revolution occurred when the analog information was changed into digital and it was processed and transformed into something of an abstract or metaphoric existence. This digitalizing of the information helped transmitting them cheaper and much faster, also eliminating supervision and censorship. This newly formed culture, meant that the information broke free and it was available for the individual in a very low price, if not free. This gave power and also voice to the individual. This notion though is contradicted by the violation of the privacies of the individuals (Weiss, 2001, p. 100). The digital information also provide the opportunity for creating new forms of art since they could merge picture, sound, music and information with interface and interactivity. This meant that the traditional roles of reader and author had altered. This revolution required the users to develop some digital ability in order to benefit this new world and not to be left behind [20].

By using computer programs, simulations were created, which can be defined as a representation of a process or a system. These programs can be used to design many engineering products such as airplanes, cars, buildings, cities and even worlds. Simulation has also attracted sociologist to investigate how it can influence human societies. Many computer games simulated cities, environments and human behavior and societies and communities where the story of the games take place [21].

Simulation, in video game studies, is a genre in which the functions and dynamics of a system is imitated in a digital representation. This take place in the game world and through an avatar, the gamer is able to control the system. The gamer must also respond to the stimuli imposed by the environment. One of the most famous simulation games in the history is probably Sims (2000) which involved doing every task in a residence. The game allows the gamer to create the character, their physique, their ethnicity and manage their lifestyle. Moreover, many sport games can also be considered simulation games since they attempt to recreate these games as naturally as possible. Also, many flight simulation games or driving games fall into this category as well. In other games too, simulation creates the world in which the gamer can utilize the environment and pass through the challenges. Many adventure games, first person shooting games and role-playing games are called scenario simulation games. While the gamer's avatar progresses in the game world by using the mechanics and its rules, the gamer feel immersed since their cognitive and physical senses are engaged in playing it [22].

Puzzle games, as the name suggests, is a genre in which the gamer has to solve different riddles and puzzles in order to progress in the game. The gamer must be good at problem-solving which include a range of different ones such as word completion, pattern recognition, logic and sequence solving. In some games, there is a time limit while others offer the gamer with infinite number of attempts [23]. Inside was one of the most successful games of 2016. It begins with a boy, apparently lost in a jungle, facing puzzles, zombies, corporates and even sea monsters, without a word being spoken. As a puzzle platform game, what you need to do is to pull, push and move objects, jump over them and climb (figure 1). What this game simulates is an apocalyptic world, where science has gone

terribly wrong and workers are essentially brainless, thoughtless zombies who the boy can use to defeat his enemies. The avatar that you control is a little nameless, soundless boy whom you must protect from different perils of the environment. The feelings we have toward the boy is of worry, protection and motherly or fatherly fear for the vulnerable kid. Sometimes the fear is overwhelming in the game, however, you move forward nonetheless because it is a game after all [24]. On the one hand, this game simulates a world, a post-apocalyptic one where everything is either dead, undead, brainless, or trying to kill the boy. This world is two-dimensional, meaning that the boy can only move forward or backward or up and down, but he cannot move to the depth of the environment. This is metaphorically reflected in the characterization of the game that the NPCs that they are either killed or try to kill you. It also simulates the feeling of vulnerability and protection and at times sympathy in the gamer.

Figure 1. Inside (2016). A post-apocalyptic puzzle game

In adventure games, the gamer is positioned in a world where they can roam and interact with some objects and achieve their objectives. These objectives usually involve different steps to be achieved, for example, finding keys to doors, climbing things, escaping traps and killing. The characters can carry things in their inventory and use them when required [25]. The world created in *Metal Gear Solid* (*MGS*) is much more dynamic and natural looking in comparison to Inside. The gamer can move in any direction they want, they can drive vehicle and man weapons (figure 2) and they can choose the angle of the camera to look at different scenes in the game world. They can paint, customize and improve the vehicles and guns they own. In addition, they can choose the order of the side missions they want to complete and pick the weaponry they deem necessary for accomplishing the mission. Moreover, the graphics are more advanced and physical details of the characters are obviously visible. Rather than protecting the character, we control a mercenary boss who aims to kill and complete his mission at any rate.

Figure 2. MGS (2015). Driving cars.

The story telling techniques is simulated in the aforementioned games differently. *Inside* for example, does not use any words or dialogue. Moreover, the avatar only moves in two-dimensional fashion and cannot use the depth of the locations. In *Skyrim*, the gamer can create the avatar; that is, they can modify the appearance, choose the gender and race and even select their attributes. Besides, the avatar will increase their abilities and attributes as the game moves further. This is important in this game since some stages and fights require certain character level, otherwise the player cannot pass the obstacle. *Metal Gear Solid* on the other hand, does not provide the user with character development; however, one can choose and craft weapons for combats which influences the quality of the fights. In *Detroit*, the element of choice and interactivity play a crucial role in the progression of the story without which the story line is actually undetermined (figure 3). *Skyrim* is an open world game, allowing the appreciator a high degree of control over the environment of the game. *Metal Gear* gives the gamer some freedom but within the mission, otherwise, how the story moves on is out of the control of the player. *Inside* restricts the movements of the character in only two dimensions, while in *Detroit* the gamer, benefitting from great interactive storytelling, can move the storyline with their decisions in different ways.

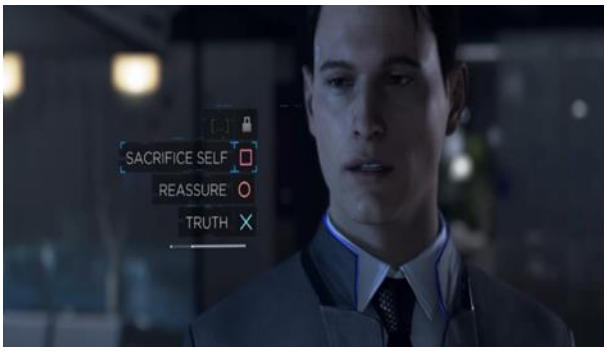

Figure 3. Detroit (2018). Making important choices in the game.

Elder Scrolls: Skyrim has simulated a fantastical world with mythical creatures and mystical occurrences. The gamer has much freedom over the quest they need to complete. It means that there are so many side quests in the game that can be abandoned or finished by the gamer. The vast world of the game allows the player to explore and hunt down treasure or other valuables. Furthermore, the game provides the opportunity of creating a character, choosing the race and even abilities (figure 4). It simulates a world back in history with sword fights and interacting with monsters and NPCs. However, the character in the game does not have a voice and never speaks, despite the fact that you can choose the dialogues. This game is also available in first person mode. These are the games in which the gamer perceives the environments and events through the eyes of the character in the game. This method of presentation provides the highest degree of immersion in comparison to other genres [26].

Figure 4. Skyrim (2011). Creating characters. Choosing non-human characters.

Detroit: Become Human depicts a futuristic world where the gamer assumes the role of a robot. In this world though the gamer has some control over the characters. Their physical features have been determined in advance and we can only move the avatar in certain directions. In this game however, we can make choices in different situations which may have consequences in the future of the characters. These choices vary greatly so that they determine many endings for the story. Unlike other games, when the character dies, the narrative can continue with the remaining characters.

All the games above are a kind of simulation of the real world. Some have tried to recreate the humans and creatures in the game world most similarly to reality by using advanced graphics provided by sophisticated graphic engines while Inside uses a much more simplistic representation of the world. This by no mean is a disadvantage, but just what the genre and the story necessitates. Whether all video games can be called simulation is an issue that can be investigated. Even very simple games such as Candy Crush which only represents movements can be considered a simulation. This, however, is not the interest of this paper.

B. Interactivity

To understand the concept of interactivity in games, one might need a definition and history of the term. Interactive fiction is born out of computer and digital sciences. It designates a form of narrative where a simulated world is presented to the user who can command characters and some events. Some of these narratives are text-based, meaning the user would type words or sentences to which the simulation would respond [27]. For example, Zork (1977, Infocom), one of the first text-based games, benefits from excellent text recognition technology. In this game, you keep typing the information you need in order to collect as much treasure as you can [28]. Interactivity then is a cycle where the information is put into the system, to which the system responds and the games gives another command considering the given data. This is the feature which enables real time story telling [27].

However, whether computer games are narratives is not without controversy. For one thing, it is a new area which experiences rapid changes every day by the aid of advancement in technologies, graphic designs and gadgets. Also, games are combination of different arts and techniques and many disciplines intertwine in them. Moreover, since there are many different genres of games and numerous platforms such as PCs, game consoles and mobile phones, defining them and creating them proves to).be demanding. The amount of freedom that games allow for the gamer is also a matter of disagreement among theorist. To some, it is too little freedom and too much structure and gameplay. Hard-rails, for example, are the games in which the gamer does not have much freedom and simply experiences going through a pre0designed structure. Soft-rails on the other hand, give the appreciator more autonomy in the game world. For instance, GTA (Rockstar, 2001-2015) are present the gamer with a much more intricate and responsive environment in which the avatar can roam freely [29].

In comparison to cinema and literature, games are the next step evolution in creating an ideal narrative: a fully responsive and immersive virtual reality with the great

complexity and psychological richness on the par with the literary canon. Although it is still a long way to reach that target. What occurs during video games is something that Murray (1997) would call 'procedural authorship' which is creating settings, rules and preconditions to create a narrative experience for the gamer [30]. Aarseth believes though that games, similar to hypertexts are better comprehended in a cybernetic system as opposed to a storytelling systems. He coins the term 'ergodic literature' which refers to the works which depend heavily on cooperation of their reader in order to create their structure and shape [31]. Hypertext is a series of text fragmentations, linked to each other that allow the reader to explore them on their own pace and wish. This is the foundation of internet systems and electronic data basis, but narratologists also exploited the abilities [32].

Spatial story telling simulates struggles in order to reach different spaces, conquer them and interact with them. These works depend less on character development and more on creating challenges for the gamer. So designers use architectural narrative, meaning that they may not tell stories but design words in which narratives become possible and make sense. Game spaces include events, which can create narratives and give information to the gamer which they can use to make progress in the game. Some critics believe movie cut-scenes, which are non-playable parts of the game, are the most traditional form of storytelling in games. These games though, since they create a clear distinction between interactivity and storytelling, can hardly be called interactive storytelling. Others on the other hand think these scenes can be used as creating artistic effects [33].

Cut-scenes are sequences that provide a break between the gameplay and the storyline of the game. They are what make games more cinematic and they follow the convention in cinema and television, hybridizing games. These cut-scenes, which soon became an accepted tradition thanks to enhancements in graphics and improvements in storage, changed the attitude of the gamer from and active player to a passive watcher. These moments improve the gamer-game relationship since the role of the user alters from player to spectator. There are different cut-scenes: 1. live ones that include live performing actors in front of camera. They are either recorded for the game or have been taken from other films. 2. Hand-drawn cut-scenes that have been taken from Japanese manga tradition. 3. Cut-scenes that use computer generated pictures, usually produced by the same engine that creates the game [34].

Cut-scenes have different functions in games depending on when they are used. Some are played at the beginning of the game which create certain expectations in gamers. They introduce the environment, characters and the game genres. They also show off the power of game graphics and play a great role in engaging the gamer from the very first moments. Played in the middle of the game, sometimes they function as a conclusion of the level and provide the gamer with some sort of break/award, creating a sense of accomplishment. In more story-based games they explain something, introduce new characters. In sport games they are mainly used to display the replays of the events occurring during the game. Finally, when used at the end of the game, they serve as a conclusion and explanation of the end of the story and what might happen next to the characters [34].

The games of this study present the player with different degrees of interactivity. The line graph demonstrates how interactive these games are and in what aspects the gamer can make changes. For the ease of understanding, numbers were allocated to different criteria in interactivity (see figure 1).

The first category is the freedom of movement. Number five in this category means that the player can basically go anywhere in the map, but the places that are impossible to reach, according to the laws of the game, for example, a high mountain with too steep s, is naturally impossible. As can be seen in the graph, *Skyrim* provides the gamer with most freedom. The gamer is not restricted from some areas because of the story of the game. This game gives the player total autonomy to roam in the map, and only the physical rules of the game world hinder the avatar to reach some areas. Although *MGS*, (*Meta Gear Solid)* lets the character of Venom, the protagonist, roam the area of the mission freely and choose his angle for attack or observation, it limits him to that area and he cannot leave the premises or he will fail the mission. The same thins is true about *Detroit* on being restricted to an enclosed area. Moreover, the gamer cannot move and job or attack freely in this game. The least amount of freedom in movement belongs to *Inside* in which the gamer can only move in two directions in game world.

Next category is character creation, which is, building a character by choosing their appearance, race, and mental and physical abilities, where *Skyrim* comes on top, giving the gamer the chance of choosing one of the races who populate the world of the game and consequently possessing different abilities and aptitudes. Other games on the other hand, define the characters in all aspects and the gamer only controls them.

Considering changing the story and plot-line, *Detroit* is the leader. It provides the gamer with great freedom in interacting with objects and props. This goes so far that the branching storytelling comes to about 85 endings (Hornshaw, 2020). Other games, *Inside*, *Skyrim* and *Metal Gear Solid*, while providing some options for the gamer at times to do the details alternatively, they do not create changes in storyline. However, the order of the story and its event can be changed in some games. For example, in *Skyrim*, the gamer can go on side quests in the order they wish. This is much more limited in MGS because the gamer can only choose the order of the mission they go on and conquer military camps. Gamers are deprived of this feature in the other two games.

Overall, *Skyrim* occupies the greatest surface in this diagram, making it the most interactive among the four. This game offers great agency to the gamer, as in creating the character from the

scratch, freedom of movement in the map and the ability to customize the character. It does not however allow much alteration in story. *Detroit* on the other hand, despite its limitation in movement and choice of character, a great autonomy is given to the gamer to create and change the storyline and it even allows death of some characters with which the game will not end.

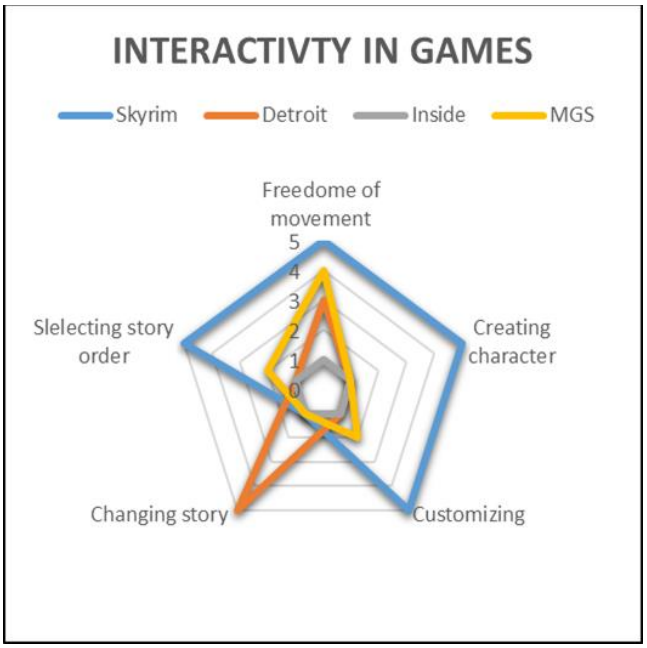

Figure 5.. Interactivity in games

IV. CONCLUSION

Video games were created in a post-modern era were the discussions and papers on post-modernism had been attracting a lot of attention in academia and had shown their manifestations in different areas. As simulation of reality, these games provided a great agency for the appreciator and allowed them to be a part of the narrative. In more recent years, with advancement in computer programing, sophisticated graphics and more powerful graphic engines, games designers have been exploring new horizons in games and especially their narrative. This meant that some game would allow the gamer to play a greater role in the narration of the story. The games of this study form a spectrum of more traditional games, in their narrative, gameplay and narrative (*Inside*), the one with more freedom in taking action and fulfilling missions (*Metal Gear Solid*) to the one with open world (*Skyrim*) and the game that offers the most significant role to the gamer, that is changing the story more dramatically with the possibility of more than eighty endings (*Detroit*). By examining the elements of post-modernism and narrative, such as simulation and interactivity, this study concluded that these for games are typical examples of post-modern narrative and by extension and more research, most video games can be called post-modern narratives.

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