

Death and Dying in DayZ

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ABSTRACT

Avatar death is essentially universal in combat games, and ubiquitous in all other genres; death of a player's materialization in the game space is used to identify the player's failure and temporary removal from play. Yet the possibilities for creating interesting social dynamics and game play experiences through the design and configuration of death mechanics in games remains largely unexplored. In this paper we discuss the first person shooter game *DayZ*, which has configured death with an extreme level of consequentiality not found in other online first-person-shooters. We examine the affect of this consequentiality on the player experience and attitudes towards death and dying in *DayZ*. On the basis of our research data, we find that the increased consequentiality of death in *DayZ* principally affects the game experience by intensifying social interactions, raising a player's perceived level of investment and invoking moral dilemmas.

Categories and Subject Descriptors

K.8.0 [Personal Computing]: General - Games

General Terms

Design, Human Factors, Theory.

Keywords

DayZ, Death, dying, perma-death, character death, avatar death, nightmare mode

1. INTRODUCTION

I might have died, but I felt very much alive afterwards

Avatar death is essentially universal in combat games; death of a player's materialization in the game space is ubiquitously utilized as a mechanic to mark the player's failure and temporary removal from play. Indeed, death is ubiquitous in most genres; it is found in first-person shooters, MMORPGs, puzzle games, children's games and even *The Sims* can die.

However, despite its ubiquity, the configuration of death is rarely experimented with in mainstream titles. Within genres there is particularly little variance on the death experience; dying in *World of Warcraft* is the more or less the same as dying in *Star Wars: The Old Republic*. Dying in *Halo* is more or less the same as dying in *Call of Duty*. Thus the possibilities for creating interesting social dynamics and game play experiences through the design and configuration of death remains largely unexplored.

There is one recent notable exception to this rule: the survival

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zombie first-person-shooter (FPS) *DayZ*, which has implemented *character-death* (or 'perma-death') rather than mere *avatar-death*. In accordance with its ruthless post apocalyptic survival narrative, *DayZ* characters begin with only a few rudimentary items, and no weapons, and must scavenge food and water to survive for more than a short period. Advancement in the game is highly dependent on accumulating resources and weapons. *DayZ* also has a persistent character identity system, allowing players to build and improve their character over multiple play sessions. This lends *DayZ* a significant role-playing game mechanic for character progression, though without skill or ability progression. Unlike other FPS games, in which death is a minor 2-10 second setback before rematerialization, death in *DayZ* involves the permanent death of this character, and loss of all items and advancement. In this paper we analyse interview data and publicly available player texts and videos to understand the impact that such dramatic reconfiguration of death has on the game experience, and further explore this distinction between avatar-death and character-death.

We will begin by reviewing the academic literature on death and its impact on game experience, before providing a brief description of the *DayZ* mod. We conclude that the increased consequentiality of death affected the game experience principally by intensifying social interactions, increasing players' perceived investment and invoking moral dilemmas.

2. PRIOR WORK

There is surprisingly little academic work on the game mechanic of death; notable exceptions being Emily Flynn-Jones' in-depth analysis of in-game death [14] and Lisbeth Klastrup's chapter on death and dying in the *World of Warcraft Reader* [19]. Klastrup notes that, "*in online worlds such as World of Warcraft, characters in game worlds die repeatedly, whereas the players playing them never (normally) die. The experience of "death" is thus not one of termination, though it may definitely cause a player grief. In most game worlds, dying is an activity similar to a number of other repeatable activities that occur as part of the everyday life in the world ... dying is a risk-free endeavour*" [p. 144]. Indeed, this analysis reflects the commonplace experience of death in the FPS genre; where dying is similarly mere inconvenience, part of the process of playing.

Klastrup notes that "*death itself is not interesting*", rather, "*it is the punishment for dying that most often informs the experience*" [p. 146]. In *World of Warcraft*, death results in geographical displacement, inflicting damage on the character's equipment or removing earned experience points, but the agency given to players is also interesting. In *World of Warcraft*, dead players have the opportunity to seek out their Corpse as an ethereal ghost-like image of their avatar, navigating the shared game world as an invisible spectre, though in practice the player is able to pay a small, inconsequential penalty to avoid having to do so, diminishing this experience.

Another interesting element of the experience of death in *World of Warcraft* noted by Klastrup is the perspective given to the player;

a slow, third party observation injected with the unpleasant wail of the player's avatar as they fall to the ground, while the screen fades to black ("*much in the way people are used to seeing "death" for instance on film*" [18]). This differs to the FPS experience, in which the player views the game environment through the eyes of their avatar. In *Battlefield 3*, for example, the avatar (as camera) falls to the ground, screen splattered with blood, while the dying soldier briefly raises their arm, reaching out, before going limp. A notable exploration of this experience can be found in some games in the *Call of Duty* series; when the 'last chance' perk is enabled, avatars mortally injured (but not immediately killed) fall to the ground, but the player remains in control, able to shoot their side arm for up to 30 seconds, potentially securing more kills or tactical advantage.

Though in each of these examples the mechanic of death negatively impacts game experience through removal from play, Klastrup warns game designers "*must not make it [death] so harsh that players are scared away from the game at an early point in their gaming experience.*" [19, p. 146]. This advice is widely followed and is reflected in the recent 'casualisation' of mainstream games [10, 11, 17]. Speaking to single player role play games, Whalen [24] understands the punishment of death as simply "*being forced to repeat material that has already been explored*". David Myers' [22] analysis of 'perma-death' (or character-death), likewise argues that such a feature "*is overly restrictive*" and "*an incongruous MMO design feature that disrupts the normal and most enjoyable flow and consequences of play within the contexts of both cooperative and competitive play*" [p. 130]. We argue that this assumption has overly influenced the design of death in digital games, in a direction potentially inconsistent with the actual affect of death on player experience.

With regards to the impact of death on social experience, Mark Chen [9] makes an interesting observation regarding the role of group death in learning. High-end *World of Warcraft* players partake in difficult 'raiding' which requires collaboration between multiple players (at the time of Chen's analysis, up to 40 players). Failure can often result in every member of the group dying, an event colloquially known as a 'wipe'. Chen argues that such a disastrous, collective consequence forces better collaboration and learning. Nick Yee has also made similar observations about the severe death penalty found in early versions of *Everquest* [26]. While the individual experience of death in recent games has been consistently inconsequential, we begin to see here the possibilities for the death mechanic to impact player experience in the social dimension.

We briefly want to discuss, as an example, the creative utilization of the death mechanic in the *Sims* games. The death of a player's Sim is ostensibly a representation of the player's failure to achieve a primary goal of the game (take care of a Sim). However, upon dying, the Sim's estate is visited by a non-player 'Grim Reaper', attending the scene to make death final. Ingeniously, the developers of the *Sims* have utilized this as an opportunity to expand play by making this Grim Reaper character interactive. Players can instruct other Sims to beg, bargain and even trick the Grim Reaper into not taking their loved one away, at which point the deceased Sim will miraculously recover. In the *Sims 3*, deceased Sims with a high logic skill are even able to play Chess for their lives. Players have further been able to explore death as an element of play by being able to collect items or complete 'quests' to revive dead Sims. We mention these mechanics to emphasize the possibility of using death as a space for design exploration. A handful of other games in the survival genre such as *Don't Starve* and the original, 'vanilla' version of



Figure 1 - The screen presented to players when they die in DayZ

Minecraft have explored and exploited character-death in a similar way to DayZ. However, DayZ is unique in combining character-death with other game mechanics discussed below to create a novel, unique and very interesting play experience.

3. DAYZ

DayZ was released in early 2012 as a 'mod'; a modification to the 2009 military sim *Arma II*. It was developed by Dean Hall, a game designer at *Arma II*'s studio, *Bohemia Interactive* as an exercise in exploring *Arma*'s game engine, which he had been hired to help re-design for *Arma III* (2013). Released online for free (though a paid version of *Arma II* was required to play), the game was a sensation, propelling the 3 year old *Arma* into the 'best selling' games on Steam (a popular game distribution platform) for several months. PC Gamer called DayZ one of the "*most important things to happen in gaming in 2012*" [20]. By November 2012, *DayZ* had had over 1.3 million unique players, outstripping many blockbuster studio titles. A standalone version of the game is currently under development, due for release mid-2013. The *DayZ* mod has been turned over to the community for development.

As a 'mod', *DayZ* has been under continual development, with new features and reconfigurations changing the game in minor ways at each new release. Consequently, elements of this description may grow inaccurate as the *DayZ* mod is further developed by the community. The following reflects the experience of the game in late-2012, the period in which the majority of data was collected.

Players begin the game along the coast of the map, with very few items in their inventory (bandages, painkillers and a flashlight). Unlike nearly all other modern digital games, DayZ provides no tutorial process, guidance, direction, defined narrative or implicit goals other than to survive. This lack of initial framing for the game world feeds into the DayZ's reputation as being a ruthless, brutal and *authentic* post-apocalypse survival game.

Players must scavenge weapons, food, drink and medication from zombie-infested buildings spread across the 225 km² open world map of 'Chernarus'. Making this process difficult are zombies that will attack players who attract their attention, but players are able to crouch and crawl to reduce visibility and noise to sneak past zombies undetected. Health of a character is represented by blood volume; blood is lost when damage is taken and can be restored by food and blood transfusions. If a character does die, the death is permanent and consequential: the player must begin the game from the beginning with no inventory and none of their previous advancement. Figure 1 shows the screen which is shown immediately to the player when their character is killed: it is an abrupt, immediate disconnection from the virtual world, rather than a third party observation as in *World of Warcraft*.

DayZ is also multiplayer. There are over 2,000 servers hosted privately around the world which host between 40 and 60 players at any given time. Each server is connected to a persistent identity system (nicknamed 'the hive') which saves a player's character location and inventory, allowing players to log off and return to any server using the same persistent character. Each individual server is a persistent virtual world, they continue to be operational between individual play sessions, and players can leave certain items in the game environment that will remain in that location when they return.

No form of social organization is implemented in the game engine. Players are not sorted into 'teams', and cannot found or join formally recognized groups. Only informal collaboration is possible. There are very few components of the game structure that encourage collaboration other than the blood transfusion item (which needs to be administered by another player). Should two players cross paths in DayZ, nothing prevents one from killing the other, stealing their entire inventory and sending the victim back to the beginning of the game. This highly consequential PvP is exhilarating in its risk. Extra depth is added due to the realistic in-game proximity voice communication [see 4]. This communication system, referred to as 'direct chat' by players, allows players to socially interact in the immediate lead up to PvP confrontations; for example demanding items in exchange for mercy, or agreeing to team up to scavenge cooperatively. Voice communication is enabled between players whose avatars are located within 50m of each other in the game world, and is presented in stereo - allowing discerning players to determine the direction from which sounds are originating (e.g. to determine the location of hidden players).

4. METHOD

In order to examine the affect that these reconfiguration have on player experience, we conducted an extensive evaluation of DayZ paratexts, in particular monitoring the official DayZ forums and the DayZ community on reddit.com. We also interviewed a small number of players for the purpose of developing a survey designed to quantitatively measure the appeal and enjoyment of DayZ (not yet deployed). These interviews involved players reflecting on positive experiences had while playing DayZ, and were conducted via voice and text chat. Interview transcripts and online materials were analyzed using grounded-theory methods [15].

5. DYING IN DAYZ

We found three pronounced, interlinked ways in which the unique configuration of death in DayZ affects the player experience; by: intensifying social interactions; increasing players' perceived investment; and invoking moral dilemmas. We will briefly discuss each of these now with examples from our research. These effects are discussed in ascending order of their impact, categorized as such based on our research so far.

5.1 Perceived Investment

Because of the increased consequence of death – if a player dies, they lose all their advancement – it is evident that players treat death more seriously than they do in other games. However, numerous other elements of the game's design interplay to increase *perceptions* of investment, which influences player agency in a fashion perhaps best encapsulated the 'webcomic' shown in by Figure 2 (YOLO stands for 'You Only Live Once').

As Lisbeth Klastrup argued [19], it is the punishment, or *post-death* experience that most informs the overall death experience. As death in DayZ is *character death*, players must 'respawn' to the



Figure 2 - Virtual Shackles comic capturing the different approach to Death by DayZ players

beginning of the game with only a few rudimentary items and no weapons. Players then have to scavenge, again, for the basic essentials to survive – water, food, guns, ammunition. Thus, it is not simply that DayZ players lose everything, but also that it is difficult to collect again the equipment necessary to 'safely' explore the game world.

This was well supported in the interviews and publicly available descriptions of player experiences; players nearly always preface their narrative with what items they had been able to attain before death, as their success up to that point is an essential part of their 'death story'. Further indicative of this is a lack of acknowledgement of "immediate" deaths, deaths that quickly follow a prior death, when a player's character is still unarmed. A new or unskilled player might die several times before being able to find a gun (and the right kind of ammunition) to begin rebuilding their inventory. Though these deaths likely make up the vast majority of deaths in DayZ, they rarely feature in online accounts of dying.

Conversely, the increased perception and appreciation of investment in one's character affected the experience in the opposite fashion when players begin with a new character.

With a new character, you've got nothing to lose, so you'll take more risks in order for a bigger payoff: you'll get the chance to explore a city you might never have done so when you were all geared up, and you might even run around like some kind of axe murderer, freaking people out over direct chat.

This quote, taken from a player's personal blog [21], demonstrates an indirect result of increasing the consequence of death; players may make the conscious decision not to 'buy in' to a particular life, instead suspending their primary motivation for playing the game to explore new modes of play.

5.2 Invoking Moral Dilemmas

In line with the increase in the perception of personal investment in their character, players also recognize the investment of other participants in the virtual environment. In consequence, player-versus-player engagements gain a new dimension, one in which shooting other players becomes a moral dilemma. The following transcript comes from a YouTube video [16] in which two players, playing together and communicating over a third party voice application, encounter others in the virtual world of DayZ;

P1: *Shit shit I'm going to have to shoot*
P2: *Wait*
P1: *They just stopped*
P2: *Wait Wait... [Quietly] please turn around please turn around*
P1: *If they come up any closer I'm going to have to shoot them*
P2: *They're looking at Electro so. Oh fuck no no, no. Please*

don't please don't

P1: *Yep, its gunna have to happen, its gunna have to happen.
Get your gun out.*

Then, a few minutes later after a gun fight;

P2: *I'm not seeing movement. I got one murder.*

P1: *Me too.*

P2: *Do you want to check the corpses?*

P1: *Why did they have to come up this fucking hill?*

P2: *I didn't want to shoot them*

P1: *Me either! But you know what happens when we don't
shoot first.*

P2: *Yeah*

This striking transcript emphasizes the extent to which players internalize the consequentiality of death, despite *DayZ* being structurally similar to most player-versus-player FPS games. These players take no joy in killing strangers, and express regret at being “forced” to kill. This is despite there being significant reward from killing another player’s character due to the opportunity to loot their corpse. The palpable emotion exhibited in this and many other recordings of play in *DayZ* demonstrates that killing other players in *DayZ* can create moral anguish for some players as a result of the consequential character of death in the game. These emotionally charged, morally ambivalent play-experiences that result from *DayZ*’s death mechanics are not readily attainable in others games. In the discussion section we will further expand upon the possibilities this opens for future research.

5.3 Intensifying Social Interactions

The principal way in which we found the reconfiguration of death changed the player experience was through its impact on social interactions. This is interlinked with the increase in perception of investment, the new presence of moral dilemmas in play, and the ‘direct chat’ proximity voice communication.

The severe consequence of death in *DayZ*, combined with the ambiguity of social relationships (a lack of clearly delineated team structures) creates an immense risk when interacting with another player. One or two well-placed gunshots can rob a player of all of their current advancement. This is commonly articulated by players as creating a feeling of “*tension when encountering another player*”.

For example, when discussing the implementation of proximity voice communication, one player stated:

if i hear begging from someone with a broken leg at night, if i am in a town alone or running through a forest and i hear someone begging for help, i'll be very wary of traps.

Tendencies towards altruism or a desire for social play (a large motivation for many players [25]) are tested by the risk and consequence of death in *DayZ*. As the preceding quote indicates, there is the capacity for social interactions to be a ‘trick’, that is, players might use deception to further advance themselves in the game. There is also the capacity, however, for a player to genuinely be stuck with a broken leg and no capacity to heal themselves, needing the help of another player. Whereas in another FPS or MMO there is little risk in deciding to interact with another player, in *DayZ* this is a difficult decision.

As a result, what otherwise might be mundane interactions become an intense personal dilemma (do I assist this person) which permeates the interactions that take place. Numerous

YouTube videos depict players nervously scanning their surroundings during interactions in case they are being flanked, and accounts of players crossing paths generally focus on the intensity of the experience; how nervous the player was, what they were risking, and how they were on edge the entire time.

6. DISCUSSION

In *DayZ*, death matters. Indeed this likely contributed to the sharp fall in popularity of the mod, which was susceptible to life-ending hacking and bugs. A meaningful and consequential death experience becomes frustrating and pointless when death is initiated by walking through a doorway, or being teleported 50 meters into the air by other players with hacked versions of the game. In mid-2013, *DayZ* will be released as an independent game (rather than a mod), based on an entirely new server system which will prevent prolific hacking. This release will replicate the business model of *Minecraft*, offering players early ‘alpha’ access to an incomplete version of the game in exchange for ‘pre-purchasing’ the final release. This version of the game will be regularly updated with new features and content, providing researchers with the possibility to investigate the impact of small changes to the configuration of the *DayZ* experience. This offers intriguing methodological possibilities for researching games, as causal links between game experience and specific game mechanics can be investigated and plausibly explicated.

This paper examined death in *DayZ* through the lens of consequentiality; an appealing analytical framework particularly given the finality of ‘real’ death. Where digital games offer a largely unexplored opportunity to examine the multifaceted meanings and experiences involved with death, *DayZ* provides one of the closest approximations in mainstream titles to the intense, deep relationship people have with dying and death. Indeed, *DayZ* designer Dean Hall has frequently spoken of the relationship between his design emphasis on *authenticity* (over *realism*) and the increased consequence of death [23]. This notwithstanding, there are numerous other possibly fruitful ways to analyse the mechanic (or ‘metaphor’ [3]) of death in games; such as post-death, pre-death and death experience, for example, which we have not addressed in this paper.

The impact that the unusually high consequence of death has on the *DayZ* player experience is not limited to the three categories discussed in this paper; it has broad impact on all elements of the game’s culture, reputation and experience. We have simply sought in this paper to identify the key impact areas on *game experience*, to facilitate further discussion about death as a meaningful mechanic in game design, and to assert that high consequence (and associated feelings of anxiety) is not necessarily unwelcome in digital games. As Emily Flynn-Jones notes, the absence of critical writing on ‘permanent death’ is “*perhaps due to the infrequency of its usage in videogames*” [13]. We intend to further explore the impact of this unusual configuration of death when the *DayZ* standalone is released in 2013.

In this paper we have also drawn on a distinction between player, character and avatar [5] to clarify our discussion of the death mechanic in various computer games. In this set of conceptual distinctions ‘player’ refers to the experiencing entity that plays a game; the person. ‘Character’ refers to the “*fictional identity within the [game] narrative*” [5, p. 68], which encompasses a set of in-game properties like skills and assets which ‘belong’ to that character [p. 70]. ‘Avatar’ refers merely to the player’s visual manifestation within the game, through which the player sees and acts within the game world. Using this distinction, *player-death* occurs when the player dies in a biologically embodied way, ‘for

real' as it were. Such a computer game mechanic only occurs in works of science fiction. *Avatar-death* refers to the game-mechanic of the player's representation in the game dying, being temporally removed from play and re-spawning more-or-less without loss (e.g., as found in *Call of Duty* or *World of Warcraft*). 'Perma-death' is thus *character-death*; the death of the player's in-game character. That is, upon death the character is removed (permanently) from the game. As in *DayZ* the character encompasses the abilities and history of the player's efforts within the game, this progress is also lost. This useful distinction between avatar and character contributes to how we might begin to evaluate and understand the experience of death in digital games.

Due to the consequence of character death, *DayZ* creates meaningful social dilemmas of the kind often modelled as a "prisoner's dilemma". Without formal team structures constraining cooperation and competition, players can *choose* to collaborate, and some tasks require that they do, but they can also choose to kill and steal from each other. The proximity voice system enables negotiation of the outcome of any encounter. This means that player relationships are ambiguous. Players who form cooperative (if temporary) associations are constantly tempted to renege on them, thus forcing players to confront a social dilemma.

The resulting dynamics of these high-stakes interactions resemble the ruthless social interactions found in *EVE Online*, and situate *DayZ* within the genre of "ruthless games" [6, 7]. We argue that this element of *DayZ* strongly contributes to its appeal. Further research is required to fully understand ruthless play. Ambiguous relationships intensify interaction by involving social intercourse as a domain of competition. In ruthless games, communicative acts such as deception become part of a player's arsenal.

Social dilemmas lie at the heart of the human condition [1, 13]. The appearance of ruthless games opens the possibility of using well-tested models from other fields to understand player behaviour, or even to reverse this logic and, following the suggestion of authors such as Castronova [8] and Bainbridge [2], use the virtual world of the ruthless game to study (offline) human behaviour.

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