

Negativity in Play - How Negatively Valenced Emotions create Meaningful Games

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Abstract—Emotions are considered a core component of any media experience, including video games. However, most research regarding video game experiences regularly focus on the positive emotions elicited during play. As research on negatively valenced emotions is still ongoing, recent studies show they can provide more meaningful experiences for players. Therefore, this paper seeks to build upon previous research to emphasize how negatively valenced emotions can benefit the player experience (PX). Accordingly, studies regarding psychological research, essays, and presentations focused on game design are analyzed and discussed. A closing section of this paper serves as an examination of the game *Getting Over It With Bennet Foddy*, whose thematic and design philosophy complement those explored by this paper.

Index Terms—Negative Emotions, Game Design, Player Experience, *Getting Over It*

I. INTRODUCTION

Studies have attested that emotions play a vital role in the player’s experience (PX) [1] [2] inside video games. Therefore, various researchers have analyzed how emotions can be linked to game design and consequently impact players.

In this paper, the term *emotion* refers to the common understanding of emotion as defined by Baumeister et al. [3], which is recognized as “a state of conscious feeling, typically characterized by physiological changes such as arousal” [4, p. 3]. Hence, for the discussion presented in this paper, emotions are to be understood as the labeled feelings associated with categorizing oneself as having a certain emotion.

For the sake of simplicity, the term *mood* is to be understood as a state of constant display of a single emotion [4]. Similarly, The term *affect* refers to the underlying experience of emotion. Emotional responses are referred to as *strong* if they are considered to be uncommonly intense.

Furthermore, the terms *positive* and *negative* emotions refer to the classification of emotion concepts using psychological appraisal theory, also known as the notion of valence [5]. After defining valence as the intrinsic attractiveness or averseness of a particular event, emotion concepts are classified as positively or negatively valenced.

In the same context as other articles discussing media emotions [6]–[8], general emotion concepts such as joy and happiness are considered positive emotions, while fear and sadness are considered negative emotions. Additionally, the

use of the term *negativity* in this paper is also referent to negatively valenced emotions.

Some of the studies regarding negativity show that negative affect may be beneficial to the player experience [9], contributing to their enjoyment or resulting in (self) reflection [10]. Therefore, game developers should acknowledge the importance of emotions and the process of designing around them. As a result, developers can provide increasingly meaningful experiences for players alongside a more expressive and artistic game design.

When developing a game that seeks to produce emotional engagement, designers have extensively explored and discussed techniques to guide the player’s emotions [11]. These methods frequently involve a mixture of narrative and gameplay elements, further examined within this paper. Game designers and reviewers have also discussed the importance of balancing positive and negative player interactions within the player experience to maximize their motivation and enjoyment [12].

Ultimately, this paper proposes an analysis that considers empirical and psychological research on media emotions alongside the design perspective from game developers and reviewers. It aims to indicate the value of negative emotions in meaningful experiences for players, providing insight into the potential of video games to go beyond hedonistic products of sheer entertainment.

II. RELATED WORKS

A considerable amount of research has been conducted in the field of psychology to better understand and explore the concept of entertainment in media. Researchers have then analyzed responses to media and consequently formed connections between the audience’s emotions and their enjoyment. Accordingly, many studies consider emotion to be one of the roots of the so-called media experience [6], [7], [13].

Ed S. Tan [14] concluded that people who engage with media, such as viewers of traditional feature films, often have the desire to experience emotion within the safe margins of fantasy. Similarly, Bartsch [6], [7] conducted studies regarding entertainment gratification and compiled a considerable amount of research that illustrates why audiences may seek media to experience certain emotions.

A growing number of researchers have also analyzed non-hedonistic approaches to media. These studies sought to understand the appeal of media experiences that are not considered positive, such as fear, frustration, and sadness. Oliver and Bartsch [7] have suggested a possible explanation for the search of negatively valenced emotions in media: appreciation. Appreciation could result from the fulfillment of higher-order goals of autonomy, competence, and relatedness. Therefore, they concluded that moving and thought-provoking entertainment that evokes negatively valenced emotions may result in a deeper level of processing and contemplation. This type of entertainment could contribute to a more lasting and enduring response.

As a somewhat recent form of media, video games have also been a case of study regarding enjoyment and the emotions experienced by their respective audience. Consequently, emotion is also considered a core component of the enjoyment factor and is an integral part of PX [1], [8], [10].

Bateman et al. [15] produced studies in which players reported feeling positive emotions such as amusement and excitement. Notably, positively valenced emotions such as fun and enjoyment are the most frequently recognized during play [2]. Perron [16] identified video games as tools of mood management, which created the possibility for players to engage in self-controlled arousing experiences. This observation falls in line with Bartsch's examples of possible gratifications [6] that people can experience with media.

Most research concerning games and emotions focus only on the positive aspects of play [8]. These emotions are still to this day the most commonly related to games [10] due to their popular portrayal as purely hedonistic entertainment products. Cole et al. [17] recognized that, at the time, the most popular games often focused on providing functional challenges instead of confronting players with emotionally charged subjects. They proposed the term *Avant-garde game* to refer to games that chose to use the medium to provide emotional challenge and create a more tough-provoking experience. Other researchers such as Oliver et al. [10] argue that games could offer meaningful experiences that go beyond hedonistic gratification.

Similar studies often examine how games can affect an individual beyond pure entertainment, serving as thought-provoking pieces of insight or help on their education and training [18]. Notably, Marsh and Costello [19] devised the term *serious experience* to refer to game experiences that are not exclusively positive, going beyond pure hedonistic entertainment.

Researchers such as Bopp et al. [8], [20] chose to focus on negatively valenced emotions, which, while being present in the player experience, were mostly unresearched. This is due to a prevalent belief of negative emotions being at odds with the focus on positive affect and enjoyment that video games should provide. Yet, some researchers have recognized negativity to be a core aspect of many popular games. Johnson et al. [21] conducted studies with players who classified MOBAs as their favorite game genre and concluded they

experienced less positive affect and more frustration. However, these players would greatly appreciate the eventual mastery of the game and the teamwork it could provide. Likewise, Allison et al. [9] found that players can consider frustrating mechanics an integral part of game experience.

Therefore, this body of research is primarily focused on why players experience negative emotions and how these emotions can benefit the experience. Still, they often function solely as empirical studies and psychological analyses of the emotions evoked by media [8], [10], [19]. From a designer's perspective, game developers and reviewers have also researched negatively valenced emotions. These studies focused on the practice of designing games that explicitly evoked negative emotions, providing more engaging experiences.

An increasing number of developers have started to value the potential of designing for negative emotions such as frustration [22]. For instance, Harrer [23] analyzed how games could explore the Freudian concept of loss. The study was made using expressive gameplay devices described by Rusch [24] which could stimulate emotion.

Game developers such as Burnell [12] have also explored and discussed means of subverting traditional game design practices. Similarly, Wilson and Sicart have discussed different types of what they define as *abusive game design* [25]. In both cases, the designer purposefully uses negative emotions to further immerse the player into a more meaningful experience.

Conclusively, this paper aims to bridge the psychological research regarding emotions in video games and the design perspective of negativity as a tool to elevate the player experience.

III. METHODOLOGY

This paper highlights the value of negative experiences in games, using both psychological research and game design studies. Its primary objective is to illustrate how video games could use negativity [8] to produce more meaningful experiences [10] and become more than products of hedonistic entertainment [7].

It first discusses the potential of negative emotions in the design of meaningful experiences, then expands this discussion to the medium of video games. Following this analysis is a study on how some games have harnessed negativity to create meaningful experiences for players while avoiding poor reception.

Lastly, a section of this paper focuses on an examination of the game *Getting Over It With Bennett Foddy* [26]. The game displays an atypical design and a metacommentary on frustration, elements that are closely related to the discussion presented in this paper. Consequently, its segment contains an analysis of the game alongside a literature review regarding its developer's commentary.

IV. NEGATIVITY IN PLAY

As aforementioned, it is valuable to analyze how media provokes emotion and provides fulfillment to comprehend how games can benefit from negative emotions. Therefore, the

following section focuses on psychological research regarding emotions within generalized media and video games. Following the next session is a three-part discussion on practical approaches to emotional engagement within game design.

A. *Negativity in Media and Games*

When analyzing entertainment gratification, Bartsch [6] offered an overview of various forms by which media could provide enjoyment. Of these, mood management and sensation seeking can efficiently illustrate how the audience can derive positive emotions from media. Other concepts mentioned by Bartsch like meta-emotion and self-reflection can explain the gratification of negative emotions. Additionally, the concept of eudaimonic motivation is valuable when analyzing gratification, as it implies the use of media can also be motivated by a search for deeper insight, meaning, and purpose in life. Ultimately, the article concludes that media provides an opportunity for the fulfillment of psychological needs [6].

Furthermore, Oliver and Bartsch [7] cited appreciation as a possible motive for the search for negative emotions in media. This concept of appreciation is introduced as a state distinct from enjoyment, being more similar to self-reflection.

When analyzing the medium of video games, many researchers concluded that emotion also plays a core part in PX [1], [2], [16]. Some studies often discuss the potential of the medium to engage its audience due to its inherent interactivity [27]. For instance, Oliver et al. [10] concluded that games provide the opportunity for prolonged and sustained user immersion and involvement. Consequently, games also create the possibility for players to experience a broad range of emotions.

Therefore, many researchers sought to understand how exactly video games could elicit emotion. Some researchers have stated that a game's story plays a significant part when generating emotion [10], [11], [17]. However, other research estimates that the core part of PX and its inherent emotions are primarily linked to gameplay [16].

Many researchers emphasize how video games can be related to Self-Determination Theory [28], with games being able to fulfill three basic psychological needs: autonomy, competence, and relatedness [12]. Many studies regarding PX often employ the Player Experience Need Satisfaction scale (PENS) [29], devised to specifically assess these three needs.

Lazzaro [2] concluded that the mechanisms by which games could cause emotions were also one of the primary reasons for player engagement. Some of the concepts devised by Lazzaro help illustrate the general appeal of games, such as their use as a method of reproducing certain emotions such as excitement and relief. These observations align with other reports of games functioning as mood managers [6], [16].

The widespread consensus of video games tended to characterize them as shallow and superficial [10], [30] due to their portrayal of products of sheer hedonistic entertainment. In an analysis of professional game reviews, Cole et al. [17] concluded that core blockbuster games usually offer what can be considered functional challenges. These challenges are

considered functional due to their reliance on dexterity, skill, and strategy. However, when analyzing games that sought to produce a more thought-provoking experience, reviewers often focused less on the functional challenge and more on the game's narrative and thematic [17]. This prompted the definition of emotional challenges, which are more related to cognition and internal psychology than dexterity or skill. While emotional challenges are primarily linked to a game's narrative, research shows it is equally possible to use game mechanics to elicit emotional responses [23], [24]. These findings are further discussed in the following section of this paper.

As games continued to evolve, an increasing number of emotionally charged experiences have been reported in blockbuster high-budget games produced with high budgets [8]. Since stronger emotional responses are linked to greater satisfaction with media [6], the game industry seeks to elevate the emotional engagement games have over players [11]. These efforts could also provide experiences that go beyond hedonistic gratification.

Likewise, some games are designed with a primary purpose other than sheer entertainment. Defined as serious games, their primary objective is to promote education, training, and social change [18].

There is a notable stereotype which confines serious games to edutainment, focused only on skill development or reinforcement learning. On the contrary, Ritterfeld [18] argues that almost every digital game with a purpose in addition to entertainment should be considered a serious game. This would include meaningful games [10], which tend to highlight fundamental values or depictions of the human condition, serving as thought-provoking experiences that can lead to self-reflection.

Accordingly, the use of the term meaningful experience in this paper refers to experiences that go beyond hedonistic gratification and offer some form of insight or education for players. Therefore, meaningful (and serious) games could fulfill the intrinsic need for insight and meaning in an individual as defined by the concept of eudaimonic motivation [6], [30].

Some researchers also believe serious games can provide experiences that are engaging and entertaining, much like their non-serious counterpart [19], [31]. These findings reveal games have the potential to provide traditional entertainment while also being thought-provoking and insightful [10].

When analyzing experiences reported by players, researchers observed that negative emotions such as sadness and tension were more pronounced in meaningful experiences [8], [10]. Similar observations lead to an ongoing examination regarding negative emotions within PX, where some researchers argue that negative affect can contribute to more engaging player experiences [1], [8]. Naturally, games can commonly elicit negative feelings such as frustration when challenges are one of their core components.

Functional challenges are directly related to what Lazzaro [2] defined as hard fun, where emotion is created by overcoming challenges. Consequently, the emotions evoked by these

challenges tend to be limited to a cycle of frustration and Fiero (personal triumph over adversity). Research has shown that the negative emotions present in the concept of hard fun are a core aspect of some games [9], [21], where players consider it an essential component of their experience.

Some game designers acknowledge the innate frustration present in their designs and build upon them. Other games would guide the player to project his feelings into elements of the narrative, such as guiding the player's frustration into anger towards a villain [12]. These approaches could result in a more emotionally charged experience.

Likewise, many games use their narrative to evoke emotions such as sadness, which is described by players in their reports of notable emotionally driven experiences [20]. This sort of emotional response is tied to relatedness, which can also present itself as a variation of loneliness, melancholy, and grief [12].

Both frustration and sadness serve as direct examples of negative emotions usually present in games which could be beneficial to PX. As the medium evolved, game developers began to further explore and comment upon the human condition [24]. Studies indicate players find it rewarding to experience strong emotions and situations uncommon in their real-life [20]. Furthermore, reports show these experiences can lead to a state of self-reflection and insight, which can be related to a game's thematics and narrative. Combined with the informative nature of serious games, they can both introduce and discuss both educational [18] and social [27] topics to players.

Consequently, the exploration and management of negative emotions can lead to more personal and meaningful experiences within games, leaving more lasting impressions. Hence, developers and reviewers have both explored and discussed how and why to inject negative emotions within games.

B. Negativity in Narrative

As games evolved, it became easier to develop traditional narratives such as those frequently found in literature or film. Due to their intrinsic interactivity, games often allow players to take the role of the main character inside a narrative. This can result in a closer relationship between a player and the story [16]. Therefore, many games take advantage of this to more significantly involve players in their story, resulting in a stronger emotional response.

These increases in emotional engagement are possible thanks to one of the psychological needs that games can satisfy: relatedness. This need is associated with an intrinsic desire for connection with others, and it is usually related to interactions between players in multiplayer games [29]. Still, both researchers and developers associate aspects of relatedness with the interaction between players and fictional characters [8], [12].

Similarly, Bartsch [6] addressed how media-induced emotions can build and deepen bonds among spectators, but also cultivate parasocial relationships with characters and avatars. Nonetheless, these parasocial relationships mostly seem to

serve as a complementary source of emotional gratification instead of compensation for deficiencies in social life [6].

Hence, many writers have developed compelling narratives for video games inspired by those seen in literature or cinema. However, presenting fiction in a video game is more challenging than it appears for those unfamiliar with the innate interactivity of the medium. As commented by Freeman [11], developing a story for a video game is fundamentally different than creating one for film since the player often must be treated as a character and be convinced of his role.

Writers must also consider the actions players may take inside their narrative, possibly resulting in branching paths and different storylines. Reviewers often emphasize that many games try to tell players a story about someone else [32] instead of actively making a story in which the player participates. Accordingly, many developers have commented on the difficulty of translating traditional narrative structures to games, as illustrated in the figure below.

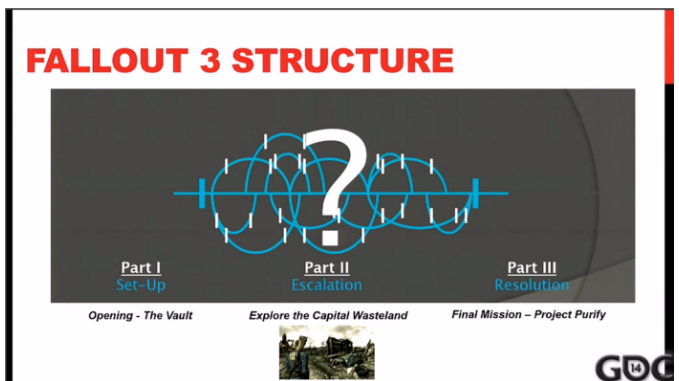


Fig. 1. A slide illustrating how traditional narrative structures can hardly be adapted to open world games [33].

Nevertheless, the intricate subject of narrative design for video games goes beyond the scope of this paper. One of the key objectives of creating an engaging storyline inside a video game is to capitalize on their innate interactivity. Doing so could strengthen the connection between the player and its characters or insert the player in a situation that evokes emotions by itself.

Emotionally challenging games often rely on their narrative to immerse the player [17], which can lead to a scenario of reflection and contemplation [8]. Cole et al. [17] noted that games that focus on providing emotional challenges for players often refrain from using functional challenges, leaving space in the mind of the player for reflection. Similarly, ambiguity and incompleteness can increase player immersion and generate what Lazzaro defines as easy fun [2].

While adhering to simplicity in both visuals and mechanics proved useful to facilitate emotional attachment in games such as *Florence* [34], [35], recent research has shown that functional and emotional challenges need not always be mutually exclusive [8]. Similarly, games that are widely commercialized as blockbuster titles attempt to offer both functional and emotional challenges.

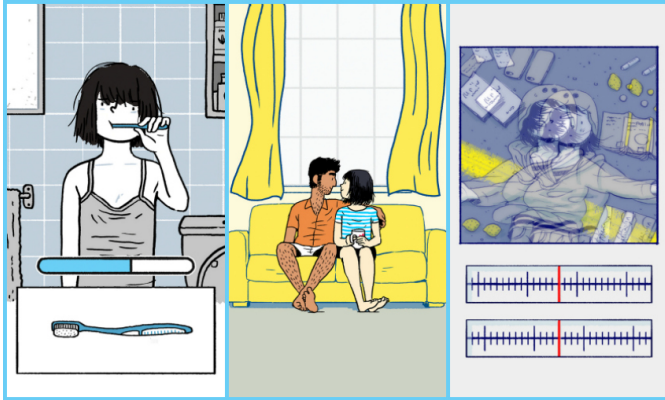


Fig. 2. *Florence* (2018) focuses on its simplicity to allow players to imagine more and fill in the gaps [34].

Alongside other forms of media, some games also create tough-provoking experiences by depicting modern real-world problems. Addressing these topics, they can emotionally engage players by exposing and discussing problems they may have faced in their real life. Furthermore, these depictions can call attention to issues and situations in which players would typically not experience themselves [27]. Nonetheless, developers recommend taking caution when depicting real-world problems and sensitive topics [36] since it is crucial to portray them with respect for those that may be affected by them.

Many video games are guilty of trivializing concepts such as death and consequence [37] since many of them give the player the option to rewind their mistakes (be it intentional or not). These trivialities can be highly detrimental to both depictions of serious real-world issues and tragedy inside narratives. Therefore, developers should always examine how to minimize possible trivialities brought on by gameplay.

Another psychological need linked to games is autonomy, being related to the volition or choice in decisions and actions [29]. It's essential to make the player feel responsible for his actions and convince him that his decisions are meaningful. Therefore, a game's narrative should always consider player autonomy.

A possible solution to the trivialization of tragedies in games is to subvert the player's autonomy. By restricting player choice, designers can create inevitabilities inside the story. However, this must be carefully structured, as breaking autonomy frequently has to be deeply justified inside a game's narrative, or it may lead to frustration aimed directly at the designer [12].

Consequently, both designers and writers should take care when creating tragedies and complex outcomes while denying the player the option to achieve a happier ending. They should make sure that the narrative justifies the inevitability of a tragedy instead of forcing players to fail in what they believe is another challenge [38].

C. Negativity in Gameplay

When focusing on negative emotions in gameplay, both designers and reviewers often analyze a game's difficulty. Since difficulty is associated with the challenges proposed by the game, it's also considered one of its core components [17]. Difficulty is also linked to competence, related to feelings of effectiveness manifesting when overcoming challenges [29].

Likewise, Lazzaro's definition of hard fun [2] involves triumph over complex challenges and their frustration, as opposed to easy fun, which is more related to player immersion within a game world.

Consequently, many designers have studied how to balance a game's difficulty to make sure a game is never excessively easy or exceedingly hard. This focus on balancing occurs due to a widespread belief in game design that either of those cases would be detrimental to player engagement [39].

By ranking player performance, designers can measure the difficulty in their games and interpret them as a curve, as pictured below. The most traditional difficulty curves start low, meaning the game's difficulty is relatively easy. As the game progresses, it gradually builds up challenges to match the player's developing skills, raising the curve. This approach follows the traditional belief that difficulty requires balancing to avoid player boredom or frustration.

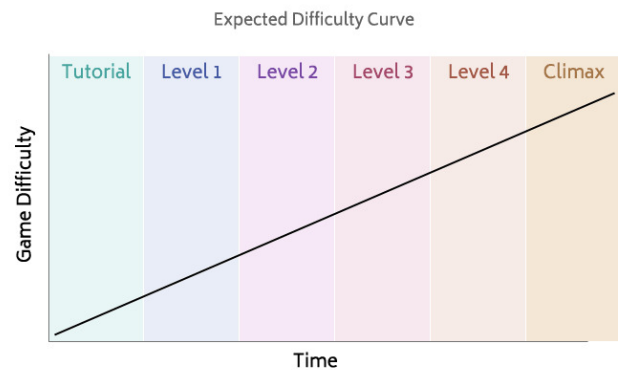


Fig. 3. An example of the expected difficulty curve within a video game [40]

Yet, many games have adopted a different approach, sometimes referred to as an Inverse Difficulty Curve [41], where the curve starts high and the game is challenging from the very beginning. Gradually, the challenges presented by the game get simpler.

Some of these games may offer character upgrades and level-ups, the most common aspect which lowers their difficulty is the gradual development of a player's skill. This approach is sometimes called *Darwinian Difficulty* [42] because the player has no choice but to adapt and master the game's systems from the start.

Popular games such as *Dark Souls* [43] noticeably use similar approaches to difficulty. Reviews regarding the game indicate that many players enjoy the cycle of frustration and Fiero evoked by overcoming the game's challenges.

One of the most praised features of *Dark Souls* is how the game punishes the player for dying by deleting their character's experience points and money if they fail to retrieve them after death [44]. While this mechanic is a considerable measure against the trivialization of death in games, it quickly loses its power if the player has nothing left to lose by dying repeatedly.



Fig. 4. *Dark Souls* (2011) was praised both by reviewers and players its punishing mechanics [43]

Similar mechanics which seek to punish the player are observed in a wide array of different games. Sometimes they are considered a fundamental part of the game experience both by designers and players, such as permanent character death [9].

Foster [45], lead designer and programmer for *Titan Souls* [46], has commented on the team's design philosophy to punish the player in order to create a more meaningful experience. In the game, the player dies in a single hit. Additionally, they respawn at a far-off checkpoint and must walk to resume their battle.

Consequently, these elements prominently added weight to the player's battles. While the critical reception was mixed on some of these design choices, Foster reinforced that *Titan Souls* was meant to be a niche game that did not appeal to every type of player.

Similarly, *Darkest Dungeon* [47] is another example of a highly challenging game that differs itself from traditional RPGs by having extremely punishing mechanics. As stated by the developers [48], the game is about making the best of a grave situation, and it leads players to try their best in the midst of disaster.

As mentioned by Burnell [12], subverting the player's competence by creating extremely difficult or unwinnable scenarios can make the player feel vulnerable or helpless. These subversions can lead to the player seeking assistance from both characters and other players.

Similarly, analysts observed that a game's difficulty affects aspects of its community-building [49] since it incites players to help each other either by interacting within the game or by spreading knowledge. In the modern games industry, some developers argue that it's favorable to develop frustrating mechanics, as they can improve both player and community engagement [22].

However, it's important to note that frustration mechanics should punish the player while simultaneously engaging them. These punishments should not restrict them from actually engaging with the game. For instance, Bycer used the term *fun pain* [50] to describe games that use avoidable frustrating systems and mechanics if the player chooses to spend money. These practices don't add to their experience, but rather take away from it.

Bycer also argues that a good game should not break its own rules to challenge the player [51]. While it's possible to subvert the game's rules without detracting from the player's experience with some previous setup, a sudden shift in the game's rules can lead to player frustration aimed directly at the designer [12].

In contrast, Wilson and Sicart [25] argue that the industry's search for best practices in game design leads to a design philosophy in which a game has to satisfy a player's desires. By having designers act as advocates for the player, games would be further reduced to products of shallow hedonistic entertainment.

One of their examples is the infamous minigame *Desert Bus* [52], in which players take eight hours to conduct a bus through a bleak and repetitive desert landscape while constantly making sure the bus stays on the road. The game was designed as a humorous response to a political movement of censorship regarding violent video games [25].



Fig. 5. *Desert Bus*, a minigame from the unreleased Penn & Teller's *Smoke and Mirrors* Sega CD game, is infamous for simulating a monotonous eight hour drive through the desert [52]

For Wilson and Sicart, designers must repress the conservatism present in the game industry and develop experiences that abuse the player, making an effort to transform the experience into a dialogue between them. By disregarding the standards set by the dominating market, designers could focus on creating more personal and meaningful experiences.

D. Negativity in Design

When analyzing the differences between games and other forms of media, it's evident that their innate interactivity is unique to the medium [53]. Players strive for autonomy, seeking games that offer agency and freedom.

As discussed previously, this poses a challenge for designers, since creating traditional linear narratives means restraining the player's freedom. Consequently, the link between gameplay and narrative has been an extensive point of discussion and exploration in the industry.

Hocking [54] defined the term *Ludonarrative Dissonance* to refer to the conflict that can happen between a game's narrative story and the actions the player can take through gameplay. An example of Ludonarrative Dissonance would be how the narrative in the *Uncharted* series [55] portrays the main character, Nathan Drake, as an everyday adventurous man. This depiction seems to ignore the fact that the player commits countless acts of murder while controlling Drake, which would alter the nature of the game's story [53].

This dissonance is a problem exclusive to the games, as they can easily suffer from the contrast between narrative and gameplay. Both reviewers and players believe Ludonarrative Dissonance to be detrimental to the experience once they become evident. Consequently, developers should always be conscious of the interactions between their gameplay and narrative.

Still, some games can take advantage of this interaction and structure their gameplay to enforce the narrative's thematics.

As previously stated, critics praised *Dark Souls* for its punishing mechanics, but critics also appreciated its world-building and unconventional storytelling [56]. The game initially envelops the player into a crumbling but still hostile world, leaving him disempowered amidst a wide array of challenges. Interacting with the dying world presented by *Dark Souls* can instill contemplation in players, as the environment reflects its narrative's themes of decay and extinguishment.

Critics also praised *Darkest Dungeon* for its contextualization of the player as a possible villain. Since the game's system encourages the player to exploit his adventurers, many players found use in discarding them once they are no longer helpful [53]. Essentially, the game enforces the hopelessness and nihilism present in its narrative by rewarding players for being ruthless with their party.

Likewise, Rusch [24] believes that instead of attempting to mix gameplay and narrative, games should aim to align them. For instance, Rusch mentions the opening levels of *God of War II* [57] as an example of alignment between the main character's feelings and the player's, through both actions performed by gameplay and narrative elements told through story cutscenes. Rusch also suggested that games could design more insightful experiences by harnessing aspects such as proceduralism and metaphor.

While Cole et al. [17] argued that games that seek to provide emotional challenge usually strived for simplicity to leave room for thought, research has shown that many mechanically-heavy games can also generate emotional challenges [8]. Some games achieve this by aligning their narrative and gameplay, establishing an emotional connection between player and character.

Harrer [23] examined in-game examples of loss and how it would be manifested not only in their narrative but also



Fig. 6. *Final Fantasy XII* (1997) presents in-game loss both on a narrative and gameplay standpoint [58]

in their gameplay and controls. In particular, the death of a character in the game *Final Fantasy XII* [58] is considered an emotionally impactful moment both in Harrer's analysis and in research conducted by Bopp et al. [8]. By removing one of the party members from the game, this death impacts both narrative and gameplay.

Impactful games also strive to create meaningful choices through player autonomy, such as *Orwell* [59], which confronts players with morality-based decisions to determine the fate of certain characters within its narrative [60]. *Orwell* was inspired by *Papers, Please* [61], a critically acclaimed game that also poses moral questions to the player through both narrative and gameplay while also providing social and political commentary.



Fig. 7. *Papers, Please* (2013) was critically acclaimed due to its emotional challenges and socio political commentary [61]

Similarly, *Legal Dungeon* [62] provides a similar study on player morality but also serves as a commentary on the power and righteousness of law enforcement systems [63]. In the game, players are encouraged to act against their morality to appease the system.

Therefore, designers could add more substance to both narrative elements and gameplay moments thanks to this synchronization. Even simple steps such as designing enemies to specifically provoke certain reactions [64] could be effective to guide a player's emotion.

When discussing how to possibly evolve the concept of storytelling alongside the medium of video games, Schell [37] reinforced an observation made by USC Games Institute’s Chris Swain: “Film wasn’t taken seriously as a medium until it learned to talk. Games are waiting to learn to listen.”

Unfortunately, Schell’s futuristic vision of an age where games harness their interactivity and create personalized characters for each player is still far from tangible. Nonetheless, designers are still discovering new ways to talk to players both in narrative and gameplay, while also convincing them they are being heard.

E. *Getting Over It With Bennet Foddy*

Starting over is harder than starting up. If you’re not ready for that, like if you’ve already had a bad day, then what you’re about to go through might be too much. Feel free to go away and come back. I’ll be here. [26]

Initially released in October of 2017 as a Humble Monthly exclusive, *Getting Over It with Bennett Foddy* [26] is a very unconventional platforming game. Heavily inspired by an obscure indie game named *Sexy Hiking* [65], the game challenges players to climb over obstacles using only a hammer that follows the mouse cursor.

While its premise is simple, moving the character through the various obstacles requires a large amount of precision and familiarity with the game’s movement physics. While climbing the mountain, players can easily make mistakes and fall back to previous sections, losing their progress. As the game has no checkpoints and is constantly saving, the player has no choice other than to accept their mistake and climb again.



Fig. 8. Gameplay screenshot showcasing the player character using his sledgehammer to climb over obstacles [26]

Bycer [66] has described the game as *janky*, with purposefully cumbersome and obtuse mechanics, which are a common trait found in other games made by Bennet Foddy [67].

While many games can frustrate players unintentionally, *Getting Over It* is notorious for being designed as an intentionally frustrating experience [65], centered around its thematic of failure and restart. As stated by Foddy [68], he aimed to create an uncompromisingly difficult game that wouldn’t simply be sadistic.

Another core feature is the presence of a narrator, voiced by Bennet Foddy himself. While climbing, the player will listen to comments that vary from design decisions regarding the game to discussions about digital culture. If the player is falling and losing progress, Foddy will quote various phrases and poems. While most passages reflect upon failure and serve as encouragement, others can be interpreted as humorous remarks about the loss of progress. Some of Foddy’s voice lines emphasize the intention to design a game that doesn’t submit itself to the player:

A funny thing happened to me as I was building this mountain: I’d have an idea for a new obstacle, and I’d build it, test it, and... it would usually turn out to be unreasonably hard. But I couldn’t bring myself to make it easier. It already felt like my inability to get past the new obstacle was my fault as a player, rather than as the builder. [26]

In interviews, Foddy states that a lack of meaningful consequences and high stakes create games that don’t matter for the player [69]. Making the player vulnerable to mechanics that can take away their progress adds a sense of importance to their achievements, resulting in a more engaging experience.

Ultimately, Foddy’s belief that a player should not be the master of a game [70] is similar to statements made by Wilson and Sicart [25] in their discussion regarding the importance of designing against player advocacy. This design philosophy is best summarised in one of the many voice lines that Foddy can quote to the player when they lose progress:

If you try to please audiences, uncritically accepting their tastes, it can only mean that you have no respect for them. — Andrei Tarkovsky [26]

V. CONCLUSION

While emotion is undoubtedly a core component of player experience, the importance of negative emotions is becoming increasingly evident within the medium. A contributor in both meaningful experiences and innovative design, negative emotions can essentially subvert the idea of video games as purely hedonistic entertainment.

Therefore, designers should reconsider the traditions set by a player-appealing market, which constantly labels player advocacy as good game design. Negativity is at the core of tragedy and in the shadow of challenges. It creates high stakes in gameplay and impactful narratives, making sure games retain agency and don’t act as hollow interfaces devoid of personality.

By bridging psychological research and design studies, this paper hopefully contributes to the ongoing research of emotions and their role in game design. Tough there are still many aspects to be further studied, such as the role of specific emotions such as frustration, fear, and sadness, alongside concepts such as Wilson and Sicart’s abusive game design [25]. These could be considered potential future developments for this research.

Ultimately, designing for negative emotions gives meaning and consequence to many trivialities present within games.

Negativity bridges the gap between player and designer, provoking thought and reflection. By harnessing their innate interactivity, games ultimately bring us closer than ever to experience frustration, pain and loss. They can help us learn about what's out in the world and bring to light what's within ourselves.

As mentioned by *Kill Screen* writer J P Grant [71] regarding the potential of the medium:

If games are playgrounds for thought, they may be the perfect venue for testing our reactions to this unknowable thing. And because we use games to process experiences in a safe space, we can use them to confront in play what we never want to have to confront in reality. [71]

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