Defining and understanding the core concept of 'Engagement' using several examples from video games.

For the first level of immersion to be experienced, a player needs to feel the compulsion to progress. They must experience this level-before they are able to comprehend the subsequent levels of immersion, which include engrossment and total immersion. This is supported by Schonau-Fog and Bjorner; they detail that "the desire to continue playing, which is a prerequisite for the experience of other conceptualizations such as engrossment, flow, fun, enjoyment, immersion, involvement, and incorporation, because a player first needs to *want to continue* playing" (Schonau-Fog and Bjorner, 2012, p.405). Similarly, there are viewpoints that contribute to the definition of engagement, which entails the player to overcome their preference of games. This is exemplified by Jennett describing engagement for the gamer needing "to invest time, effort and attention in learning how to play the game and getting to grips with the controls" (Jennett et al., 2008, p.642). Furthermore, this is emphasised by Rozendaal that "both richness and control need to be optimized" (Rozendaal et al., 2009, p.124), connoting that complexity and influence for the player needs to be perfect for them to be fully engaged. The scope of this essay is to discuss the core concept of engagement using several different video game examples.

Intellectual engagement can be split into two different objectives the player deals with within a game. The first is denoted as, "Extrinsic objectives are extrinsically motivated goals set up by the game, e.g. challenges, quests, collecting a certain amount of items or something that

has to be overcome within a limited time scale." (Henrik, 2011, p.7). Henrik details extrinsic objectives as pre-scripted events, which are designed for the player to be engaged until said goal is accomplished. This is evident with games such as *Super Mario Bros* (1995), as there is one primary goal at the end of the game, i.e. to save the princess. As a player, they go through each level avoiding monsters, collecting coins and completing platforming sections, leading them closer to the castle. The goal of the game is to save the princess who is locked away in one of the many castles; these are the extrinsic objectives created by the designers. This supports the notion that one of the fundamental categories of engagement is that goals are designed to give the player a desire to carry on playing.

The second objective created within games is intrinsic objectives which "are intrinsically motivated, self-defined goals made up by the player, for example when a game includes elements which enable players to define their own objectives." (Henrik, 2011, p.7). Henrik specifies intrinsic objectives as goals created by the player for their own engagement, even if the designers had not intended for it to be that way originally. Games such as *Minecraft* (2011) focus on player-led goals. As a player, you are transported to a world that you are able to explore extensively and alter the way you want; the game has no set defined tasks. You have to survive the first night from enemy zombies, skeletons and spiders, however if you die, you are able to respawn and subsequently try to survive. There is no indication of failing a quest or challenge; there are only intrinsic objectives created by the player. Intrinsic objectives support the desire to finish challenges within games, even if there are no pre-designated goals in place for them to follow.

Physical engagement consists of the desire for players to master the physical inputs given to them by the medium they are playing through. Calleja narrows it down to a specific definition, “Kinesthetic involvement relates to all modes of avatar or game piece control in virtual environments, ranging from learning controls to the fluency of internalized movement” (Calleja, 2011, p.43). Calleja suggests that players feel engaged by mastering the sequence of actions presented to them through physical inputs of a controller. However, physical engagement needs to be properly observed. There needs to be a suitable learning curve so player engagement is not broken through frustration of highly demanding control mastery. Fluidity of movement in the virtual environment, corresponding to physical input on a controller, is key within fighting games such as *Brawlhalla* (2014). Within the game you select a fighter, which individually consist of their own unique move sets; using specific button presses the player needs to knock their opponents off the stage. To improve within the game, the player will need to master specific physical inputs, whether it is using a controller or their keyboard. This influences player engagement due to the desire of wanting to improve their skill set within the game, which can only come across through mastery of physical input.

Physical engagement can also lead to tactical immersion, which is defined by Adams as “the sense of being “in the groove” in high speed action games… To encourage tactical immersion, you must offer the player dozens of small challenges that can each be met in a fraction of a second” (Adams, 2009, p.20). Adams suggests that for a player to be tactically immersed, there needs to be a dexterity challenge for the players to compete against. This is apparent

with *Guitar Hero Live* (2015), a music game that requires players to press specific buttons on their guitar-shaped controller, corresponding to the notes played in a song. By players pressing buttons within a small time window, especially on higher difficulties, the fast-paced gameplay offers the zonal immersion as illustrated by Adams. Physical engagement is not only the desire to improve mastery of physical input, it also produces a fast-paced immersion for players to challenge their dexterity.

Sensory engagement is the audio-visual execution within a game, where players continue playing due to a stimulated experience. Sensory engagement is experienced by the player by a "large screen close to player's face and powerful sounds easily overpower the sensory information coming from the real world, and the player becomes entirely focused on the game world and its stimuli" (Laura and Frans, 2005, p.7). Laura and Frans advocate it is vital for the player to experience the diegetic and non-diegetic sounds, as well as the graphics and animated aesthetics, for the full sensory engagement experience. *Mad Max* (2015) demonstrated a sensory engagement with players, enabling them to relive their pre-conceived experiences of a post-apocalyptic desert environment. Diegetic audio of the growling engine of your Magnum Opus, the ominous soundtrack while traversing on foot into a hostile camp or the broken and baron wasteland; these sounds stimulate player senses and urge them to continue engaging with the open world.

Additionally, spatial involvement can be justified with engaging players on a sensory level. Spatial involvement concerns itself with player's "engagement with the spatial qualities of a

virtual environment in terms of spatial control, navigation, and exploration." (Calleja, 2011, p.43). Calleja suggests that it is important to engage players by giving them a realistic experience within the game world. This is perfectly portrayed by *Fallout 4* (2015), in that world events are triggered without the direct interference of the player. Within this open world game, the player encounters enemies that have been killed recently, due to interactions with other enemies in the area; these generated events lead to a spatial engagement that there is a living world around the player. This supports sensory engagement, as it make the player feel engaged within the game world.

Social engagement entails the social relations that can be provided with other players, whether it is through gameplay or in real life. The focus on social immersion is engaging with fellow players to compete against one another, or work together to overcome a specified challenge. This is highlighted by Rozendaal, as they state that "Interactive systems affording teamwork, cooperation and competition can be rewarding activities because of the associated experiences of camaraderie and social connectedness" (Rozendaal et al., 2009, p.124). Competitive games are the focus of social engagement, as they often reward players that use teamwork and cooperation. Within *Counter-Strike: Global Offensive* (2012), the ability to communicate with the team towards the end goal of planting or defusing the bomb (depending on whether you are Terrorists or Counter-Terrorists) is a desirable end reward that leaves the players engaged throughout the game. A strong potential motivator towards social engagement is accomplishing these rewarding activities with friends, as it stimulates camaraderie and friendship, which are defining social conventions. The desire to interact with friends in the same spatial vicinity, or remotely via use of Voice over Internet Protocol, allows

for social immersion, as games assist in the engagement with other players.

Narrative engagement consists of two different experiences with narrative gameplay. The first is in the form of narrative immersion, which "is the feeling of being inside a story, the player is completely involved and accepts the world and events of the story as real" (Adams, 2009, p.21). Adams connotes that players should have the ability to empathise with characters, leading to imaginative immersion. This is where the players become fully "absorbed with the stories and the world, or begins to feel for or identity with a game character" (Laura and Frans, 2005, p.8). Games such as *Red Dead Redemption* (2010), demonstrate character attachment and narrative engagement, with the use of good storytelling ploys (interesting characters, exciting plots and dramatic situations). While playing as John Marston (main protagonist), during one of the final missions you kill the main antagonist, who was a former friend; this then triggers a non-diegetic song which plays while riding back home to your ranch. The narrative immersion is apparent, as it creates an emotional atmosphere to make the player feel empathetic towards the character and the events that have just unfolded.

Narrative engagement does not have to conform to solely pre-scripted events. Similarly to intellectual engagement, player-created narrative can be an engaging factor when it comes to gameplay. Rollings and Adams propose that the choice of avatar causes "a greater sense of immersion in the game and best of all, it's not prescripted. The player can choose who to make friends with and who to antagonize, and it does have an effect on the gameplay."

(Rollings and Adams, 2003, p.164). This increases player engagement, as they identify with their avatar. This leads to the desire to continue playing the game, and create a personal narrative with their character. *DayZ* (2012) places players in a post-apocalyptic setting with the primary goal of survival; as such, there is no active narrative. However, the player will create their own narrative through the different encounters they have with zombies and other players. Moreover, there are roleplay servers, which feature the likes of bandits and sheriff archetypes players can employ. The desire for the player to continue their own narrative is a key component of engagement, as they wish to experience the outcome of events from their ongoing narrative.

Emotional engagement is defined by Schonau-Fog and Bjorner as "the result when the player's own emotions during gameplay—feelings toward other players or empathy toward nonplayer characters— make the player want to continue." (Schonau-Fog and Bjorner, 2012, p.407). Emotional engagement can be likened to narrative and social engagement, due to the interaction with fellow players and characters within the game. Furthermore, emotion can derive from a range of external sources, outside their gaming environment. This can be supported by "a range of emotions (enjoyment, fun, satisfaction, etc.) and experiences (e.g. the feeling being immersed, present or in flow) which may or may not be part of a player's experience of engagement" (Henrik, 2011, p.4). Player character death can be a key emotional turning point, especially in a multiplayer arena. *Call of Duty: Modern Warfare 2* (2009) epitomises player character emotion due to the killstreak mechanic. Once a player acquires enough kills, the player is rewarded a killstreak that can vary from an unmanned aerial vehicle (that can locate enemies on the map) all the way to a nuke (that can end and

win the game). The frustration that can occur while acquiring said killstreaks can engage the player, as there is a desire to continue playing until the player finally attains their chosen killstreak.

To conclude, engagement is understood to be the first stage of immersion, where the player needs to acquire a desire to continue playing, regardless of their preference of gaming. In addition, this is essential for players to experience the additional levels of immersion that include engrossment, flow, and lead to total immersion. For players to be engaged, there are several categories that were discussed deriving from different elements of gameplay. Intellectual engagement gives players the desire to complete objectives given by either the game, or set by themselves. Physical engagement allows for player mastery of physical inputs, which can lead to tactical immersion. Sensory engagement leads to sensory stimulation for the player to be immersed within the visuals and sounds of the game. Social engagement draws parallels to interactions with fellow players, whether it is during gameplay or in real life (leading the player to rewarding camaraderie and friendship). Narrative engagement allows for the player to immerse themselves within the story, to witness the outcome of events. Finally, emotional engagement can originate from a variety of causes not present with player engagement of the game.

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