Do You Play or Do You Watch? Exploring the Dichotomy of how We Experience Video Games in The Streaming Age

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Abstract

Video Games have always been an interactive medium. There to be played and experienced viscerally through an individual's connection via joysticks, gamepads or mouse and keyboard. This is gaming's greatest strength; this ability to empower the player to feel something above and beyond their normal, everyday emotional state; to allow them to become something else through the process of playing a game. But the ever-burgeoning nature of passive media delivery sites such as YouTube and Twitch has placed gaming's very essence under threat. The ability to play a game is becoming usurped by the ability to watch it; the experience of playing a game is becoming synonymous with the experience of watching it. As we move forward into a world that is ever more governed by digital delivery, has the notion of play become undermined to such an extent that it is now more usual to hear of people experiencing new games vicariously through second hand YouTube streams rather than playing them for themselves? Is this a good thing? Does this movement from a participatory state to a non-participatory state mean that our involvement with games and their inherent design is fundamentally changing? How do we ensure, as possible designers of interactive media, that our work is being experienced as it was intended? Is the future one of passive acceptance or interactive rebellion?

Table of Contents

Table of Figures

Introduction

In order to try and explore the questions posed in the abstract, it is worth first widening our field of research into other forms of media, where the passive gaze and pleasure gained from watching has been more fully explored. This will be then compared against the fundamental differences that games offer against other forms of media and whether this difference is crucial if games are to ensure their singular identity is maintained. Further to this, research has been carried out to examine whether there are any kind of physiological effects on people when they experience a game second hand or first hand. Data has also been collected on a range of people from multiple backgrounds on their personal gaming habits and their personal engagement with YouTube, one of the largest digital content providers of video streams. It is the intention of this research to try and begin to determine why people are consuming games through second hand media.

> *"Understanding players today is very different from the standard practice even a decade ago… video games have become more akin to services than simple videogames." (Salmond, 2017)*

As games have evolved from simple arcade experiences in their formative years, the technology that has allowed this evolution has also been taken on board by other media. The impact of the internet and fast and widely available broadband has been key to this. Games, television, films, books and music have all had to adapt to the acceleration of these new technologies and delivery methods. With passive media, this has resulted in new ways to experience the same content; watching a film on your phone whilst commuting to work may seem like a new model of consumption, but it is still just simply watching. The interaction between the viewer and the content

has not changed. Likewise, reading a book on an e-reader is again simply changing what you are holding in your hand. The same cannot be said for video games. Watching a stream on YouTube whilst commuting is a fundamental change to the consumption of this media. You are now no longer playing, you are watching; the interaction and impact has become something else. Have games changed to adapt to this? Are they now designed with this viewership in mind? As Salmond notes above, understanding the players themselves is key for modern video games to be a success and part of this understanding is the realisation of the possibility that people who may be engaging with the game may not be players at all, but viewers of other players. Where does this leave the current generation of game developers and their relationship with their audience?

Understanding Why We Watch

The notion that viewers gain pleasure by the sheer act of watching is not a new concept. Laura Mulvey, in her essay 'Visual Pleasure and Narrative Cinema' said *"The cinema offers a number of possible pleasures. One is scopophilia (pleasure in looking). There are circumstances in which looking itself is a source of pleasure, just as, in the reverse formation, there is pleasure in being looked at."* (Screen, 1975) The interesting thing to note with this concept, that of both looking at and being looked at, is that this can in some way explain the relationship between a YouTube celebrity and those that watch them. Pleasure is derived by both parties in this relationship. However, in a survey of two hundred and seventy-five people of all ages, whilst seventy five (27.3%) people stated that they watched full play throughs of games on YouTube (figure 1), only forty one (14.9%) of them actually found these viewings comparable to the real thing (figure 2).

This poses an interesting question; why do thirty-four people watch full play throughs of games on YouTube when they do not consider the experience the same as playing the game themselves? Further, why do forty-one people consider the experiences to be similar? We will examine later what makes a game unique and why this shift to passive viewing is changing the audience's interaction with games. At this juncture, there is no doubt that this is happening. The statistics behind YouTube and the volume of views that videos of games are receiving demonstrably show this. Figure 3 shows the list of the most viewed video games in May 2015.

This is clear evidence of the volume of gaming media being consumed and being created by the audience for these games. The two games at the top of the list, Minecraft (*Mojang, 2009*) and Grand Theft Auto 5 (*Rockstar Games, 2013*), gained nearly six billion views alone in a single month, and 99.9% of this content was user created. This is not content created by the developers of these games, this is content conceived, created and consumed by the players of the games themselves. In the survey carried out for this paper on the two hundred and seventy-five people, the reasons given for watching YouTube streams varied from, "*It is similar to playing it yourself, you experience a majority of what developers want you to experience just as much,*" to simply, "*Its (sic) fun to play and watch."* Of the two hundred and seventy-five people surveyed, one hundred and thirty two said that they watched gaming channels on YouTube and one hundred and seven said that they subscribed to them rather than just tuning in to them on an ad hoc basis. The interesting thing of note here is that seventy-three of those that subscribe to gaming channels still play games on a daily basis and of those, eighteen play for more than four hours a day. This might show that for these people, the consumption of gaming, both through watching and playing is perhaps the same thing and the difference between

watching and playing has become lost. To examine this further, let us examine what it is that a game can offer that make them unique from other media.

Understanding Why We Play

To try and understand the fundamental differences between watching a game rather than playing it, we must first try and understand what exactly makes a game and how a game is different from other creative media. In their book Rules of Play: Game Design Fundamentals, (Tekinbaş and Zimmerman, 2003) define a game as '…a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome.' They argue that a game needs to be a system that players interact with, that offers conflict through its rules and that leads to a quantifiable outcome. To take this concept a stage further, Kathryn Isbister, in her book How Games Move Us: Emotion By Design (2016), discusses how games offer a series of meaningful choices, that games 'offer players the chance to influence outcomes through their own efforts.' At the heart of both definitions of what a game is lies the central conceit that what makes games individual, what makes them stand out from other media, is their strict adherence to player interaction and their isolated ability to offer the player choices that determine how the experience before them plays out. According to both Salen and Zimmeren and Isbister, removing the notion of rule based interaction and the possibility of meaningful choices is to remove the very essence of what a game is.

It is possible to argue that video games are the natural evolution of all forms of media, being that they encapsulate and utilise almost all elements from the media paradigms that have thus far been created. Video games take the earliest notions of

play and merge them with almost all advancements in technology that have shaped other media; they encompass music and rhythm action; they incorporate design, both two dimensional and three; they incorporate architecture and spatial awareness; they possess elements of film, television and theatre and they are able to tell narratives in ways that no media before it can.

Video games allow the player an ability to interact with them, to generate change and affect their outcomes, and can generate emotions that no other form of media is able to. As Isbister states, *'The capacity to evoke actual feelings of guilt from a fictional experience is unique to games.'* (Isbister, 2016) She argues that although film and other media can generate emotions, they do not charge us with feeling guilt or pride like games are able to, as games are able to put the player in the central role of the text and generate actual feelings of responsibility. This is unique to games, and in particular, Video Games.

A study into the physiological impact of playing and watching video games was carried out by Steven W. Cole, Daniel J. Yoo and Brian Knutson (Cole, Yoo and Knutson, 2012). This study used fMRI equipment to study the differences in the brain between someone playing a game in comparison to them watching. Their findings did show that playing a game triggered stronger responses, especially during *'player involvement in shaping the event stream (i.e., interactivity)… required to substantially engage motivation-related brain circuits.*' (Cole, Yoo and Knutson, 2012)

To explore this, Lucas Pope's game *Papers, Please* (3909, 2013) charges the player with the role of becoming a border operative in a fictional Eastern European country in 1983 that has just reopened its borders to foreign nationals. As the player, you and your family are moved to a new home near the border where you must report for

work at nine o'clock in the morning every day. Your role in the game is checking the paperwork of anyone that wants to enter the country and ensuring that they have the required documents. For every person you successfully admit or turn away, you are awarded five credits. Turn away the wrong person, or let someone with incorrect papers in, and you are docked five credits. You must earn enough each day to pay the rent, feed your family and pay for any medical bills or other expenses that start accumulating. As the game progresses, the amount of papers you must check increases, meaning it is harder to meet your daily quota to simply keep your family alive. On top of this, you will encounter situations where couples fleeing dictatorships will try to enter the country, but only one of them will have the correct papers. Do you let them both in and take the financial penalty and the impact this may have on your family, or do you stick to the rules and turn one half of the couple away? The game builds upon this foundation as people try to bribe their way in and the feeling of guilt and corruption grows within the player. You are complicit in everything that happens. You are responsible for sending people to perhaps certain death. You are responsible for the well-being of your family. You are responsible. This is what video games can do.

Research and Findings

In addition to these esoteric feelings that video games can engender in their players, and as previously noted in the study by Cole, Yoo and Knutson, games can have a physiological effect on their players. This could be considered the fundamental difference that games have in comparison with other media. Whilst the previous

study was focused more on brain activity, the scope for this study was much simpler and direct.

The study was conducted on five male gamers aged between 18 and 24. The study asked them to play a sequence from two separate games; the opening fight scene in Bayonetta (Sega, 2009) and the opening section of The Silent Cartographer from Halo: Combat Evolved (Microsoft, 2001). Whilst playing these sequences, a heart rate monitor was placed on the subject to track any changes in their heart rate. The location for this was one of the classrooms at the University Centre Grimsby. To have no external distraction, the monitor was placed facing away from the door and the blinds on the windows were closed. Each candidate was given five minutes to ensure they were rested before starting to play or watch to ensure a satisfactory resting heart rate was obtained. The controls were explained before play was started and the difficulty level was set to normal

The results can be seen in the following table:

	Bayonetta			Halo: Combat Evolved		
	Starting Heart Rate	Ending Heart Rate	Maximum Heart Rate	Starting Heart Rate	Ending Heart Rate	Maximum Heart Rate
Subject 1	98/69	98/88	98/88	98/65	97/75	98/80
Subject 2	98/102	98/109	98/115	98/105	98/108	98/111
Subject 3	94/67	98/80	98/87	99/76	98/87	98/90
Subject 4	98/70	98/82	98/86	98/68	98/74	98/78
Subject 5	99/87	99/93	99/106	98/96	98/107	98/112

Table 1

Even though no physical activity was undertaken during the experiment, all five participants experienced an increase in heart rate whilst playing both games. The sequences chosen were intense action sequences but no context was given to the participants regarding what was happening in the game narrative. This may have been a contributing factor, but none of the participants said they felt confused by what was occurring.

In the first test, whilst playing Bayonetta (Sega, 2009), the range of heart rate increase was between six and seventeen beats per minute. However, all participants experienced a higher spike whilst playing the game, with these ranging from thirteen to twenty beats per minute. The participants were then given a further five-minute rest to allow their heart rate to return to resting.

During the second test, whilst playing Halo (Microsoft, 2001), the range of heart rate increase was between three and thirteen beats per minute. However, all participants experienced a higher spike whilst playing the game, with these ranging from six to sixteen beats per minute.

Subjects 1 and 5 were also tasked with watching a play through of the same sequences and the following results were recorded:

	Bayonetta			Halo: Combat Evolved		
	Starting Heart Rate	Ending Heart Rate	Maximum Heart Rate	Starting Heart Rate	Ending Heart Rate	Maximum Heart Rate
Subject 1	98/71	98/74	98/75	98/65	98/68	98/68
Subject 5	98/96	98/98	98/98	98/93	98/98	98/98

Table 2

Due to time constraints, the study was not able to record all participants watching the game, but to try and keep an appropriate level of balance, subject 1 first watched the sequences before playing them, whilst subject 5 played the sequences then watched them.

In the first test, whilst watching Bayonetta (Sega, 2009), the range of heart rate increase was between two and three beats per minute. In this instance, only the first participant experienced a higher spike in heart rate which was an increase of four beats per minute. The second participant suffered no spike over their final heart rate. The participants were then given a further five-minute rest to allow their heart rate to return to resting.

During the second test, whilst watching Halo (Microsoft, 2001), the range of heart rate increase was between three and five beats per minute. Neither participant experienced a rate higher than their final heart rate.

There was a difference in the physiological effect on the participants between watching the games and playing them. Although comparisons can only be drawn between subjects one and five, there is still evidence here that playing a game has a greater effect on a player than simply watching. The participatory nature of taking control and being responsible for the action in front of you translates to a heightened heart rate in all participants. Even though no external stimuli beyond the game being played were used, the increase in heart rate shows the effect playing a game can have.

A greater level of accuracy could have been obtained by using a bigger sample group and letting all of them both watch and play and that is something that further study could lead to. At this stage, it is apparent that there is a greater effect on

people when playing a game rather than watching it. Further information could be obtained by measuring people's physiological state whilst watching games being played by the favourite YouTube presenters or Twitch streamers. It is possible that the lack of commentary whilst watching the games being played led to a lack of engagement and thus they did not experience the same effect as they would when watching online content.

Conclusion

"Game designers have to cope with much more interaction than the designers of more linear experiences… We give the player a great deal of control over the pacing and sequence of events in the experience." (Schell, 2008)

The experiences that video games can create are specific to them and they are generally built upon the notion that the person experiencing them is the person with the controller in their hands. As Schell points out, game designers have to consider far more possible interactions with their creation than designers of more linear content. This wealth of experience is borne out by the small sample of research carried out for this paper and by that of Cole, Yoo and Knutson. The physiology of the player is more engaged when they are playing a game and experiencing for themselves the experiences that the designer has created. This can be taken on a step further when games that are heavily systems based can lead to player experiences that simply cannot be replicated by merely viewing them.

It is important to try and understand the recent paradigm shift in video game consumption, that of the rise of YouTube "Let's Plays" and other forms of streaming content, and what effect, if any, it may have on video games themselves. Although beyond the reach of this paper, it has been demonstrated that playing a video game

does have an effect on the player, whether in creating various emotional states or physically engaging specific parts of the brain. A video game is fundamentally designed to be played, and to reduce a video game to a passive media is to take a retrograde step away from what defines and differentiates them. It is hard to fully reconcile the two activities, and even though in this limited study only forty-one people described watching a game the same as playing it, we can only surmise what this figure may be in years to come. Of that forty-one, sixteen were aged twenty four or under, and as YouTube and other forms of streaming media consumption continues to evolve, it may be the case that this figure will continue to grow and the consumption of video games may fundamentally shift from our existing notion of what it is to play a video game.

Table of Figures

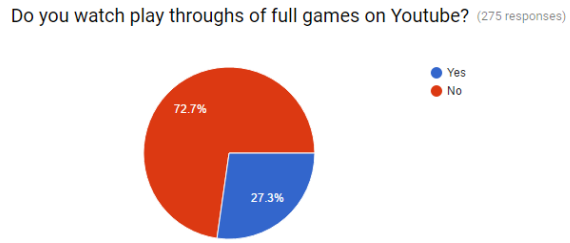

Figure 1

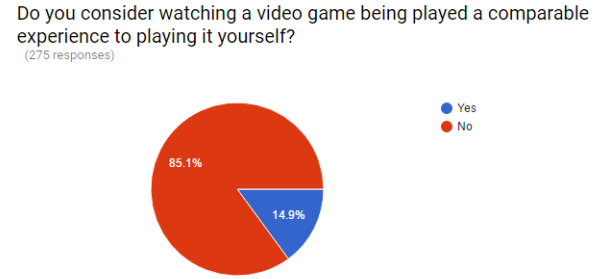

Figure 2

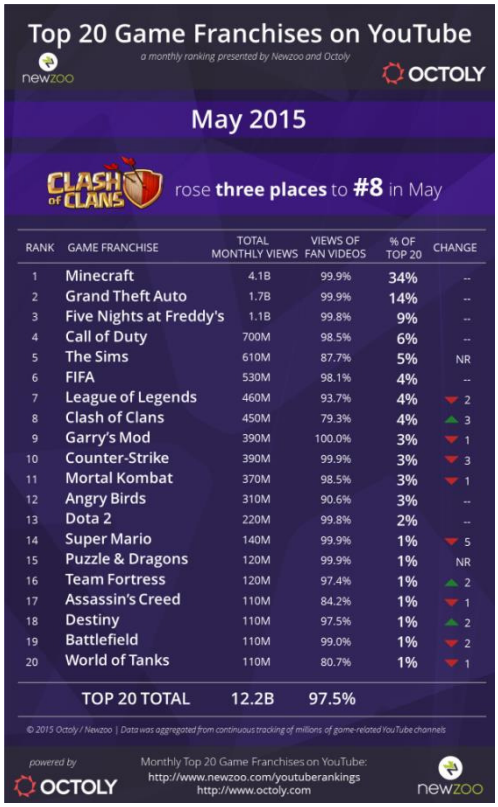

Figure 3 (Newzoo, 2015)

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