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# **An Analysis of the Role/Impact of the: Magic Circle in Video Games**

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**Dundalk Institute of Technology**

*In partial fulfilment of the requirements for the degree  
BA (Hons) in Communications in Creative Multimedia*

**May 2019**

**School of Informatics and Creative Arts**

Supervisor: Rory Walsh

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Communications in Creative Multimedia is entirely my own work, except where indicated by referencing, and that I followed all good academic practices. I can confirm that I did not make use of any published or unpublished work without acknowledgement and that all sources used in my research are clearly referenced, in both the text and the reference list. I understand that plagiarism is a serious offence and that I am bound by the Academic Integrity Policy and Procedures in vigour at Dundalk Institute of Technology.

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## Abstract

This dissertation is a study of the *magic circle* in relation to the gamespace which the player uses to play video games within. Researching how *play* in general is formed by then exploring what makes a video game possible, further examining its capabilities of how ‘immersive the player can become whilst playing their video game’; detailing the magic circle as less of a metaphor; but more as a construct through analyzing how games are designed using their traits such as view perspective, level design, and story to pull the player in. The intention of this paper was to have a broadened perspective on all aspects of the player's experience within the video game to get as much interesting data as possible. Through a survey conducted with over 190 responses, as findings showed that the magic circle is more of a construct revealing that players find open world video games, fourth wall breakages, and fictional worlds more immersive amongst many other traits that a video game uses. Interviews were then conducted with two game-theorists and a psychologist of video games based on the data gathered, questioning their views from the survey results; interestingly some theorists had a two-sided view on whether or not immersion is capable of enacting a complete magic circle experience for the player.

Keywords: The Magic Circle, Play, Video Games, Immersion, The Player, Game Theory, Diegetics, Classic Game Model.

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“Play cannot be Denied. You can deny if you like, nearly all abstractions: justice, beauty, truth, goodness, mind, God. You can deny seriousness, but not play. Play only becomes possible, thinkable and understandable when an influx of the mind breaks down the absolute determinism of the cosmos” John Huizinga (*Homo Ludens - Chp 1: The Significance of Play*, 1955).

## **Chapter 1: Introduction**

The primary aim of this dissertation is to demonstrate how the magic circle; a psychological metaphor/space immerses the player even further into their video game by creating a construct of it using game theory. Such as the classic game model by Jesper Juul featuring: its use of level design, gameplay, and story in relation to the game space whilst playing a video game. To study the player's relationship with video games further as part of the magic circle, the aim is to link immersion through an analysis of game theory with user interfaces (UI), diegetic elements, semiotic meanings, and the model of immersion integrating all studies together with the goal of forming meaning to the magic circle metaphor. As the basis for this study contemporary and non-contemporary AAA video games that portray immersive themes such as psychological warfare and history are used as they contain more in-depth themes to compare the magic circles overall effect thus adding to the growth of immersion for the player and their relationship with the video game.

This hypothesis will explore detailed game theories that surround the magic circle, using game theorists such as (Salen et al, 2003) metaphor of the circle and (Juul, 2003, 2008, 2011), work around game theory with the magic circle of how the player enters to play a video game thus forming the circle of immersion. All theorists studied throughout have extensively created a construct of the magic circle multiverse using psychological and static studies with renditions around how immersive the magic circle can make a player analyzing the traits that make a game through: play, rules, negotiation, and fiction, relating to the player's overall experience. Firstly the magic circle can be classed as either a metaphor of static as mentioned or as in video games it's another word for “a pre-existing gamespace creating a dichotomy between what is real and imaginary” (Copier, 2007). This research intends to demonstrate the magic circle from both sides: (real) as construct with game theory and (imaginary) as the psychological metaphor. Demonstrating a greater flexible outlook thereafter concluding that the *magic circle* is more than a mere circular metaphor but rather it is a circle of immersion due to the players overall experience with the video game. In-hindsight forming a construct using the fundamental traits of playing a video game through the players use of play, with the

overall objective of defining magic circle as a “powerful space, investing its authority in its actions of the player creating new and complex meanings that are only possible in the space of play” (Salen, 2003).

To further create an analysis of how video games can be immersive experiences with meaning and structure - integrated with immersion this paper also uses (Breda, 2008) model of immersion to demonstrate how engagement adds to the magic circle player experience. The concept of immersion is then used and broken down into specific categories depending on the level of immersion the video game represents. This is determined by other theorist's studies of game components which are 'Diegetics' and 'Semiotics'. These two theories help sum up the immersive player experience within the magic circle. To understand the look and meaning of the video game, using (Fagerholt et al, 2009) (Stamenkovic, 2016) and (Conway, 2010) specifically is researched using their Diegetic (UI) game theory and fourth wall studies around the magic circle using elements with semiotics, player relationships and metaphor meanings. Overall the objective is to show how all these features make up the magic circle whether psychological or physical creating a deep immersive environment within the player's overall experience with the video game. By utilizing these traits one can define what elements of the video game defines the overall immersion/experience for the player. Specifically, in more detail, the three video games studied will induce an extensive textual analysis of their immersion, through the use of their: gameplay and design, with the objective of adding meaning to the overall magic circle concept within particular video games that portray unique traits such as using real world themes mixed with AAA styled gameplay.

An overview of the chosen games are as follows:

1/ Red Dead Redemption 2: Is set in an expansive high graphical setting with over 200 species of animals, within an open world set in the fall of the western age. The player plays Arthur Morgan, an outlaw on the run as he is a member of the notorious Dutch Van Ler Linde Gang. (Variety, Magazine 2018) (GQ. Magazine, 2018).

Due to RDR2 being such a modern open world game pushing the boundaries in technology and advanced AI, it has many of the ingredients needed to immerse the player within the magic circle just by graphics alone. Even the games design and psychics has been made to a complete overhaul from the previous game over 8 years ago with the developers stating: “This overhaul was made to take full advantage of the current generation hardware, allowing such improvements such as realistic flowing water that disturbs naturally around animals,

character, objects. All of this blends together to create a fully simulated natural world that abides by the rules of the real world”. (VG247, 2018)

2/ Spec Ops The Line: Is a 3rd person shooter based in a fictionalized Dubai where the player plays Captain Martin Walker a member of the US Army Delta Forces: using real-world concurrent themes of the consequences of war, Spec Ops is: a video game that questions the players obsession with violence and military shooters by forcing them to communicate “virtual violence that the military shooter has instilled in them”. (Smethurst, 2017)

The reason for choosing Spec Op’s The Line for this study is due to its complex physical narrative that creates a meaningful experience - questioning the player’s actions, making the magic circle a more immersive sphere. For example Heron and Belford within their paper ‘Do you feel like a hero?, Externalized Mortality in Video Games’ speaks in there paper about certain video games that have a *moral decision making system* that effects the player externally. However not all games have this as most lack the weight of the player feeling genuinely reflective for their actions, however Spec Ops: the line creates a meaningful experience within the magic as Belford stated its “clear that at least for subset of players that *moral message* within the game has allowed for deeper engagement with the players relationship to the title” (Heron, M Belford, 2014).

## Chapter 2: Literature Review (Magic Circle: The Concept of Play)

Classed as a metaphor the magic circle is an “unseen space that acts as a “temporary sphere” (Huizinga, 1955), where a person or persons can step in and out of the space at any time. This all depends on the medium of course - regardless both are all interlinked to create this circular boundary or “protective frame which stands between you and the real world” (Salen, 2003). Known as the magic circle a term originating from Dutch philosopher *John Huizinga* who emphasized that all *play* moves and has it's being within a playground: marked off beforehand either materially, ideally, or deliberately stating: “The arena, the card table, the magic circle, the temple, the screen, the tennis court, the court of justice etc. are all in form and function playgrounds” (Huizinga, 1955).

Huizinga's theory of the magic circle is a focus on general-play such as sports. However the fundamental concept of 'play' itself is what relates to the overall medium even today with the advent of advanced technology. Huizinga was also very adamant to state that play is a type of arena, boxed in from the reality of life around us. This arena is also another word for space or gamespace, sphere, or bubble which could possibly relate to the psychological and physical space making up the environment which is widely associated to being called the magic circle - a pregnant word which literally means “in-play” (Huizinga 1955). Classed as a static and overly formalist for some (Consolvo, 2009) and culture induced by others (Copier, 2007), or even more surreal being an extension of the fourth wall (Conway, 2010). Either way the magic circle derives from the concept of *play* and perspective of *space* creating boundaries that center around the video game built by rules, fiction, participation, and much more. Building this type of immersion and exclusion from reality within a particular space similar to being in a sphere. In other words “The boundary or frame that defines the game in time and space” we call this the magic circle boundary. This is the frame that surrounds us when playing the video game; as it is what surrounds us as the player. Thus this affects the player by communicating with them consciously and unconsciously. (Salen et al, 2003)



Figure 2.1 Queen Nefertari Playing Senet

Games, in general, are a form of *play* that date back thousands of years from board games such as Senet played Queen Nefertari in Egypt 1250 BC: to hopscotch and football. As play has been produced from many mediums from past to present thus eventually transitioning to digital via the internet. As video games started with first ever game known as ‘Space Wars’ in 1961 (Juul, 2011). Although technology has changed, the setting and space for the player hasn’t, as the concept of what makes the magic circle have stayed the same as changes of play have only adapted and transitioned to modern devices such as smartphones, consoles, and PC’s. Play is an original form regardless of the medium that’s used to create the boundary or frame as mention “every game exists within a frame: a specially demarcated time and space” (Salen et al, 2003), where normally the person or persons enter this space to play the game or participate in the event. Participation also occurs as the player is partaking in the video game by negotiating the rules by simply entering the space this, can be either fictional or real. For example watching a real football game: the audience must be seated in the arena or when playing a video game within a fictional world the player must go to the objective marker on

the map. Whilst inside this space (play) occurs with player/audience participating in the event thus creating this boundary known as a ‘temporary world’ within the ‘ordinary world’ as play and games are typically thought as ‘closed systems’ of play which formal rules “allow players to operate within the magic circle outside the cares of everyday life” (Huizinga, 1955). Ranging from courthouses, religious spaces to video game-spaces and so on evoking a sense of the player constantly stepping through a sort of “looking glass” (Taylor, 2007), forming what we know as the typical metaphor associated with the magic circle as psychologically with the concept of play, these can make the circle seem actually magical.

## **2.1 The Magic Circle: within Video Games**

There are two particular features associated with the gamespace in which a player uses as video games are made up of negotiation, engagement and play (Juul, 2003). For instance to play the game requires the player to use “hand and eye coordination to and for the event to function as a gamespace” (Crawford, 1982). Thus the player is then *negotiating* with the rules and fictional worlds of the video game which occur that make up the game’s structure creating imagined fiction or non-fictional worlds. Regarding fiction in video games, it’s not universal to all games as the video games for this study use some sense of real-world themes such as human conflict, factual history relating to the repercussions of the players actions. This means that the fundamental aspect of the magic circle for the basis of this study is to analyze the video games role within the magic circle. As such this firstly requires an “active engagement from an external agent (player) in order to function” (Smithurst, 2017). This also requires an inhabited game world that allows the player to play the game - thus creating the circle of immersion for the player. For the magic circle to be immersive, the player must also step into this boundary also known as the Gamespace. As a metaphor the magic circle can act as a “marker of time, like a clock: it simultaneously represents a path with a beginning and end, but one without a beginning and end” (Salen, 2003). A ‘marker of time’ that perhaps goes

beyond the confines into possibly magical confines this would be where a psychological response might occur. However as “Play” the magic circle can be more than a mere psychological or physiological phenomenon as it can go beyond the confines of “physical and biological activity” (Huizinga, 1955). Although this is hard to determine as it is in other words is mentioned by Salen and Huizinga as they are describing the magic circle as a “Psychological Space”. A marker of time in which the game can “exist” (Grimshaw, 2013). Temporarily excluded from the reality of the outside world, similar to Huizinga’s emphasis that the magic circle is more than a mere “psychological phenomenon” (Huizinga, 1955). This is true in the physical sense however as mentioned psychology has a major part to play when comparing the brain especially within the realm of creating immersion to form the magic circle; as most importantly the membrane plays a significant role within video games: as a majority of studies have shown when studying the brain activity with pattern recognition it was found that “significant use of brain activity due to overall environmental and gameplay effects the brain” (Bakaoukas, 2015). This creates a “shield of sorts protecting the fantasy world from the outside world” (Castrova, 2005). Building a magical circular sphere, with boundaries, frames surrounding the player whilst playing their video game. Likewise this makes the magic circle complex as it can then move and change as Huizinga states that “all play moves” “before being marked off” (Huizinga 1955). This gives players the freedom to step in and out of their sphere or change location whenever they choose this could be by the player playing a Nintendo DS on a bus or watching a movie at the cinema, which is why the magic circle is so flexible. This can therefore be understood further with an analysis of understanding the fundamentals of game theory of what makes video games specialized around it with models of immersion, using the *classic game model* and *semiotics* giving the circle much more meaning and depth.



## **2.2 The Classic Game Model**

To understand the concept of what makes a video game theorists such as Jesper Juul, (Juul, 2013) has constructed: *The Classic Game Model* featuring the necessary components fitting the context to be a video game through its use of transmedia stories across multiple or singular game medias - however for the basis of this study the focus is on singular (single player games) for the specific two games as they contain the story and design required to immerse the player. Specifically this study will use the classic game models 6 defining features to examine what games are made of. As this can then make us understand the video games immersion relating the model to the overall gamer experience creating a construct of the magic circle for the player to which by building a guide of sorts of how the player interacts with the video game inside the magic circle game space therefore showing how the player interacts with the videogames world. Three important features to some up the classical game model are:

- The kinds of systems set up by the rules of the game (Rules).
- The relation between the game and the player of the game (Negotiation).
- The relation between the playing of the game and the rest of the world (Outside/Ordinary life).

Overall, the entire theory can therefore be described as an “intersection between games as rules and games as fiction and the relation between the player and the rest of the world” (Juul p. 255, 2005).

## **2.3 The Immersion of Video Games**

For a video game to become an immersive environment the player must be able to step into the magic circle and play the video game - The game also must uphold rules, play and a fictional world as mentioned with the classic game model this is created by the level design, gameplay, and story, within some form or another to add to the immersion thus becoming the

magic circle: however some argue that the concept of immersion contradicts the nature of play itself by adopting some kind of “double consciousness” (Salen, 2003), that supposedly puts the player both inside and outside the game world. We know this is possible as the concept of immersion is the “suspension of disbelief” (Fagerholt et al, 2009) originating from drama over 200 years ago. Immersion can also be described as experiencing a deep emotion linked to medium; in this case, it would be the attachment to video games and their characters, story, and audio cues to build a fictional world. Summing up the space for the player in which immersion acts as the imaginary circle metaphor using psychological and magical elements that become part of the overall magic circle. To understand immersion within the magic circle as different levels this paper uses *the model of immersion* derived by game designer Luca Breda identifying attention, concentration, atmosphere, and empathy as the key levels of what makes up immersion within video games (Breda, 2008). This can be held as four key features to sum immersion up - depending in the type of game of course:

- Short Term Immersion (a simply less challenging game).
- Long Term Immersion (More dense game).
- Narrative Immersion (Character/Story - attachment, closer to what's found in film and literature).

Depending on the type of video games will depend on the overall experience of the magic circle to co-exist with the player's experience of immersion. Which is why for the purpose of this study has specific games chosen because they invoke fluent gameplay with real-world themes that relate to several types of Immersion. As many contain more dense elements in relation to the player's expanded experience. The overall objective should show how the players perceived actions of these strategies create decisions and consequences that facilitate a more immersive experience whilst playing there video game. Of course, these variables can change due to the layers of “negotiation with the game during the act of play” (Stamenkovic, 2016), which is why (meaning) specifically could vary.

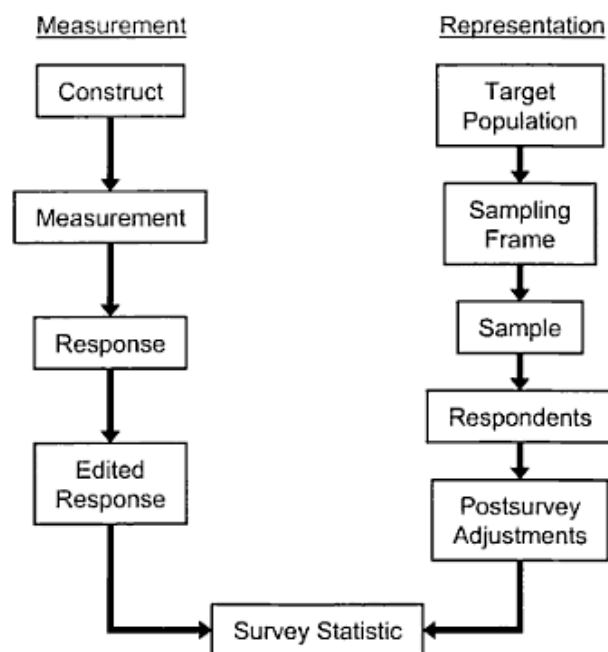
### Chapter 3: Research Methodology

The main aim underpinning this study is to produce “A research paper as a form of written communication as it should present ideas clearly and efficiently applying the knowledge and skills through previous writing experiences” (MLA book, 2009, p.14). By using mixed methods *please see table 1.1 below* it enables us to immaculate the data from both sides, as on one side is the gamers who play the video game on a regular basis, and on the other is the game theorists who study and understand how the game is built, as combining both should be an effective cycle to formulate a better understanding of the *magic circle*. However this is only possible based on the secondary research as this paper will reference a huge selection of game theory: (Huizinga, 1955) (Juul, 2011) (Salen, 2003), through an ‘Analysis of the Magic Circle’, studying its role and impact on the players overall experience within video games analyzing how the gamespace is used to immerse the player into their video game. As the research conducted is to obtain new knowledge from the hypothesis by exploring - the magic circle metaphor; creating a construct of it by using primary research which covers two mixed methods exploring: Quantitative Research that “inquires about the relationships among the variables that the investigator seeks to know” which in this case is a Quantitative Survey: that will require a high sample size of around 80-100 participants, as the survey will be sent using Google Survey via. online social groups with a high population of avid gamers which are as follows: Reddit/Facebook/Twitter/Steam/HTML5Devs/Nexus Forums/DKIT Campus. The secondary primary method is Qualitative Research: based on discovering the “motives and desires using in-depth interviews for the purpose of the measurement of quantity or amount” (Kothari, 2004, p.16). The Qualitative Interview: is used to understand the magic circle more in-depth by using the data gathered from the public survey. This is then implemented into the interview questions with hope of gaining more knowledge on how immersive video-games are from a gamers perspective. As the majority of this papers study is based on theorists who specialize in the area of the game theory, as it is required to justify and question the data as much as possible. This is integrated into several parts of the research methods, as this research design should ensure “that the evidence collected enables us to answer the questions or test theories as unambiguously as possible” (Nyu.edu, n.d). Therefore this paper uses research methods that will be initially ‘exploratory’ questioning how immersive the magic circle is as a metaphor of immersion for the player's overall experience. The methods will question 2-3 game theorists who specialize in the area of game theory around game design, game psychology, computer science, the magic circle and immersion located all over the world in countries such as America to the Netherlands in professions ranging from professors, lectures and authors. This should help us to gain a better understanding of the magic circle by adding

more flexibility and diversity as the game theorists that this papers research is based on are of a range of male and female genders which should produce diverse results. The list is as follows: Marinka Copier Director of the BA and MA programs in Games and Interaction Design at the HKU, University of the Arts in Utrecht. Steven Conway: senior lecturer and course director for games and interactivity in Swinburne University. To expand and critique the magic circle psychologically one Author/trained psychologist of books dealing with the psychology of videos games called Steven Madigan is used from Texas/USA.

### 3.1 Mixed Methods Survey

As mentioned the gathering methods for the primary data will be in the form of both qualitative and quantitative mixed research as they are essential for added flexibility to advance in a “mixed methods study in order to narrow and focus the purpose statement” (Creswell, 2014, p.246).



(Groves, 2004. P.42) Survey Design Life Cycle: Table 1.1

The above figure is a *Survey Life Cycle* by Groves as it's a good example of how the data is formulated as the statistics will be measured by the target population which is 'Gamers'. The responder's data is then gathered to be analyzed and mixed in as part of the concurring interview for game theorists to answer.

### **3.2 Method Advantages/Disadvantages**

The Method Advantages are of course the flexibility of mixed methods using both surveys and interviewees - as this paper covers a broad range of areas from many different fields within the gaming community and game theory using psychology, diegetics, what makes a video game and of course the players personal game experiences and relationship with the magic circle. Combining all will be aimed to produce interesting results.

However some Method Disadvantages include: as according to (Groves, 2004. p.143) he distinguishes 7 problems with answering survey questions; here are 2 important points of the seven that are sufficient for this research for avoiding:

1/Misinterpretation of the questions: We must be careful how the questions are worded as participants will be from all over the world using different acronyms as wording has to be made to be clear/concise.

2/Problems in formatting an answer: can frequently occur as the survey questions must be avoided on being overly technical for the public, whereas the interview questions are able to be more theoretical as the theorists are in a position of credibility to answer and understand them.

### **3.3 Survey Measurements**

To profile the survey participants as 'Gamers' this research uses several survey measurements which include; Demographics by specifying age-range to grasp the gamers environment. Age range should also differ from 18-35, as it's currently the highest in the US (Statista Age, 2018), As for gender it's mostly equal on both sides as females have remained steady with nearly half playing video games since 2016 (Statista Gender, 2018). Higher populated gamers are situated in the Geographical areas of North America and Europe - using Reddit/Steam should help target both countries as they contain a high number of gamers therefore, simulating more data however, it's also important to target less mainstream areas as international gamers in other countries are important which is why using Reddit should help. This research also uses Psychographics to examine and "understand the cognitive attributes, emotions, and values among other psychological factors" (CB Insights Research, 2018). Analyzing behavioural patterns of how often gamers play video games determining what type of gamer they are i.e. casual, hardcore etc. This should help us understand if the gamer has induced more or less immersive qualities by assimilating their video game experiences.

### 3.4 Diegetics/Semiotics Analysis

To be able to analyze how a game looks and is designed for the player's engagement diegetic and non-diegetic elements are studied: originating from film theory. The term diegetic typically refers to the “internal world created by the story that the film characters themselves experience” where as the subtitles and film score is usually referred to as non-diegetic. (Fagerholt et al, 2009) For the purpose of game theory diegetic is referred to:

**Diegetic User Interface:** contains the UI elements in the game scene that require the player to interact with to progress these are the elements that cause-effect, to the games world such as health bars, ammo, maps, HUD: enhancing the player's immersion.

**Non-diegetic UI:** are the elements that act as the wallpaper, things of less importance that are part of the game-world though are more for show than interaction. The more non-diegetic elements inside the game the less immersive it becomes thus affecting the magic circle's immersion (game dev, 2016) (gamesstra, 2014).

**Semiotics:** In video games semiotics plays a vital role to produce meaning to what is being said for example to form a video games world messages and meanings are an added immersion that forms rules, fiction, and play of the video game-space, stemming from Juul's classic game model and diegetics to form a semiotic structure. This Dissertation uses multiple semiotic methods to create a textual analysis using:

Feedback (Multimodal feedback regarding the game world and game state).

Narrative Strategies/Discourse Aims.

**Mechanics:** (the engine which facilitates the actions of the game-breaking these down into ethical, pathological, and logical arguments stemming back to Aristotle's (Perceived Aims).

### 3.5 Ethical Considerations:

For confidentiality in conjunction with the DKITs Ethics Research Policy (DKIT Ethics, 2018), participants will be made aware of their rights as all data gathered from survey respondents will remain for publication purposes only, as mentioned for interview questions game theorists contacted will only be stated as work of place, name and their field in reference to their identity. As for security all data gathered is stored on a secure cloud service for researchers and supervisors to view, finally, at the end of the degree, all gathered data will be secured subsequently.

## Chapter 4: An Analysis of Video Games within the Magic Circle

To recapitulate the *magic circle* refers to a “pre-existing artificial game space which creates a dichotomy between the real and imaginary” (Copier, M. 2007). As the player must enter into the gamespace as Juul states “To play a game is to step into a concrete or metaphorical magic circle where special rules apply”. This is why game theorist’s class the magic circle as a separate psychological space, as it is applied using game theory. The magic circle isn't just a perfect psychological separation, as it can be an “imperfect separation which the player must negotiate and uphold” (Juul, J. 2008), as firstly the player must negotiate with the game; as to deny the game as Juul states is to prevent the player from beginning the video game.

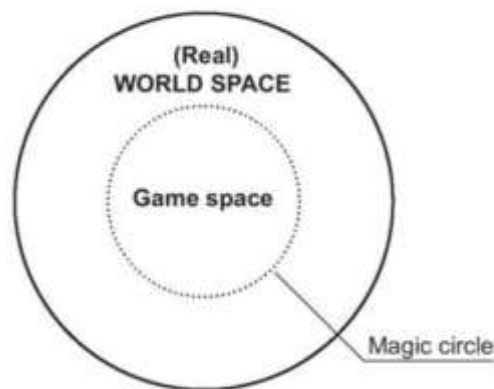


Figure 4.1 The Magic Circle: as a Boundary Gamespace (Juul, J. 2011).

*The Classic Game Model* makes it much easier to define what a game is as firstly it's a subset of the larger world in which the magic circle resides inside the gamespace, as the “fictional world of the game is then projected from the screen in which the player interacts with” (Juul, J. 2011, p.219). Constructing video games is important for the magic circle to remain less metaphorical. Which is why the entire classic game model can be defined as the (relationship between the player the game and the rest of the world). (Huizinga, 1955) and (Salen et al, 2003), having mentioned this several times. when discussing the border in which the game is played comparing it to the “outside context”. To understand how the magic circle acts, is essential to understand what a video game is in ‘relation to the players experience’ thus once the player has resided inside the gamespace ‘negotiation’ takes place within the magic circle creating rules determined by the players output with the video game. This is made possible by extending the classic game models six consisting features by Jesper Juul to make up a video game which are as follows:

#### **4.1 Classic Game Model: 6 Features: (that makes up a video game)**

1/Fixed Rules: As each video game consists of Rules e.g. ‘use this map marker to find the objective’, as in video games rules are more defined as they are programmed into the game, for the player to abide by, unless they cheat, this is then known as breaking the rules.

2/Variable and Quantifiable Outcome: For a game to function it must provide variable outcomes depending on the players experience, this can vary as with a player in a shooter game could shoot his own teammates and cause unfair advantage, however this could be ratified by the player with enabling an optional variable outcome for example by creating a setting in-game where all players are unable to shoot their teammates therefore upholding the outcome. Quantifiable outcome is the way the game is supposedly to be played for example the player is to walk to this objective, ‘there not able to fly or run’.

3/Valorization of Outcome: Each game has different possible outcomes, both positive and negative. Positive being the most difficult to achieve, this is what makes the video game challenging by its many outcomes such as conflict, statements, hostilities, instructions, and much more, e.g. Spec Op’s negative outcome war and conflict.

4/Player Effort: The player’s effort into participating with the video games challenges within, investing their energy to produce the best possible outcome of achievement through players ‘actions’ influencing outcome. This short for the player plays in - effort to win.

5/Player Attachment Outcome: This is a feature where the psychology of the player and relationship to the video games outcome - comes into effect, by the determining the outcome of the game - whether they have won or lost as other specific aspects include the outcome of the story and the influence it has when the player has finished the game. This Attachment can be also termed as the players contract or the ‘lusory attitude’ or ‘game contract’ coined by psychologist Bernard Suits by which the player abides by a contract of sorts by playing the video game.

6/Negotiable Consequences: The negotiation between the player, the game, and the rest of the world, optionally assigned to real-life or non real-life with no consequences for the players play by play actions, the only way to have negotiable consequences is to have the operation and moves for them to play the video game. (Juul, J. 2003).



	<b>The game as formal system</b>	<b>The player and the game</b>	<b>The game and the rest of the world</b>
<b>1. Rules</b>			
<b>2. Variable and quantifiable outcome</b>			
<b>3. Valorization of outcomes</b>			
<b>4. Player effort</b>			
<b>5. Player attached to outcome</b>			
<b>6. Negotiable consequences</b>			

Table 1.2: The 6 defining features: of the Classic Game Model by Juul, J. (2003).

To sum up the classic game model's features 1,2 and 4 describe games as formal whereas system 3 describes the outcome - the goal the player strives for, 4-5 is the relation between the player and the system i.e. game and finally 6 is the relation between the game activity and the player. The purpose of this model is to describe the ark of a game - showing its many features to describe an immersive magic circle game space experience between the player the game and the rest of the world.

## 4.2 Textual Analysis/Diegetics Of: Read Dead Redemption 2

We now know with the *classic game model* the user has meaning to step into the magic circle as the reason is to play a video game that is built of 6 features giving the player provided meaning with the video game as the foundation is build here. However what is on the screen in which they see in front of them?, what meaning and immersion does this add to the overall space in which the player resides to play the game?. Well firstly video game worlds are made up with “moral decision making with lucid and narrative structures connected to the magic circle to create a discontinuous space” (Heron, M. and Belford, P., 2014). As the magic circle can serve as a relationship between the in-game characters; the players play creating an extension between themselves and the characters that our inhabited. How the magic circle frames a ‘distinct space’ of meaning that is separate from but still references the ‘real world’. Is quite unique as the frame is the video games user interface in which the player interacts with. To determine the meaning and message of what the players see we can determine this by using diegetic and non-diegetic elements using HUD (Heads Up Display) with the video game that adds another layer to the magic circle experience.

If we look at Red Dead Redemption 2, one of the most life games ever made in recent times - set in the western frontier - in open expansive world full of exploration with over “300,000 spoken lines of dialogue and half a million individual character animations” (GQ, 2018), A game that took 8 years to make as the player is immersed in this world playing Arthur Morgan a gang member of the dutch lear gang, with 22 other gang members, the player has to feed himself and look after his camp, whilst building relationships with the other members, including fighting of animals threats bandits and of course the law. “It’s uniqueness unlike movies or TV show’s is that the narrative and exploitation exist around the player, they’re forced to engage with it” (Variety, 2018). Using Diegetics in game theory from HUD studies of contemporary video games such as this using game state feedback: it’s possible to see what elements of the user-interface immerse the player, as below we see that:



Figure 4.3: Diegetics HUD Analysis RDR2 Gameplay by (RockstarGames, n.d.)

Diegetic HUD- There's little user interface here other than a weapon wheel and map in the bottom left corner, with more emphasis on scale/exploration using UI navigation as the central point to progress in the world as secondary as the full map can only be accessed by pausing the game.

Diegetic HUD - When confronting citizens in RDR2 (moral) plays a key role, as the players actions have consequences, more design options are displayed with such ways of defusing a situation within the game giving the player the option to aim their weapon as a way of threat. However just as the rest of the games design these options are only temporary when in conflicting situations, however they do appear as you can see below with the users actions, the players actions are used to defuse conflict situations.



Figure 4.4 Diegetics HUD Analysis RDR2 Gameplay (RockstarGames, n.d.)

Non- Diegetic HUD – If you notice yet again a navigation map and also the wanted sign is just there to inform the user and has no bearing on the interactivity of this conflict

RDR2 has an overall similar to HUD look of Grand Theft Auto IV a game created by the same developer as both games make use of HUD in many ways with few “Design choices regarding user interface in an attempt to provide a richer game experience for the player” (Fagerholt and Lorentzon, 2009). Overall RDRD is completely fulfilled in portraying an immersive magic circle experience with its strong points being gameplay design with little use of diegetic HUD and UI to produce a realistic approach to gameplay.

### 4.3 The Psychology of Video Games: Spec Ops: The Line

To investigate the how immersive video games can be psychology plays a major role in the players actions adding to the immersion as part of the magic circle. This section is about learning how psychology can affect the players relationship with the video game and onto magic circle using: Spec Ops The Line developed by (2k, Games, 2012) - set in Dubai where the player plays Captain Martin Walker as part of his squad his team are to rescue civilians caught in a cataclysmic sandstorm. At the time little did the player know that this was more than the standard typical military shooter as it was advertised to be (Spec Ops Launch Trailer, 2012), as Spec Ops is a game that uses real world military themes mixed with psychology repercussions. To help me conduct this game in relation to the magic circle I use Tobi Smithursts analysis of how Spec Ops “enables the player to be tangled in webs of complicity

for the player to the character they inhabit - this leads to many productive ethical encounters with the perpetrators perspective”. (Smithhurst, 2017). As the player begins the game its portrayed as run in the mill stereotypical stint shooter, until the player reaches a highly controversial “white phosphorus scene” near the end of the game which can be seen here; ‘be warned it is graphic’ (Spec Ops: White Phosphorus, 2012),. The game forces the player to negotiate with the game by forcing their actions by pushing a button, causing the death of many civilians including children. This relates back to Juul’s classic game model particularly number 5 (Juul, J. 2003). The ‘Players attachment to the outcome’ as the negotiation of outcome, causes a negative impact to the player as they don’t receive a good ending due to damage that has already been caused.



Figure 4.5 Spec Ops: The Line (2k, games 2012).

Ultimately Spec Op’s is a rare game that requires the player to engage in constant active input invoking ‘preparation and guilt’. In relation to the magic circle this enhances immersion as (Smithurst, 2017) continues to detail how this impacts the players actions emphasizing “these are the actions of the player that would be considered morally dubious are permissible as part of the game”. Psychologically the developers of Spec-Ops wanted the player to feel more “emotionally connected to the mental state of the games main character” (Polygon, 2012). Conclusively Specs Op’s is rare case where a game can mentally and physically add an immersive magic circle experience leaving the player emotionally distressed even after leaving the magic circular boundaries.

Primary Framework	The common sense understandings that people have of the real world.
Game Framework	Referring to the conventions of the game.
Character Framework	In which the players are not manipulating their characters (game framework) but in which they are their characters: "The character identity is separate from the player identity."

Table 1: Frames of meaning in Fantasy role-playing games (Fine 1983, 186).

Table 1.3 Frames in RPG's By: Alan Fines (Consalvo, 2009)

Real World themes such as using Spec Ops is very effective for the magic circle as for example Consalvo would argue that the magic circle is only possible when comparing it Alan Fines framed perspective above when he studied role playing games in 1983. It's particularly interesting because when comparing Spec Ops emotional tendencies towards the player this could be represented in frames as *Fines framework* attempts to understand daily player lives as a series of frames with role playing video games describing the player seeing everyday life through frames distributing it into 'three distinct frameworks', relating to the videogame and character. When applied to single player video games his primary framework which references the "real world is a strong mechanism as it's always "intruding the players experience therefore the games structure" Consalvos argument against the magic circle as not being real believes Fines primary framework is valid as he appears to be questioning the validity of the magic circle. Consalvo believes by viewing the magic circle as static with simply inside and outside. "Gamers' activities can be conceptualized as movements between frames. This can give us an understanding of how flexible the magic circle can be. (Consalvo, 2009).



## Chapter 5: Analysis of Findings & Discussion

The survey conducted was sent online to various game communities and around DKIT which was aimed at gamers with the goal of finding out how ‘immersive the player can become within a video game’ to determine how immersive the *magic circle* can be from a players perspective; based of its design and immersion capabilities such as using the fourth wall. Responses totalled to 197 people with a high margin being male gamers who are typically mid-casual gamers with the highest being from the USA, United Kingdom, and Ireland, who play games on a daily basis, with their typical game session being 2-4 hours, on either PC or console who play mostly RPG’s, Shooters, and Action Adventures. The survey results were analyzed and used to conduct interviews with two highly established video game theorists and one author who specializes in the psychology of video games. The first theorist interviewed was Marinka Copier who is the Associate Director of the BA and MA programs in Games and Interaction Design at the HKU, University of the Arts in Utrecht. She also has a PHD titled: ‘Beyond the Magic Circle’ where she studies the magic circles effects from a ‘network perspective’ with the focus on online RPG’s such World of Warcraft (Copier, M. 2019). The second theorist was Steven Conway who is the senior lecturer and course director for games and interactivity at Swinburne University where he mostly specializes in the relationships between digital games and sports media (Conway, S Profile 2019). He also wrote a journal titled: ‘A circular wall? Reforming the fourth wall for video games’ (Conway, S. 2010) where he studies how the forth wall in video games can act as extension and contraction for the magic circle inducing the player experience. Jamie Madigan is a trained psychologist and author of ‘The Psychology of Video Games’ (Madigan, J. 2019). His goal is to popularize and understand “how psychology can be used to understand why video games are made and how they are used and why players behave and think as they do. All theorists answer’s where combined and discussed with the survey results below, using a ‘mixed methods study’.

Overall 50% of gamers found the *Fourth Wall* to add immersion to the video game, whereas over 40 % found it a distraction, that breaks the players immersion, as Marinka stated “it’s not easy to design a good break in the fourth wall, so that might explain why some players find it restricts immersion”. Unrestricted immersion can be possible however by use of good design as this can add an extension of sorts to the fourth wall by going “beyond the screen into the hardware”, as Steven has mentioned this before in his paper categorizing the fourth wall in video game terms as “expansions and contractions of the magic circle” (Conway, S. 2010). Please see appendix A & B Q3/Q2 for expanded answers.

Does breaking the Fourth Wall add or remove Immersion for you? (example below)

196 responses

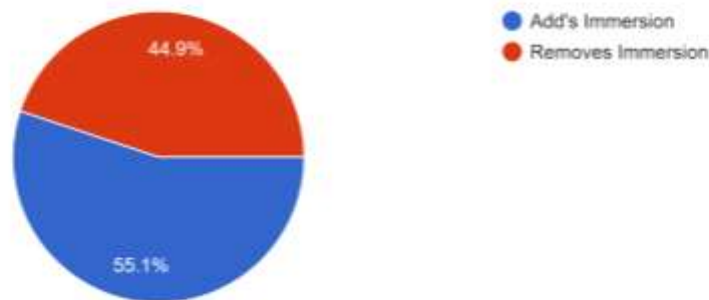


Figure 5.1 Fourth Wall Survey Results

However, psychologist, Jamie would disagree with these results as he sees “having a game character suddenly acknowledge that it’s a game would be jarring and take me out of it”. From a psychologists point of view Jamie sees the fourth wall to undermine immersion, as it can only be possible by relating it to the spatial presence in which the player gets form the game, with little distractions.

Which Level Design do you find more immersive?

187 responses

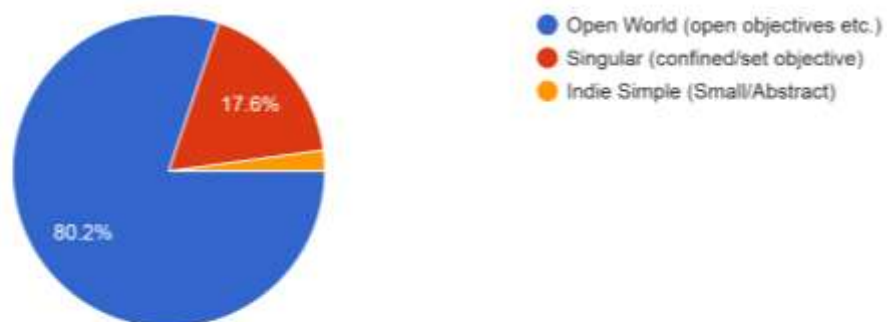


Figure 5.2 Level Design Survey Results

The reasoning when asked which level design gamers find more immersive was to focus in on differentiating games with confined singular levels versus open world levels. Overwhelming gamers prefer open world games which correlates to the question when asked, “what's the most immersive games you've ever played?”. The top three games where Skyrim, The



Witcher 3, and RDR2 - which are all open world games, with the first singular game coming into 4<sup>th</sup> called 'The Last of Us'. Jamie stated that the results make sense as open world video games "offer more freedom and don't have the arbitrary restrictions on what you can do, so there's less to remind you that your playing a video game". These findings are interesting as opposed to singular games with less distractions that have a sense of confined setting, as Steven mentioned that singular games tend to have very "tight narrative with lots of set objectives which gives me a sense of purpose and meaning".

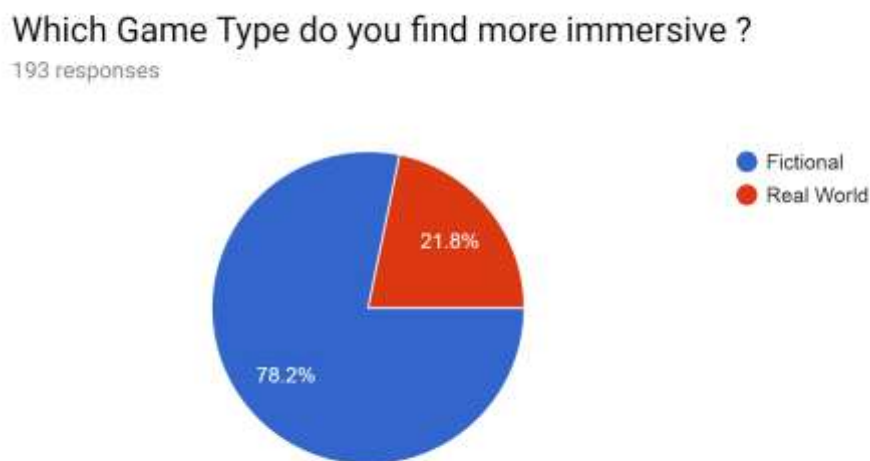


Figure 5.3 Fictional v Real World Survey Results

For the purpose of understanding this such as games as Spec The Line, that portray real world themes such as psychological warfare, compared to a fictional worlds that is set in a mystical setting, such as Skyrim, the latter was overwhelming more immersive as fictional worlds perhaps aid in more escapism - from the real world, when asking theorists based on the results – Is it harder to create immersion in games that deal with real world entities and paradigms?', Jamie stated "No as the players more easily fill in the gaps of the world as this can't be done as easily in a fantastic" world", Perhaps most players who answered the survey haven't played many games that use real world themes correctly as Marinka stated they require more "explicit design of the magic circle in order to be more immersive",. Some games enact this explicit design well are of course Metal Gear Solid and Spec Ops the line.

## Do you find Online or Offline gaming more immersive?

196 responses

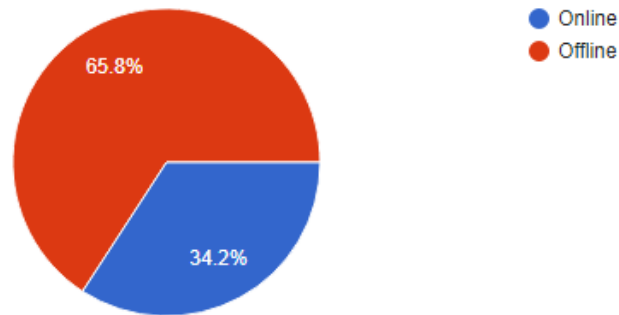


Figure 5.4 Online v Offline Survey Results

The following survey results were subdivided between online and offline gaming to find out if players are more immersed with just NPC's or whether being with real players online is more immersive, 65% of responses found offline gaming to be more immersive when asking Marinka Copier why players found offline more immersive she stated this is due to the constant "risk of other players breaking the immersion, as this is much harder to control as a game designer". This is understandable as many distractions can occur due to the player having more freedom as they are able to use the game to their advantage. Interestingly Jamie elaborated on this by saying "players in online games are constantly doing weird stuff such as jumping, emoting and saying things that remind the player there in a game as opposed to the real world". Steven Conway's was both sides as he mentioned "MMOG players can find their games more immersive than offline". Perhaps this is due to them being at AAA design level such as World of Warcraft as it contains much more content within. Steven was open to the boundaries between offline and online as he emphasised it depends on the other players stating he has found a sense of "sustained disbelief and purpose with COOP games with other players before", debating whether online v offline had much to do with the results. To try and gain a better understanding of the magic circle the interviewees were asked what their definition was of it. Steven references Huizinga's definition which was referred earlier in this paper about how all plays moves, Steven summed up Huizinga's definition by explaining how "play is cordoned off by space and time material or ideally" and specific rules are held within, he then agreed that he didn't necessarily agree with the concept, a further explanation of this would be interesting *please see Appendix B Q1 for expanded answer*. Jamie defined the magic circle up by defining what the video game is in relation to the player's perspective by saying "that we expect the rules of the game to be observed by other people and the game

system itself, what is in the game stays in the game”, interestingly he seemed to be defining the magic circle from a 3<sup>rd</sup> person point of view as if he was observing the player from within the magic circle, this understandable as he is a psychologist.

Many game theorists have questioned the boundary of the magic circle, debating what outside distractions can break the circular frame, such as (Salen, K. and Zimmerman, E. 2003) stating: “The question at hand is it has to do with the boundary between the magic circle and the game and the outside world of the game”, however this boundary can be broken as (Taylor, T 2007) has mentioned that players have a “history of pushing against these boundaries whether through feedback processes that change the game over or much else”.

### Have any of the following ever Broken your Game Immersion ?

193 responses

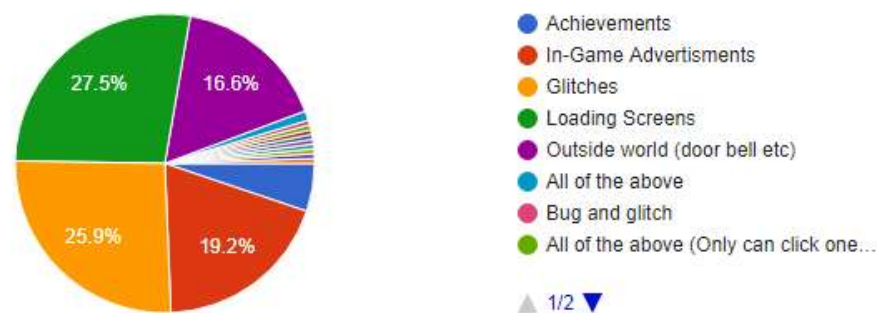


Figure 5.5 Broken Immersion Survey Results

Based on these studies an analysis and study of what ‘boundaries within the magic circle breaks the immersion for the player whilst playing there video game’, was surveyed. ‘Loading Screens’ was the top distraction to break immersion, with ‘Glitches’ a close second. If we analyze loading screens further in game theory they are part of ‘game state feedback’ as (Fagerholt, and Lorentzon, p.30 2009) has mentioned when studying player HUD for their masters. Game States inform the player about the current state of the video game. Game State feedback is split into 3 forms ‘internal’, ‘external’, and ‘system states’, loading screens are part of the system game state, which other systems such as checkpoints and saving occur within. These results are interesting very few games such as Skyrim and Deus Ex are able to create very immersive loading screens that integrate seamlessly within the game which can be viewed here (Deus Ex. 2016).

To conclude the most immersive game was Skyrim this correlates to the players POV (point of view) when asked “which point of view do you find more immersive?”, First Person view won by a margin with 3<sup>rd</sup> person second place. As Skyrim was the top choice for most immersive game. It is obvious now that first person views in video games mixed with immersive quality’s such as loading screens has helped immersion to enact for the player even more into the world and indeed much further into the magic circle experience.

## Chapter 6: Conclusion

To conclude, an overview of the findings and future studies represented is that *the magic circle* is a sphere of *immersion* that originates from the form of *play* that's flexible across many platforms and mediums. This paper's main focus is on video games studying many of its traits that are combined using *the classic game model* differentiating what a video game is made of - using game theory creating a construct with diegetic and semiotics meanings building upon the overall physiological immersion that creates the spaced video game environment of the magic circle gamespace. Expansion occurs further into the dissertation with (again) Juul's classic game model to understand what a video game is made of which is broken down into 6 categories consisting of: Rules, Outcomes, Value, Player Effort, Attachment and finally Negotiation. This helps to build a profile of the player's actions using video games within the psychological metaphor of the circle to analyze, the video game further within the circle of immersion using diegetic and non-diegetic meanings with RDR2 where it uses less HUD elements and advanced technologies in game design to immerse the player with the immersion and meaning using semiotics with Breda's 'model of immersion' broken down further. We then delve into the 'psychology' of the magic circle and how video games such as Spec Ops: The Line can induce psychological repercussions for the player's actions, even after leaving the magic circle space, dealing with the consequences of their actions thereafter. Overall this dissertation states that the magic circle construct is more than a simple gamespace by its use of all these elements combined, whereas usually the magic circle is criticized as a 'binary myth', 'metaphor' or 'utopian magical space', (Juul, 2008, p.156), with no correlation of the relationships between the video game, the player, and the magic circle. This paper should rectify this somewhat by demonstrating purpose and meaning with the magic circle metaphor of how the player can be immersed within this sphere - both psychologically and psychically. Finally the mixed methodologies was to study game immersion on a broader scale, yet this received criticism from respondents and interviewees

about how broad the methodologies were. Perhaps this could have been more focused however; as this was 'intentional' it could not be helped. It is clear that the results show how colossal immersion is as a complex subject in relation to the magic circle as video games have many twists and turns to produce a meaningful video game experience such as using: POV, HUD, loading screens, fourth wall breakages, and much more. Giving a broader perspective of how complex the magic circle can be with fourth wall breaks and view perspectives that enact a flexible gamespace bonding the player closer to the magic circle experience. Although it's tricky to differentiate something that lies on the line between the mind and the imaginary it's harder to conceive a definite term for the magic circle. However this makes the magic circle a unique experience for each individual as it's a form of immersion derived from a "physical experience of being submerged in water, as we seek this same feeling from a psychologically immersive experience such as plunging into the ocean or swimming pool, as it's the sensation of being surrounded by a completely different reality" (Grimshaw, 2013), just as being submerged in water the magic circle is an unparalleled immersive experience.

# Appendices

## Appendix A

Marinka Copier is Director of the BA and MA programs in Games and Interaction Design at the HKU, University of the Arts in Utrecht & has a PHD in 'Beyond The Magic Circle' <http://marinkacopier.nl/>

Let me start by thanking you in advance for agreeing to partake in this short interview. Most of the questions are based on data I gathered from 197 respondents across gaming communities to a survey measuring the immersion of video games. It is hoped that this data, along with your expert opinions, will help me complete my research on the 'magic circle' in video games. This research will form part of my final year studies at the Dundalk Institute of Technology.

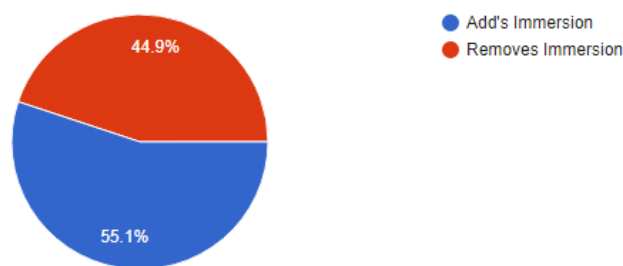
**Q1/** What is your definition of the Magic Circle within a gaming context?

**Answer:** You can find the definition in my PhD.

**Q2/** Results from my initial surveys show that a slight majority of respondents believe that breaking the fourth wall adds to the level of immersion within a video game. Do you agree with this, and if so, why? I'm also interested to hear your views on why you think some players find that it restricts immersion.

Does breaking the Fourth Wall add or remove Immersion for you?  
(example below)

196 responses

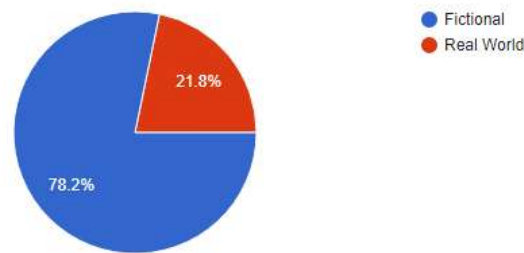


**Q2 Answer:** Adds to immersion if the game's narrative becomes more believable by breaking the fourth wall. Its not easy to design a good break in the fourth wall, so that might explain why some players find it restricts immersion. A bad design break in the wall also breaks immersion by linking to the real world. The only way to learn more about this is to question players about the same (well designed) game that breaks the fourth wall.

**Q3/** An overwhelming majority of respondents believe that abstract/fictional/fantasy games are more immersive than real world games. In your experience, is it harder to create immersion in games that deal with real-world entities and paradigms?

### Which Game Type do you find more immersive ?

193 responses

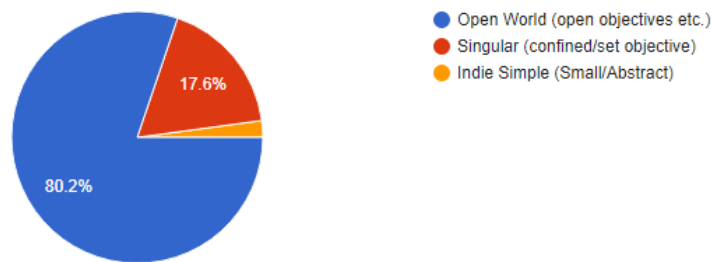


**Q3 Answer:** Games with a real-world theme needs more explicit design of the magic circle in order to be immersive.

**Q4/** The majority of respondents believe that open world level design is more immersive. What are your opinions on this? Do you agree that open world levels lead to better immersion than confined game worlds?

### Which Level Design do you find more immersive?

187 responses

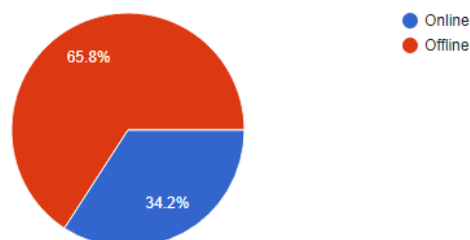


**Q4 Answer:** Your questions all depend on your definition of immersion and in this case the games that players are talking about.

**Q5/** 80% of respondents believed that offline gaming is more immersive than online gaming. Does this fit with your views?

### Do you find Online or Offline gaming more immersive?

196 responses



**Q5 Answer:** In online gaming there is always the risk of other players breaking the immersion. This is hard(er) to control for a game designer.



**Q6/** In your expert opinion, what's the single most important element used by game developers to add immersion to a video game?

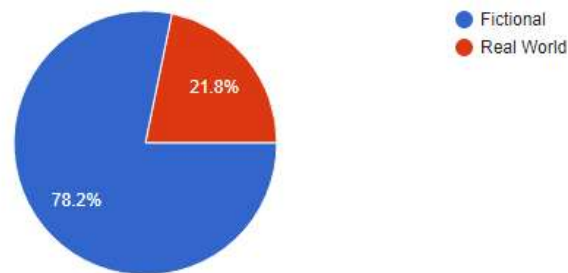
**Q6 Answer:** You should make an analysis of immersive elements in games and then check how often elements are used.

**Q7/** 78% of respondents found fictional worlds to be more immersive than real world settings, why do think that real themes used in video games aren't as effective as fictional?

**Q7 Answer:** Same question as above.

Which Game Type do you find more immersive ?

193 responses



**Q8** When respondents were asked what's the most immersive video game you've ever played? The top 2 were Skyrim and The Witcher - in your expert opinion what do you think sets these two games apart from being a unique and immersive experience?

**Q8 Answer:** Detailed game worlds. Check the work of Teun Dubbelman on world building/narrative.

Thank you for your time – Marc

## Appendix B

Steven Conway is the senior lecturer and course director for games and interactivity in Swinburne University he mostly specialized in the relationships between digital games and sports media

<http://www.swinburne.edu.au/health-arts-design/staff/profile/index.php?id=sconway>

Let me start by thanking you in advance for agreeing to partake in this short interview. Most of the questions are based on data I gathered from 197 respondents across gaming communities to a survey measuring the immersion of video games. It is hoped that this data, along with your expert opinions, will help me complete my research on the 'magic circle' in video games. This research will form part of my final year studies at the Dundalk Institute of Technology.

**Q1/** What is your definition of the Magic Circle within a gaming context?

**Q1 Answer:** I don't think one is allowed to 'invent' their own definition of someone else's concept, so I'll lean on Huizinga: "All play moves and has its being within a playground marked off beforehand materially or ideally, deliberately or as a matter of course... The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart." (1949 [1938], p. 10)

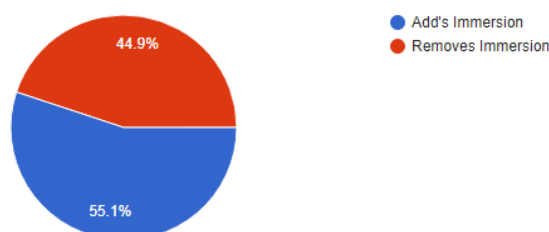
So three ingredients: play, a cordoned off space-time (material or ideal), and specific rules obtaining to that space-time. Not that I necessarily agree that this concept has much veracity, but that's my understanding.

**Q2/** Results from my initial surveys show that a slight majority of respondents believe that breaking the fourth wall adds to the level of immersion within a video game. Do you agree with this, and if so, why? I'm also interested to hear your views on why you think some players find that it restricts immersion.

**Q2 Answer:** Sorry I'm going to be that cantankerous respondent again. What's your definition of immersion? There are looooooots floating around. I don't believe in 'immersion' as I think you mean it here, since it presumes too much, as if I am completely convinced of the reality of the game (I never am, I simply suspend disbelief, but am always aware of the fictitious nature of the game, and of the Social World operating all around me). In suspending disbelief I give 'belief' to the meaning of the gameworld, its narrative and characters etc., but only of course ever in the most playful of manners, always ready to snap over to something else.

Does breaking the Fourth Wall add or remove Immersion for you?  
(example below)

196 responses



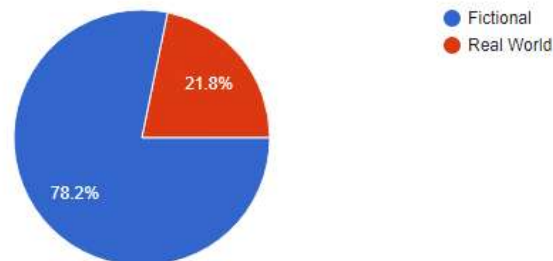
What is the definition of breaking the fourth wall in a game? I'll assume you mean bugs, glitches, crashes that emphasise the constructed nature of the game. If so, it removes my engagement with the game by the very fact it disrupts my smooth, skilled enactment.

If you mean "the game characters acknowledge the constructed nature of the game", then I don't think that's always a fourth wall break in games. It sometimes is, like when Sonic taps the screen, but often it's not, like when Psychomantis reads my memory card and tells me what games I like. In the latter, I argue (as I have in articles) this is an "extension" of the fourth wall, beyond the screen, into the hardware. Further, this extension adds to my engagement in the gameworld, as it feels playful in its acknowledgment of the Social World I sit within.

**Q3/** An overwhelming majority of respondents believe that abstract/fictional/fantasy games are more immersive than real world games. In your experience, is it harder to create immersion in games that deal with real-world entities and paradigms?

Which Game Type do you find more immersive ?

193 responses



**Q3 Answer:** What would really help here (and in prior questions) for future reference are concrete examples, a few "e.g." to let your respondent know exactly what you mean. Which is to say, all games are "fictional", aren't they? Does fictional mean digital, and real mean soccer, basketball etc.? Does 'real' mean 'has real impacts', as in gambling, versus fictional which has no impact after the event? Does 'real' mean photorealistic, and fictional mean 'abstract' design, as you say? Or do you mean the narrative is based on an historical event, and this is 'real', versus 'fictional' as in 'Tolkien's middle earth'? Is 'real' playing an ARG on my phone running down the street, versus sitting in my livingroom? It's very unclear.

Also I'm not sure what the purpose is behind "loading the question", as we say in sociology. When you 'load' the question, e.g. "here's what a tonne of people thought, do you agree or disagree?" this immediately influences the respondent, one way or the other. As we're a highly social species, we're very much inclined to go with the herd and agree with the majority. If we disagree, we feel somehow 'wrong' in responding that way.

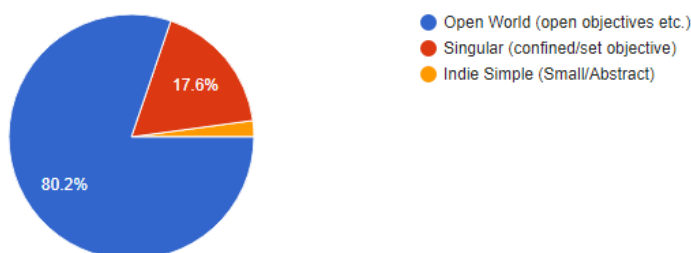
To try and answer, I'll gamble you mean "based on an historical event" by real. Yes that's very hard because people have often experienced that event in some way or another, through one or many media, and therefore have set expectations for what should be included, and should not be. This is then layered on top of the genre/platform expectations.

When one invents an entire world with its own rules and history, there are no expectations waiting to be met by the player outside of the usual genre structures etc.

**Q4/** The majority of respondents believe that open world level design is more immersive. What are your opinions on this? Do you agree that open world levels lead to better immersion than confined game worlds?

### Which Level Design do you find more immersive?

187 responses



**Q4 Answer:** Caveats as before regarding immersion. This is again very hard because, without examples, I'm not sure where you are drawing the line between open and 'singular'. If 'open objectives' means you never have any objectives set by the game (which is highly implied by "set objectives" for singular), do you mean only games like Minecraft and its ilk? Because if I think of other "open world" games like GTA and Assassin's Creed, they very much have set objectives and are confined (e.g. time-sensitive, area-sensitive, character-sensitive, ability-sensitive).

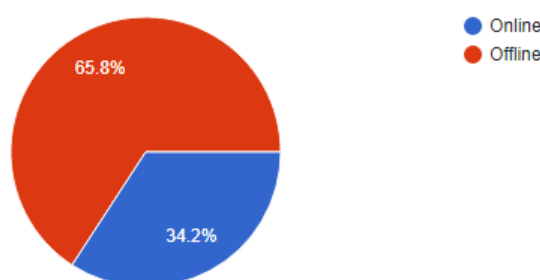
So this very hard to answer correctly. But going by the above, I will say I find Minecraft and its ilk enormously underwhelming in terms of sustaining my belief and engagement, because I don't feel the world "means" anything, much like I don't think the "sand" in a sandbox means anything outside of sand.

On the other side, a very tight narrative with lots of set objectives gives me a sense of purpose and meaning.

**Q5/** 80% of respondents believed that offline gaming is more immersive than online gaming. Does this fit with your views?

### Do you find Online or Offline gaming more immersive?

196 responses



**Q5 Answer:** Again, I have to hold up my arms since I don't know what we mean here by 'immersion'. If it means "belief and engagement" as I've answered before, it depends on the platform, game and other players. I think MMOG players find their games enormously engaging and believable, much more than offline. Similarly I've played coop games where playing with others has sustained my sense of belief and purpose. Other times, players have disrupted that purpose. Playing games such as Pokemon GO with others is I think enormously engaging. But then again, I had an extreme sense of purpose playing The Witcher 3 alone. So I'm not sure online vs offline really has much to do with it.

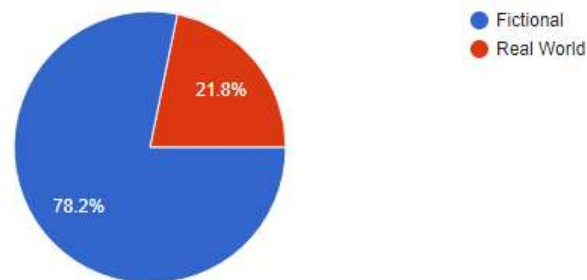
**Q6/** In your expert opinion, what's the single most important element used by game developers to add immersion to a video game?

**Q6 Answer:** Again, hands up, what is the definition of immersion used here etc. Going by my previous definition of engagement and belief, I will say game dynamics.

**Q7/** 78% of respondents found fictional worlds to be more immersive than real world settings, why do think that real themes used in video games aren't as effective as fictional?

Which Game Type do you find more immersive ?

193 responses



**Q7 Answer:** Is this different to Q3? I guess see my answer there?

**Q8** When respondents were asked what's the most immersive video game you've ever played? The top 2 were Skyrim and The Witcher - in your expert opinion what do you think sets these two games apart from being a unique and immersive experience?

**Q8 Answer:** I think Skyrim is a terrible game, whilst I think The Witcher (do you mean 3?) is excellent. I don't think I can answer this question without knowing what your participants said, and their demographics. For me, they are extremely different games both in design and quality.

Thank you for your time – Marc

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## Appendix C

Jamie Madigan Author of Getting Gamers: ‘The Psychology of Video Games and their impact on people who play them’ <https://www.psychologyofgames.com/>

Let me start by thanking you in advance for agreeing to partake in this short interview. Most of the questions are based on data I gathered from 197 respondents across gaming communities to a survey measuring the immersion of video games. It is hoped that this data, along with your expert opinions, will help me complete my research on the ‘magic circle’ in video games. This research will form part of my final year studies at the Dundalk Institute of Technology.

**Q1/** What is your definition of the Magic Circle within a gaming context?

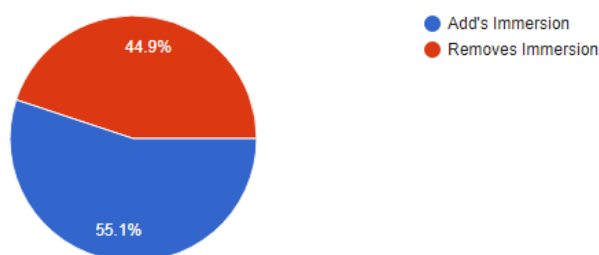
**Q1 Answer:** That we expect the rules of the game to be observed by other people and the game system itself; what is in the game stays in the game.

**Q2/** Results from my initial surveys show that a slight majority of respondents believe that breaking the fourth wall adds to the level of immersion within a video game. Do you agree with this, and if so, why? I’m also interested to hear your views on why you think some players find that it restricts immersion.

**Q2 Answer:** I would think that it would undermine immersion. Immersion (spatial presence) happens when we forget about the technology that sits between us and the game world. Having a game character suddenly acknowledge that it's a game would be jarring and take me out of it.

Does breaking the Fourth Wall add or remove Immersion for you?  
(example below)

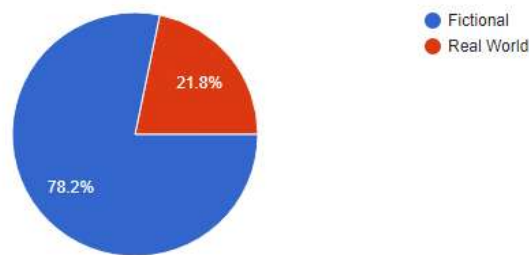
196 responses



**Q3/** An overwhelming majority of respondents believe that abstract/fictional/fantasy games are more immersive than real world games. In your experience, is it harder to create immersion in games that deal with real-world entities and paradigms?

### Which Game Type do you find more immersive ?

193 responses

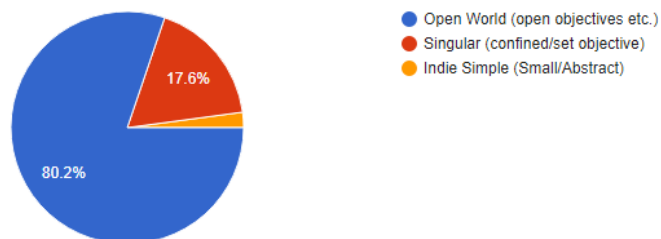


**Q3 Answer:** No, I would think that it would be possible to create immersion in almost any kind of setting. In fact, with some settings, like highly familiar ones such as modern world, it might be easier since the player can more easily fill in the gaps in the world since he/she is more familiar with it. Can't do that as easily if this is a totally fantastic world.

**Q4/** The majority of respondents believe that open world level design is more immersive. What are your opinions on this? Do you agree that open world levels lead to better immersion than confined game worlds?

### Which Level Design do you find more immersive?

187 responses

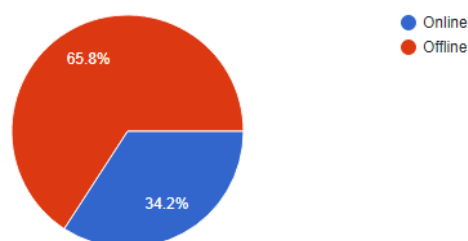


**Q4 Answer:** That makes sense. Open world games tend to be bigger, offer more freedom, and don't have arbitrary restrictions on what you can do. So there's less to remind you that you're playing a video game.

**Q5/** 80% of respondents believed that offline gaming is more immersive than online gaming. Does this fit with your views?

### Do you find Online or Offline gaming more immersive?

196 responses



**Q5 Answer:** I could see how this would be so. With online games, other players are constantly doing weird stuff (e.g., jumping around, emoting) and saying things that reminds you that you're in a game as opposed to a real world. If they're not role-playing along, it gets distracting and pulls you out of it.

**Q6/** In your expert opinion, what's the single most important element used by game developers to add immersion to a video game?

**Q6 Answer:** Probably technology. Fidelity in graphics, sounds, and (in the case of VR) movement can go a long way towards fooling your brain at the basic, perceptual level.

**Q7** When respondents were asked what's the most immersive video game you've ever played? The top 2 were Skyrim and The Witcher - in your expert opinion what do you think sets these two games apart from being a unique and immersive experience?

**Q7 Answer:** They're open world, expansive, and are driven by great technology. And a lot of different systems interact with each other convincingly to behave in real ways that you would expect of the real world.

Thank you for your time – Marc

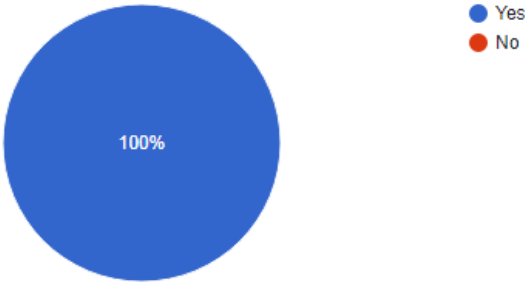


Appendix D Survey Results

Q1

Are you over 18?

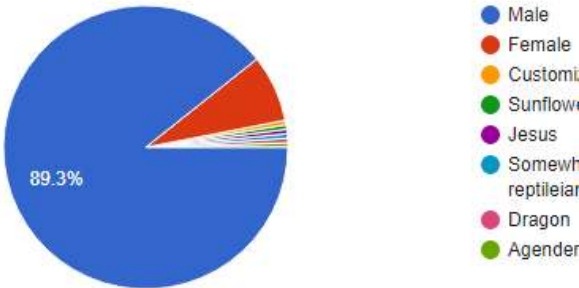
197 responses



Q2

What is your Gender?

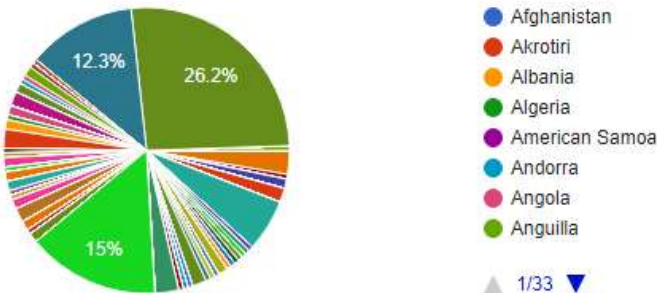
196 responses



Q3

What is your Nationality?

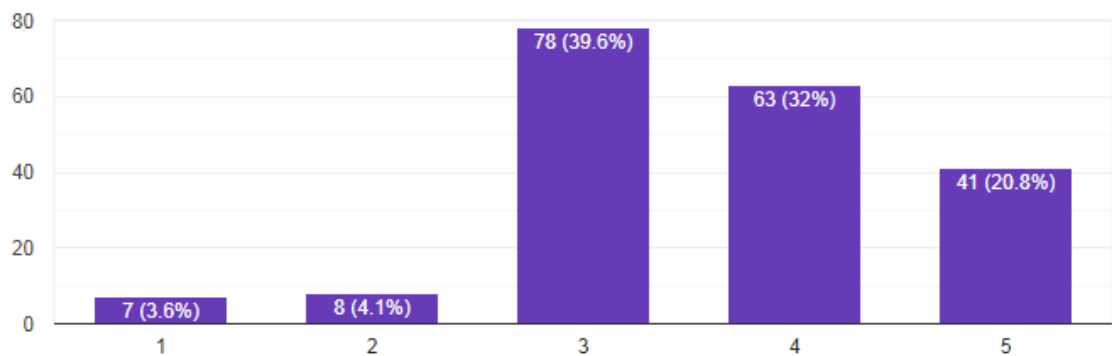
187 responses



## Q4 Scaled from 1 Casual to 5 Hardcore

### What Type of Gamer are you?

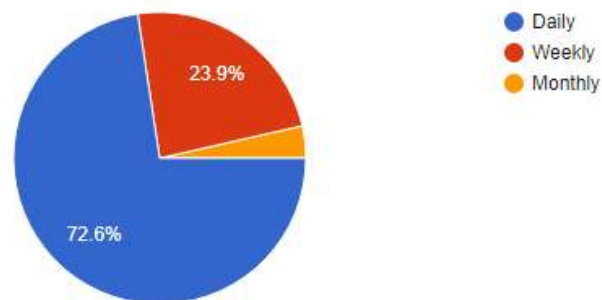
197 responses



## Q5

### How often do you Play Video Games?

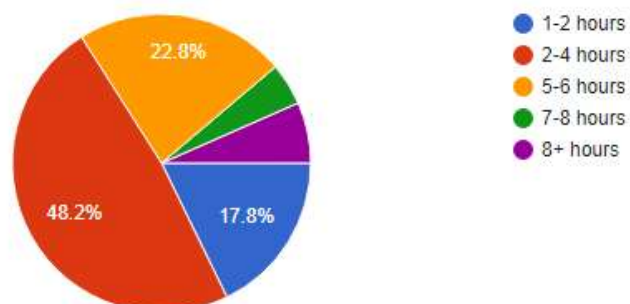
197 responses



## Q6

### How long is your Typical Game Session?

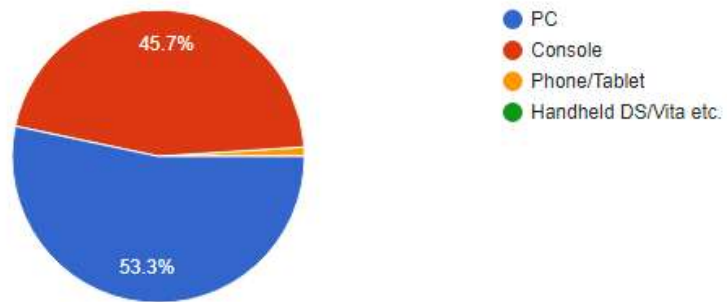
197 responses



## Q7

### Which Platform do you find the most Immersive?

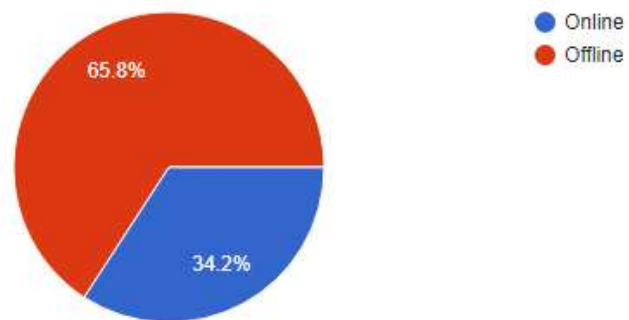
197 responses



Q8

### Do you find Online or Offline gaming more immersive?

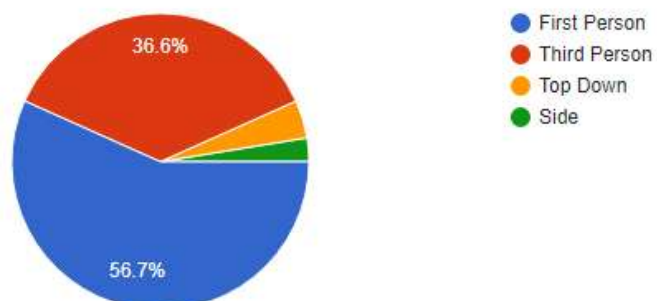
196 responses



Q9

### Which Point of View do you find more immersive?

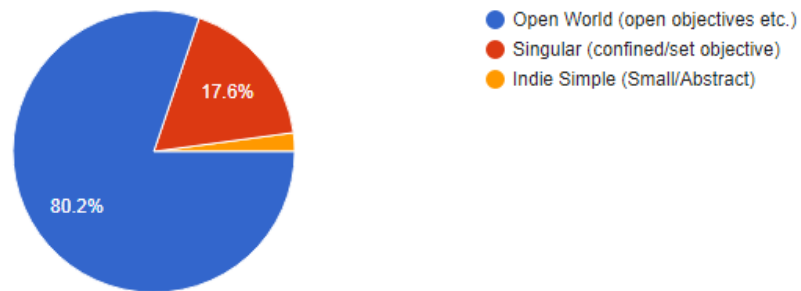
194 responses



Q10

### Which Level Design do you find more immersive?

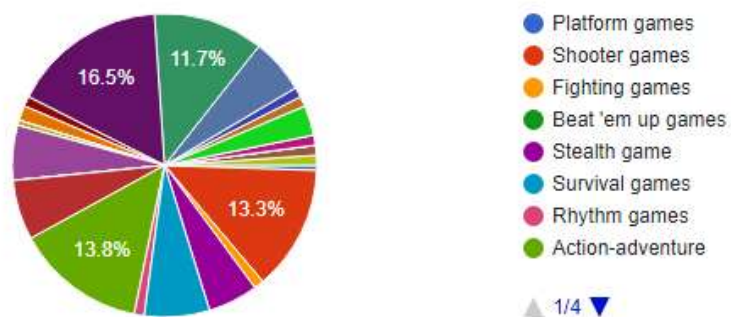
187 responses



### Q11

### Which video game Genre do you find more immersive?

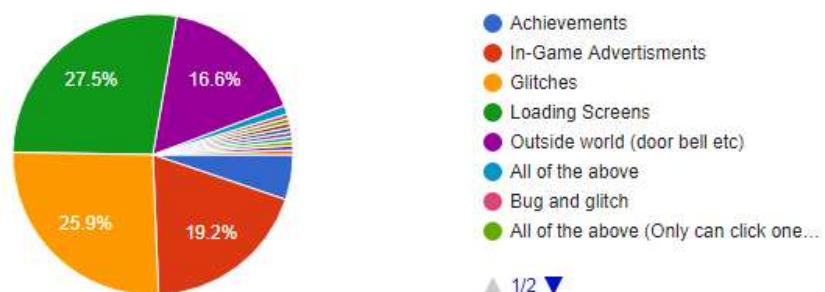
188 responses



### Q12

### Have any of the following ever Broken your Game Immersion ?

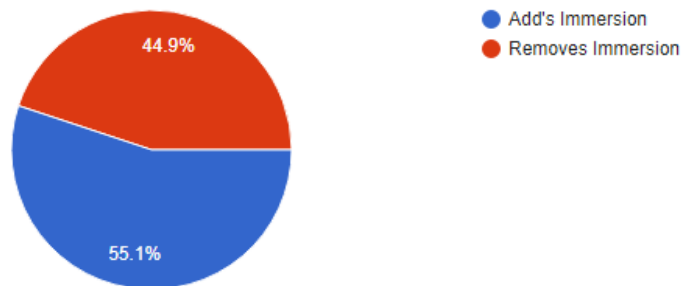
193 responses



### Q13

Does breaking the Fourth Wall add or remove Immersion for you?  
(example below)

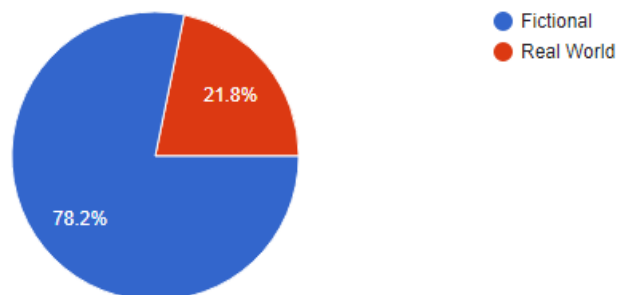
196 responses



Q14

Which Game Type do you find more immersive ?

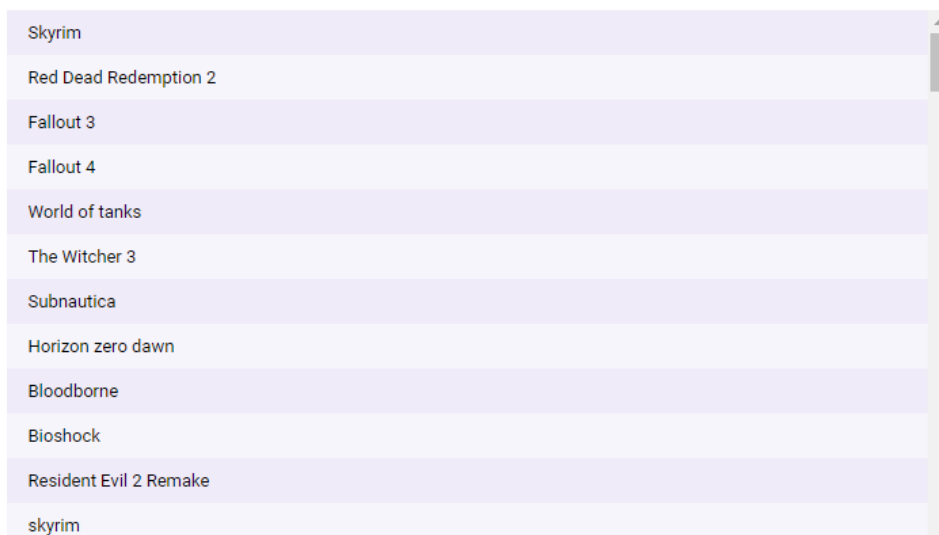
193 responses



Q15

Whats the most immersive video games you've ever played?

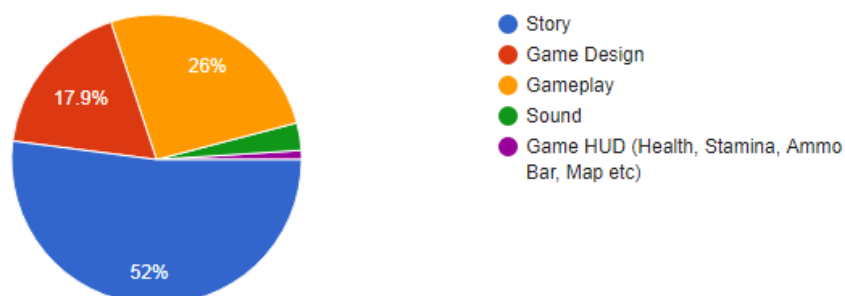
189 responses



## Q16

What was it about these video games that made them so immersive?

196 responses



## Q17

Please if theres any additional Information you would like to add that could help me?

42 responses

Why I can't choose two answers

Add multiple choice answers

I use immersive gaming to temporarily escape reality. They're my vice or drug.

For me Immersion is as much the execution of the ideas, story or other systems

Uh idk, releasing same type of games (ex:Battle Royale) just because one of them was popular removes the fun and hope we gamers have  
\_\_\_\_Idk why i said that\_\_\_\_

I generally find In-game advertising as immersion breaking as loading screens and glitches

VR games are the ultimate in immersion.

Nope

Competitive games are the best. I still play Overwatch and have been since beta.

First of all, I would've liked to see your definition of "immersion" when it comes to games and have it at the top of the questionnaire as it can be hard to define from person to person. There are games I would say I'm immersed in, when it would be that I am giving my full attention to it(Rocket league for example, there's no story to it but I'm fully immersed in the gameplay when playing due to great gameplay and lack of bugs/distractions).

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