Well Played

a journal on video games, value and meaning

volume 2 number 1 2012

PRESS http://etc.cmu.edu/etcpress

Well Played v.2 n.1

A journal on video games, value and meaning

Preface
Drew Davidson

What makes a game good? or bad? or better?

The Well Played Journal is a forum for in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game. It is a reviewed journal open to submissions that will be released on a regular basis with high-quality essays.

Contributors are encouraged to analyze sequences in a game in detail in order to illustrate and interpret how the various components of a game can come together to create a fulfilling playing experience unique to this medium. Through contributors, the journal will provide a variety of perspectives on the value of games.

As with the three Well Played books, the term "well played" is being used in two senses. On the one hand, well played is to games as well read is to books. So, a person who reads books a lot is "well read" and a person who plays games a lot is "well played." On the other hand, well played as in well done. So, a hand of poker can be "well played" by a person, and a game can be "well played" by the development team.

Contributors are encouraged looking at video games through both senses of "well played." So, with well played as in well read, contributors are looking closely at the experience of playing a game. And with well played as in well done, contributors are looking at a game in terms of how well it is designed and developed.

The goal of the journal is to continue developing and defining a literacy of games as well as a sense of their value as an experience. Con-

tributors are invited to also discuss games in general (ranging from tabletop, to big games and more) and how they are often designed for different fields (education, entertainment, etc) as we more fully develop a literacy around games and play. Contributors are encouraged to consider using screenshots and video of their gameplay in order to help illustrate their ideas. And we're open to suggestions on themed issues around a specific game or a topic across games.

Video games are a complex medium that merits careful interpretation and insightful analysis. By inviting contributors to look closely at video games and the experience of playing them, we hope to expand the discussion, and show how games are well played in a variety of ways.

Well Played session tracks are also being held at academic and industry conferences. The essays in the issue were sessions at Games, Learning and Society 8.0 in 2012, in which presenters analyzed the games and played them live to help illustrate their points. Two of them focused on Super Meat Boy, which led to s special bonus pack focused on the game for this issue with analyses and discussion.

The Well Played Journal has been receiving enough quality submissions to be published quarterly. We have organized our editorial board so that there are Associate Editors (Jane Pinckard and John Sharp) and Assistant Editors (Ira Fay and Clara Fernandez) to help set up a blind peer review process. Our goal is to publish great essays. There won't be a subscription, although as with all ETC Press publications, all issues will be available for download for free, and we'll offer print versions for sale through Lulu.com.

Stories from the Seats of Power: Chopper versus Chopper as Deuling Travelogues

Matthew Thomas Payne, University of Alabama,
mtpayne@ua.edu
Michael Fleisch, Independent Scholar & Artist,
mjamesfleisch@gmail.com

A Tale of Two (Liberty) Cities

Player 1:

As I spawn on my rascal of a street bike, leather jacket and helmet strictly for show, the familiar text – "Get to the checkpoints, and avoid the pursuer" – seems ridiculous for what it obscures. The corner HUD map has yet to highlight my shortest route, but I immediately hit the gas and scream up a small incline straight ahead, quickly working my neon green Bati 800 through its gears. You need to be a little lucky to reach any checkpoints at all.

Player 2:

There he is. I can already see him across the city. His avatar's neon-orange halo makes him impossible to miss from miles away. I gently tip the helicopter forward as its spinning blades make short work of the distance between us. I remain perched at a high altitude. From here, I can see where his motorcycle is headed, and try to anticipate any obstacles that he'll put between himself and the twin miniguns mounted beneath my aptly named Annihilator helicopter. I make a beeline to his orange halo as his marker zigzags from one block to the next.

Player 1:

Now the yellow line appears and tells me I guessed wrong; I hit the emergency brake, swerve hard left and slam into a protesting, foul-mouthed pedestrian, and then a brick facade with scaffolding, ingloriously tumbling

off my ride. This bike's torque turns pavement into ice.

Player 2:
And now his marker has stopped. I can't tell whether he's had an accident, if he's stuck in traffic, or if he's luring me into a trap. My Annihilator is fast and powerful, but its size and momentum makes it susceptible to the city's innumerable architectural elements. Nothing can destroy my gunship. However, billboards, traffic lights, and elevated roads can stop me from stopping him. He scores a point with each checkpoint he crosses. But if I time my approach right, he will not cross the first one.

Player 1:
Remounting, I again push the tiny vehicle to top speed, taking a multitude of wide turns, past warehouses weathered by salt in the air, under power lines and stoplights black against the twilight, and toward an immense silhouette of the suspension bridge that will bring me into the city. By now, he's probably very close indeed, maybe setting up for his first shot. One last hard corner, and I'm roaring up the freeway entrance ramp.

Player 2:
I'm closing in on him. It's still early in the round, so there's no need to announce my arrival with premature gunfire. He is traveling from one of Liberty City's boroughs to another by way of a four-lane bridge. This will be my point of attack. Once he commits to this route, I drop the Annihilator down and sweep wide to out flank him. If I execute my move correctly, I'll connect with him as he turns on the bridge's elbow. My arrogance dissuades me from using my guns. I do not want to shoot him; I want to crush him with my helicopter. I drop from the sky like a celestial hammer, punctuating my sudden appearance with a dignified "AHHHHHHH!"

Player 1:
About a hundred feet over the water, my wheels dance among the dense bridge traffic, flirting with the concrete divider. The world blurs as I tear

through the vulnerable rush hour commuters, all apparently oblivious to the immanent threat dangling above us all. I sense rather than see an enormous plunging black mass. I slam on the brakes, and my pursuer plops down ahead of me like a skydiving orca without a parachute, crushing three unsuspecting motorists.

Player 2:
My dramatic belly-flop maneuver misses his bike, but not the adjacent traffic. Nearby cars explode into flames while others are flung off the bridge like ragdolls. As my Annihilator flails about on the blacktop like a mechanical beached whale, I catch a glimpse of the biker careening around the bridge's metal wreckage. He sails through the tollbooth. And though it remains invisible to me, I know that he must be closing in on the first checkpoint.

Player 1:
Weaving sneakily past the deadly (if momentarily grounded) churning rotors, ignoring the chorus of terrified screams, I urge my bike through the sparking carnage. Knowing that my odds have dramatically improved, I tense up a bit – you don't want to make any mistakes if you manage to survive the initial assault. Engine at full-bore, I zip along the highway with a high-pitched whine, for the first time paying attention to where the checkpoint might be. Skyscrapers tower in my field of view, and I allow myself a moment to appreciate the enormity of downtown Liberty City.

Player 2:
The Annihilator is agonizingly slow to right itself. Its blades clip the tollbooth and grind against lampposts. While I struggle to recover from my failed strike, the biker puts more distance between us. Despite his narrow escape, he has not returned to the relative safety of the city blocks – not yet. Having righted the bulky black bird, I push the helicopter forward, firing short bursts at my target. From this distance, I might get lucky and knock him off his bike, or cause a nearby car to

sideswipe him. But he and I know that these shots are mostly for show. I'm taunting him, daring him to tempt fate again.

Player 1:
Distant mechanical rattling echoes give way to intense, momentary tremors. Metallic shells rend the earth around me, splashing me with fiery pavement. Somehow maintaining my balance, I rocket toward the exit ramp, and see that the checkpoint is a few short blocks away. I make no decisions about which turns to take; if I don't know exactly where I'm going, neither does he.

Player 2:
With my helicopter now paralleling the roadway, I line up my crosshairs on the nimble biker. I take a few casual potshots, kicking up asphalt and ripping apart the roadway's concrete divider. He hasn't taken any direct damage, but the indiscriminate destruction is cluttering his escape route. He is forced to slow down to negotiate a tight space between two wrecked cars. And that's when it happens.

Player 1:
Wincing in anticipation, I prepare to jump the exit ramp's retaining wall, but the charred hull of a mid-'70's sedan inconveniently slides across the lane and forces an evasion. It's an earthquake of heat and noise all around me. There's a sinking feeling in my stomach as the motorcycle skids to a near-stop, and I briefly consider abandoning it. Now I'm picturing myself sprinting to the wall, leaping over it, and hustling through the tree-lined park on foot, all the way to the yellow-and-black-checkered goal. Of course, I won't ever get the chance.

Player 2:
I lay off the guns and drive the Annihilator down. It strikes the road with a sickening thud. The cars around me ignite instantly. I see the biker frozen in time and space, paralyzed amongst the wreckage. This is when

one of my blades catches his torso and flings his summersaulting body into the evening void. My screen fades to gray.

Player 1:
The sports car-turned-fireball throws me up and back from the seat, doubled over, hands and feet out front of me, my body concave to the street. I might have flown fifty feet backwards if the blades hadn't caught me; I might even have survived. Instead, they strike the rear panel of my leather jacket squarely and bend me convex. Like a batted ball I instantly reverse direction, which is how I go flying across the park – five, ten stories up – lazily twirling over the autumn trees at sunset.

Player 2:
My opponent's sudden death is accompanied by a discordant sound – his howling laughter. This is not our first match, and it will not be our last. The game reorients my point of view, and the roles are reversed. I am now sitting on a motorcycle lost somewhere in the city. It's now my turn to get through the checkpoints. I should get going. After all, somewhere nearby there is an indestructible helicopter bent on my destruction. And I am sitting here with a bright orange target on my back.

Figure 1: Player 2 chases Player 1 in "Chopper vs. Chopper."

"It was the best of choppers, it was the worst of choppers"

"Chopper versus Chopper" (CvC) is one of several multiplayer games packaged with "The Lost and Damned" downloadable expansion pack for the 2008 multiplatform action-adventure game, Grand Theft Auto IV (GTA IV). A critical and commercial success, GTA IV built on the design formula that has characterized the series: open-world gameplay, urban spaces teeming with colorful citizens and vehicles, and a rags-to-riches story that allows players to make narrative choices that determine the game's outcome. But unlike its predecessors, GTA IV was the first to feature multiplayer gameplay. The core game came equipped with a suite of modes, including "team deathmatch," car races (both armed and unarmed varieties), and cooperative missions, among others.

GTA IV's two expansion packs – "The Lost and the Damned" and "The Ballad of Gay Tony" – allowed players to revisit the game's NYC-inspired locale, Liberty City, through the eyes of different protagonists. These add-ons also introduced new multiplayer modes, including "Chopper versus Chopper" (CvC).

At first blush, CvC can be an underwhelming experience. This is especially the case when the game is viewed alongside the random, free-flowing violence of "Free Mode" or the frenetic, Mad Max-like armed road battles of "GTA Race." For one, the number of competitors is dramatically reduced. In lieu of competing hit squads, only two players inhabit this world. And these two players are not offered a wealth of in-game options. One player begins on a bike, and the other one in a helicopter. The former choses the best route to the map's checkpoints, while the latter works to eliminate their competition. But CvC is not any less of a game mode because of its restrictions; it is a more compelling experience because of them.

CvC's rules distill GTA's synthetic boroughs filled with scheming, player-controlled would-be mobsters and hapless non-player characters into a singularly focused affair between two combatants. Notably gone are multitudes of players vying for first, second, or third place in some road race. Gone are the solipsistic snipers that take opportunistic shots as you scramble to find cover. And gone are the rocket-propelled grenades that make short work of your team's get-away car. More subtly, though no less importantly, absent is any context for the conflict. The pilot is not urgently preventing a briefcase handoff; the biker has no drug kingpin to identify. There is no justifying backstory, no narrative excuse required, and what remains is the sheer exuberance of the toys and map.

To be clear, it's not as if the "kill or be killed" logic that undergirds the vast majority of AAA games or even GTA's other multiplayer modes is absent here. Indeed, in alternating rounds, one player is tasked with eliminating the other in spectacularly violent fashion. CvC is likewise not alone in gifting a single player with different game assets (e.g., weapons, armor, vehicles, information) from others to create unique gameplay dynamics. But CvC regulates considerably the terms of its contest, and in doing so presents its two players with dramatically alternating perspectives of this sandbox style city – one from a cockpit above, and one from a leather seat below – that showcase this mode's elementary but essential brilliance.

The alternating perspectives of CvC accomplish elegantly what few other video games are capable of doing. The game establishes competitive gameplay balance by presenting two players with wildly differing perspectival, spatial, and gameplay resources. That is, whereas most competitive games create parity via a series of equivalences – literally staging an "even playing field" – where each side is granted balanced abilities and resources, CvC is an exercise in ludic dissimilarity. For example, the Annihilator pilot can rain down hundreds upon hun-

dreds of bullets in endless waves on the vulnerable motorcyclist. The agile biker's primary strength (such as it is) is her maneuverability. By jetting between the shadows of the city's buildings and overpasses, the biker hopes to force her opponent to guide their bulky and unwieldy gunship through a thicket of urban architecture, occupying them long enough so the biker can score an elusive point. Both choppers must time their approaches with the other player and the city in mind. Can the biker risk prolonged exposure on the open bridge? Should the pilot hang back and assume a better firing position, allowing the biker the time to score another point? Even the title's wordplay gestures at the false equivalences of this urban battlefield. That is, while "chopper" is a recognized nickname for both vehicles, at no point does the game feature two competing helicopters or motorcycles (1).

Clearly, the helicopter's spatial freedom – its ability to play in three dimensions – grants it substantial advantage over the earthbound motorbike. But it is the Annihilator's indestructibility, the mode's most overt suspension of physical reality, which mercifully guarantees that the predator vs. prey calculus neither approaches true gameplay parity nor earthly realism. (To be sure, the biker who crosses multiple checkpoints during any single round has beaten long odds). Striking this unique imbalance between combatants ensures that the mode is understood as a fantastic game and not some horrific simulation (i.e., this "cat and mouse" game mode is the obvious by-product of GTA's sandbox world; it bears no connection to GTA's gritty narrative or its attendant physics). This is a gamble and sacrifice that pays off; the invincible pilot and the nearly powerless biker experience heightened emotional states as a result of this radical inequality (2). While the "choppers" literally move the players around Liberty City, the disparate manner in which they do so makes them affective transports, too. The roles and attendant machines impart dispositions to gamers traveling though the city either the proud and haughty Annihilator pilot, or the terrified and wily biker, thus "moving" the players emotionally.

In this manner, the revolving rounds of "hunt or be hunted" gameplay allow players to see and traverse Liberty City's space and physics in diametrically opposed ways. And with a change in the player's position and abilities comes a change in gameplay strategies (e.g., the biker's utilization of evasive maneuvers, the pilot's strategic use of firepower, etc.). Functionally speaking, this amounts to little more than moving from offense to defense. One player is the under-equipped scorer, the other player is the overpowered goalie. But oscillating from one vehicle to another generates a wellspring of gaming pleasure because CvC also presents its gamers with competing modes of experiencing and knowing Liberty City's complex environments and spaces. In other words, built into these alternating perspectives of biker-pilot-biker-pilot are competing experiential and epistemological frameworks. The Liberty City you zip through as the biker is not the same city you surveil and assault as the helicopter pilot. The same skyscrapers that shielded you from gunfire last round are now making it impossible for you to eliminate your competition. With each round, the city transforms from offering contextual affordances to liabilities.

The pleasure of any one round's situated knowledge is reinforced and amplified by the mode's other prevailing pleasure: imagining your opponent's point of view. CvC's ludic alterity is born out of the identity swapping between the "choppers." The game designers are not blind to this fact. Indeed, when the helicopter closes on her prey, the biker is momentarily gifted (with the press of a button) with the ability to see the world from her opponent's vantage point (note: there is no similar ability for the pilot since the biker's location is perpetually announced with the several stories-high neon orange marker that is affixed to that avatar). This new point of view typically assists the biker in escaping the nearby Annihilator. However, if the players are chatting with one another, the pilot can tell the biker to switch to that optional view to witness their demise from the pilot's cockpit, perversely turning the biker's asset into a de facto "kill cam." Let us return to the scene of the crime on the decimated causeway. That

particular altercation was the finale of but one of many, many rounds. It also marked the end of two emergent stories that had, only moments before, started as separate Liberty City narratives. The collision of the biker and the pilot's strategies and choices on the bridge is likewise a narrative confrontation. But unlike a cinematic chase scene that reveals space and distance through careful editing choices, CvC players must imagine the other player's storyline and choices before they find one another. And therein lies a great deal of the game's holding power.

This interplay of distinct but interconnected narratives, incited by a simple gameplay mechanism and set against a stunningly complex backdrop, constitutes a more direct, visceral, and – indeed – intimate communication than many other competitive gaming modes. The focused interplay between radically different chopper experiences of the same virtual space and series of events has interesting educational possibilities. Imagine how players might think about personal, historical, and fictional narratives and discourses if they could experience a space and/or event from oppositional viewpoints with oppositional agendas. This simple game construct enables a rapid-fire exploration of competing worldviews with quick entries and stunning exits.

Moreover, instead of growing increasingly tiresome, the simple CvC set-up grows richer with each round. But why? The mode's holding power is partly due to the enormity of the city map which takes time to master. It is also owed to the city's randomly spawning denizens and traffic patterns, which create new surprises with each replay. But the strongest attraction of CvC is predicated on the players' ability to contribute to their emergent two-player narrative (with all the attendant pleasures and obligations) and the situated knowledge of traversing an expansive space with radically different transports and conflicting modi operandi. The magic of CvC hinges on its transformation of a simple but satisfying gameplay dialectic into the promise of as-yet unwritten but memorable stories of narrow escapes and destructive collisions. That

is, the mode's ludic alchemy converts violent spectacle into an ongoing narrative of violence. And while the game's basic scoring mechanic of one point per checkpoint baits the biker out of the shadows and into the vulnerable night despite the comically overwhelming odds set against him, it is the mode's emergent and intertwined narratives and points of view – it is the pitting of one Liberty City tale against another, told by Player One to Player Two and back – that promises that the potential reward is well worth the risk and keeps gamers engaged round, after round, after round.

Endnotes

(1) CvC differs greatly from standard "capture the flag" constructs where players temporarily enjoy different abilities or powers. Take, for example, the popular Oddball gameplay mode in the Halo series. A multiplayer variety of "cat and mouse" with shifting roles, Oddball grants points to a player in possession of a skull, simultaneously altering their offensive capabilities. Yet CvC departs from this more popular formula by locating its players in radically different relationships to the game space, and by amplifying its combatants tremendously uneven odds. These design choices result in a substantive narrative reset after every kill.

(2) At some point over the course of dozens if not hundreds of such engagements, the biker will find himself on foot and at an even greater disadvantage. Having been knocked off his motorcycle, the biker faces the hovering Annihilator. Mostly in jest, he will pull out his pistol, and wildly fire at the helicopter's tiny window. Both players delight and rejoice in the discovery that the bike-less biker can actually wound the pilot sitting in the indestructible helicopter.

References

Figure 1. Image captured from GTA Multiplayer.pl: http://gtamultiplayer.pl/en/tlad/multiplayer/

Unbroken Immersion:
The Skyrim Experience

David Simkins
Seann Dikkers
Elizabeth Owen

Bethesda Softworks prides itself on creating compelling gameplay by offering massive, open world role playing games. While many other games boast ten or twenty hours of game play, Bethesda's role playing games offer more than a hundred hours of game play, several hundred hours if one wants to experience all of the content offered. Skyrim is the most recent open world RPG created by Bethesda, and it offers a world even more beautiful, complete, and complex than any of their previous creations. It is truly epic in the scale of the world, in its expansive appearance, and in the scope of the game play and story.

Skyrim is winning game of the year accolades from several publishers in 2011, just as Fallout 3 did in 2008 and Oblivion in 2006. The success of the genre lies not only in quests, interesting characters, and endless opportunities for adventure, but also in simply allowing you to feel like you are in the world. Whether you wish to wander varied terrain, lounging in a tavern, hunt deer, sit by a waterfall, or pick flowers, you are provided compelling opportunities to do so. All of this is potentially overwhelming, not only to the casual gamer, but even to role playing veterans. Fortunately, Skyrim manages to ease the player into the immersive world, coaxing play along until the player understands the basics, without ever requiring an in-depth and non-immersive tutorial. This introduction is the focus of our discussion here – the way Skyrim offers itself to the player, entices the player to not only experience the story, the world, the rules, the game, but also to play with those elements and become a full participant and co-creator in the game.

Initially we will introduce the game itself, including some history of the series. Then we'll use some of the initial game sequences to show how the game is designed to introduce the narrative and teach the player basic components of play, encourage sandbox style exploration, foreshadow and deepen the world mythos, allow for player and story impact on the environment, and do all of this while keeping a sense of consistency and discovery throughout play.

Skyrim is the fifth of the Elder Scrolls games, each an open world, single player role playing game. The first two games, Arena and Daggerfall, were inspired experiments, but struggled with cataclysmic bugs that made game play difficult. The third in the series, Morrowind, was a masterpiece of open world play. With Morrowind, Bethesda Softworks brought its experimentation into the mainstream, and excited the research community interested in the value of gaming media (Gee, 2003; Kadakia, 2005). Oblivion, the fourth installment, made its mark as well, and has been heavily modded by an amazingly active community of player-designers (see http://planetelderscrolls. ign.com/ or tes.nexusmods.com/). These communities maintained an active interest in Oblivion ever since the game was released in 2006, long past the shelf life of most other computer games. As profound as the interest in previous Elder Scrolls titles has been, it is dwarfed in comparison with the interest generated by Skyrim.

The interest in not just hype. Morrowind provided wide-open game play but little sense that the world reflected the player's character. Oblivion rectified some of that, but at the cost of a main quest line that shoe-horned characters through a series of pre-scripted quests in order to save the world. While motivating, saving the world also constrains freedom or strains immersion. Why bother exploring when the world needs to be saved? Skyrim manages to combine the open ended play of Morrowind while placing the player at the center of the action, as it did with Oblivion. It does so not by ending the world, but by

giving the player significant choices that affect the world, and by mirroring the choices the player makes through the quests and the NPC interactions that surround the player character. The result is a much more compelling, immersive role playing experience than achieved by any of the previous Elder Scrolls titles, and arguably more than any other computer game to date.

The advance in design is not only evident in scale and subject, it is evident even in the very first moments of gameplay. In each of Morrowind and Oblivion, and in Fallout 3 also by Bethesda, the player was introduced to the world through a story driven opening sequence. In Morrowind it was little more than a brief tutorial, teaching how to move, attack, etc. In Oblivion and even more so in Fallout 3, the opening integrated well into the player-focused storyline. More than any other, Skyrim offers a tutorial imbedded in story, often so cleverly that it is not even readily apparent that one is being taught how to play. This revelation of new mechanics through game play occurs elsewhere, but it is best exemplified by the first few minutes of play – ten for an experienced Elder Scrolls player, though a new player to the genre or one who likes to take their time may take an hour or more to complete this first section.

Heading for the Chopping Block

Boot:

Skyrim starts when the player's character wakes up on the back of a lolling wagon with other hand-bound prisoners. Credits roll. While listening to the other prisoners, you are able to look around with the mouse. Bethesda shows off their new engine's graphics a bit. The sound is thick with creaking wheels, griping prisoners, and the wind that makes you wish for hot cocoa. Settle in, this may be a bumpy ride.

1 minute:

The wagon stops at an executioner's block and you are asked who you are, and sent to a character creation screen. After picking an identity, which could take the 30 seconds we have offered here or could take hours of game time for some players, the NPC responds to the choices you just made, encouraging the player to see themselves in their new role. You are then pointed toward the chopping block – able to witness one execution before it is your turn. Before your untimely end however, a dragon attacks, throwing the camp into chaos and providing you a means of escape. In a spectacular chase sequence, triggered events provide the illusion of urgency while allowing the player time to learn the basic movement controls. By running from the dragon's destruction, the player learns to run, jump, and navigate the 3D environment guided by diagetic encouragement from your fellow survivors.

5 minutes:

After just a few minutes of game play you are confronted with your first real choice - either follow the Nord rebel who was prisoner with you in the cart or follow the kindly Imperial soldier who sought to protect you from the dragon. The choice does deceptively little to game play, simply switching your guide for the rest of the tutorial to be either the Imperial or the Nord, but this small change has enormous implications. You run into a keep and down into the dungeons, where Imperial torturers are fending off escaped prisoners. If guided by the Nord, he complains bitterly about the Empire's excesses. If guided by the Imperial, he bemoans the need for such horrible methods and clearly dislikes the torturer. In the first five minutes, Skyrim has used NPC interactions, environmental effects, and a savage dragon attack to encourage the player to care about two of the main story threads - the return of the dragons and the civil war between the Stormcloaks, who fight for an independent Skyrim, and the loyalist Nords who support the Empire.

10 minutes:

Guided either by your Stormcloak or your Imperial, you spend another five minutes crawling through caves and learning by doing. You encounter reasons to open doors with levers, pick locks, attack and block, pick up items, loot containers, equip items, use potions, cast spells, and read books. At the end of ten minutes you are deeply embroiled in the land of Skyrim and have at least initially allied yourself with one of two warring factions, and other than the first few moments before the dragon attack, the player never lost control of their character due to a cut-scene or a dialog tree.

By both introducing story, and teaching the player basic controls, Skyrim presents a powerful narrative to a first person adventure and does a great deal to introduce the player to the game's complex controls. As you leave the cave, your guide calls you aside and for a brief moment you lose control, just long enough to watch the dragon fly away. Up to this point the game has been "on rails", but no longer. Having learned the basic mechanics and having been introduced to the core story, the game will never again force the player to do anything. Skyrim stands out in it's efficiency, teaching the player the basic tools they'll need for the next 100-300 hours. In a short and active initial minutes of play both the character and the player have fully gained their freedom, and are now 'on the run'.

Non-Linear Narratives
Though you are now free to roam, the game does not merely leave you to your own devices if you still wish guidance, exposition, or even just company. Your guide, Nord or Imperial, thanks you for your help getting out of the town alive. He mentions that he is heading to a relative in a nearby village and offers that it might be best if you split up. Then he starts moving down a nearby path. If you go your own way, you are free to begin your exploration of the massive world. If you choose to follow, however, he will thank you for accompanying him and will lead you down the mountain. If you follow, he points out three

standing stones - powerful magical sites that can attune your character to constellations in the game world, providing the character a small but significant benefit, depending on the player's choice of stone. The three stones are "Mage", "Thief", and "Warrior". Each represents an iconic fantasy arechetype, and choosing one of these stones is as close to choosing a character class one will find in Skyrim. It also offers the player the possibility of deciding exactly what kind of skills they will seek to advance, and therefore what their character might be able to eventually do to effect his or her world. Whether one chooses a stone or simply travels on, they will reach the town and meet the guide's relatives. Through conversation, not dialogue tree but overheard conversation which nevertheless invites you to participate, the player is provided a more detailed perspective on the civil war and its warring factions. You are given insight into some of your guide's motivations, and how you could join that side, if you wished. At this point, they open the first dialogue tree of the game, assuming one did not divert from this path up to this point. The player makes choices of what their character will say from a menu of options, though like everywhere else, the game will not insist that you choose. You may at any point exit out of a conversation and your interlocutor will react as if you simply stopped talking. Some will become angry, but most will simply go back to their business. In this case, through the dialogue tree, your guide's family offers the first truly free quest - go to the nearby city and ask the Jarl (the local lord) for send guards to the small town the family lives in, in case the dragon returns.

At this point you may wander around town, run to the city, or explore the wilderness. Skyrim is dotted with dungeons, keeps, caves, ruins, and camps. The player will find these through walking around, accepting quests, or occasionally through reading books or engaging in conversation. The map is rendered in a zoomable 3D, and serves as a key game asset for the player, showing each new place as it is discovered and allowing for quick travel to locations previously visited. Some

locations take only a few minutes to explore while others have the potential to be an entire evening of play. For example, one underground system covers roughly 20% of the entire map. While these unexpected adventures are an earmark of the Elder Scrolls series, we'll show how Skyrim uses these opportunities to effectively offer a wide diversity of game play.

It's not the graphics, it's story telling

Skyrim is a dangerous, troubled place with dragons, monsters, necromancers, and bandits marauding the countryside and taking residence in every keep and ruin not under constant guard, but that danger is easy to forget sometimes because the world of *Skyrim* is such a pleasure to live in. It is stunningly gorgeous, with everything one could hope for in a Nordic environment -- magnificent mountains and stunning snowscapes, oceans, fjords, quaint villages, and endless happy encounters with interactive flora and fauna. Even the ruins are beautiful. The game succeeds at displaying its spectacle without crashing the XBOX or any fairly recent PC by limiting the scope of view and creating a fog that limits vision somewhat. The limitation is fairly minimal, however, and the expansive views can still be breathtaking. Still, it is not so much the aesthetic design that matters as how the aesthetics are used to enhance the game experience.

The graphics play fair. They show amazing sights, but are also used let you see telltale hints, scorch marks or animal remains, that might, upon careful investigation, reveal a tripwire or a beartrap. The audio is similarly helpful, with breezes that blow cold down the mountain valleys and howls that suggest a wolf is nearby. With a limited scope of view, it is sometimes difficult to look up and around, so the roar of a dragon behind you might be your first hint that you should find some fireproof cover - and your first taste of panic that you just might be outmatched. Most of the NPCs in your travels will introduce themselves simply by speaking when they pass you, and might invite further discussion.

Open Ended, but with Navigation

Rewarding exploration is not limited to trap finding and pretty sights and sounds. The game is filled with locations that can be explored. Some take minutes to completely search, but others range from extensive to truly massive. One subterranean cavern complex extends underneath one fourth of the map. Fully exploring just this single cavern can take ten or more hours of play.

Tools

Skyrim, though open ended, includes many game tools to direct play and help the player navigate the massive amount of content. As one example, many ruins and caves are marked "cleared" on your map once all enemies have been killed. The game keeps quest notes, and separates them into major and minor quests. This allows players a sense of the scope of the quest chain, and potentially allows a player to focus on 'finishing' one main plot if they so choose. More subtly, towns and factions have small details that accumulate over time. In some areas, trees will bloom as you complete quests to revitalize the area. Each major city has a home for sale, and a player may buy it and then choose upgrades and stash treasure or collections of goods in one of the house's many containers. The shelves of the Thieves' Guild fill with booty as you complete quests to raise the power of the guild throughout Skyrim. Soldiers and other passers by will sometimes comment on the player's success in local quests, or on the player character's appearance, mirroring the skills the player has raised, almost always through regular use. Not only does this provide intangible reward to players for their success, but in some cases encourages players to explore new areas as they pursue the main storyline – or to return to a storyline as they explore new areas.

Main Narratives

Even with the map, it would be possible to get lost in the immense world and become a directionless wanderer. This was a pitfall of Morrowind, and even Oblivion, but every city you go to in Skyrim is carefully designed to offer a story and, if you take up the offer, the game guides you through interactions and quests that often make the experience seem as natural as if the player was following a linear plot. The difference? You can leave the path at any time, explore the rest of the world and, if you desire, return later to complete the city's story. The stories of the city are tied to the feel of the game - the tensions between Nords and Imperials, prejudice against non-humans and anyone who uses magic.

Let's take as an example the story of Riften. Before you reach Riften, you are likely to have heard a dozen people complain about its lawlessness. This is not exaggeration. It is a corrupt city dominated by a powerful businesswoman and her lackeys in the thieves' guild who manipulate the town's guards and the ruling Jarl. The guards on the gate are crooked and seek a bribe before they allow the character entrance. Once on the inside, a character will have interactions in quick succession with a brute threateningly inquiring what business you have in Riften, an enforcer extracting a late payment on a loan, and a pair of adventurers who are struggling, apparently hopelessly, to clean up the town. Then, you are approached by the guild and offered a job, and tested accordingly before you find the underground (figurative and literal) network and secret entrances to it. The story of Riften is the story of the guild, whether you side with or against it. Just completing all of the guild quests takes more than twenty hours of questing (the size of some smaller games!) and follows a convoluted story of love, devotion, and betrayal. Upon becoming the head of the guild, further renewable questing will allow you to improve the headquarters; and grind for trophies, talents, xp, and loot.

Side Narratives

While each city has a main story, many quests do not align with these major stories. The world is filled with people who need things - things you could provide if you were so inclined. Unlike some games where completing the game seems to require finishing every quest and collecting every item, trying to do so in Skyrim would be an incomprehensible expenditure of time. There are incidental items everywhere, just as there are incidental quests everywhere. You can interact with all of the plates, cups, etc, on almost every table. You can open every book on every shelf. Quests come almost as quickly, and can be encountered as you listen to songs in the tavern, eavesdrop on gossiping soldiers, or open an apparently arbitrary book on the end table. Every step you take opens a new potential for adventure, but there are so many options that every player must choose which among the many options they will follow. One can simply complete every quest that comes along, the golden path in most RPGs, or one might choose to role play, following only those questlines the player believes their character would follow.

Player Choice and Role-Play

Visiting every location or completing every quest is simply not feasible, and not because paths are closed off, there are a few choices that will permanently close off other options for the character. There is simply too much potential game available. The resulting effect on immersion is interesting. In many RPGs, the quests serve as a checklist - the list of things that must all be completed before you go on the final quest and end the game. This has the artificial effect of making a quest not a choice for most players, but a list of objectives. Essentially the game offers a choice: complete the quest or stop playing. In a game that overwhelms the players ability to follow all paths, the quest becomes a choice again. Choose one major path, following with thieves' guild questline, means not choosing another, at least not right now

and probably not for another forty hours of play. You are not missing out exactly, because if you were not interested in playing a thief, you could play a valorous member of the Companions, or become a member of the mage's college, or become an expert in all forms of dragon magic (shouting), or join the pro-Nord Stormcloaks, or defend the Empire's grasp on Skyrim by joining the Imperial army. It is really your choice which way you go and how you play, opening the door to a question deceptively missing from almost all computer RPGs. Who do you want your character to become?

Talents and Skills

The choices open to your character are not just implemented in the quest system. They are also implemented in the character's skill development. Skyrim has a simple philosophy on skill improvement. If you use a skill, it will improve. A character's abilities are defined by 18 skills. The character begins with a few decent skills, depending entirely on the character's choice of race. Where the character goes from there will depend entirely on what they do. If a player fights with a one-handed sword, they will increase their one-handed combat skill and gain specific skills that amplify that style of play. If they use the sword to parry, they will increase their block skill. If they later pick up a better one-handed axe, they will already be more skilled in its use because it is also a one-handed weapon.

The complication that leads to a high level of character customization comes from perks. When a skill increases, your character will occasionally gain a level. A level bar is increased each time you gain a skill, the higher the skill's number the more you gain so there is more reason to increase the skills your are already good at. Leveling allows you to choose to increase one of health, mana, or stamina. It also gives you a point you can use for a perk. Perk points can be saved or used immediately, and they are used to improve the effectiveness of a skill. There is one "perk tree" associated with each skill. Any character with a skill of

80 in one-handed weapons will be a good swordsman. A person with a skill of 80 and ten perks in the one-handed weapons tree, specializing on the use of sword, will be an amazing swordsman with a few special moves unavailable to others.

Choosing your path through the perk tree allows for character customization and leveling, both common tropes in fantasy role play, without compromising the core idea that skills level with use. The best perks require the character to have a high skill rank, so perks cannot replace use. The effect can feel strange to RPG fans used to killing monsters to level their character's skills. However, in Skyrim, one becomes a better smith by practicing smithing, not by killing monsters. A smith will fashion countless daggers, swords, and helmets before achieving true expertise (hours of pleasant game-play and achievement). In other words, the point of fighting in Skyrim is to achieve victory and improve fighting skills. The point of crafting is to craft a quality item and learn crafting skills. The point of conversation is to achieve your conversational goal and learn to speak more eloquently. Compared with the traditional model of killing monsters or completing quests to level up and add skill points to skills, this is a fantastic representation of the learning process. This model of achievement reflects well onto real-life practice and expertise models. Embedded in the model is the truth that investing time on task will improve that specific skill. Practice makes perfect.

The word that we keep using in this discussion is "immersive". More than anything else, it is the sense of immersion that draws us into Skyrim. The point of immersion is not simply to be immersed, however, but to offer an opportunity for deep experiences through game play. Skyrim presents some pretty good moral choices, which become much more interesting because the characters and environments around the moral choices feel real to us - because we are immersed in them. Even incidental moments can be profound -- discovering that a cave is much deeper than you ever thought it would be or learning that

the people you were befriending are actually werewolves. Through its aesthetically interesting, deep, free and immersive game play, Skyrim is broad enough and beautiful enough to allow us to actually role play a character on and with our computer.

Through Skyrim, we get to live in another person's shoes, and we get to lead them through interesting times. We get to make hard decisions and live with the consequences, win great victories, and we might even manage to experience and survive some defeats. The game is not perfect, but it is excellent, and it points designers in the direction of how to engage, motivate, teach, and encourage creative play using primarily a rich, deep world creation and story. This is no small task for designers, but Skyrim exemplifies its importance and potency when done well.

References

Gee, J. P. (2003). What video games have to teach us about learning and literacy. Computers in Entertainment, 1(1).

Kadakia, M. (2005). Increasing student engagement by using Morrowind to analyze choices and consequences. TECHTRENDS, 49(5), 29-32.

Super Meat Boy
Special Bonus Pack

Caro Williams

The experience of failure is a beautiful one. Granted, failure is generally only beautiful when viewed from the other side of the currently insurmountable obstacle—but without failure, where is the glory in success? When Team Meat was designing their love letter to classic platformers (Payne & Cambell) and their experience turned from joy to horror (Wolfenstein), they pushed on. And Super Meat Boy is the beautiful reward that Team Meat—and we—received from their brutal experience.

The following odes to failure and Super Meat Boy share the beauty and difficulty in pushing through aspects of life—in games and out—that cause suffering and frustration. What both Wolfenstein and Payne & Campbell tell us repeatedly, despite their very different approaches to the subject, is this: The only real failure is when you put down the controller and never return. Team Meat made the world a better place by not succumbing to their suffering and frustration—and Super Meat Boy players every day testify against failure by picking up the controller again and again. "We can do this," they say, "even as the world transforms from pastoral woodlands to hellish nightscapes—give me just one more try…"

Team Meat has left Meat Boy and Bandage Girl in our hands—fail well, and play on.

Well Suffered

Moses Wolfenstein
Academic ADL Co-Lab, 5602 Research Park Boulevard,
Suite 300 Madison, WI 53719-1245
moses.wolfenstein@gmail.com

Introduction

At the Game Developers Conference (GDC) in 2011, independent game developers Edmund McMullen and Tommy Refenes, collectively known as Team Meat, presented a post mortem of their extremely successful 2D platformer Super Meat Boy. This post mortem was somewhat out of the ordinary for three reasons. First only Edmund was physically present with Tommy calling in via video-conference. Second, rather than calling the session a post mortem, the two chose to give it the slightly enigmatic title "Super Meat Boy: A Team Meat Meatmortem." Third, and most relevant for our consideration of the game, instead of following the common post mortem formula of discussing both what went right and what went wrong in the development process, the session focused almost exclusively on the incredibly difficult challenges Team Meat experienced in completing Super Meat Boy and bringing it to market. These challenges were in fact so brutal that in reporting on the conference session, the video game blog Joystiq subtitled their report "The almost death of Team Meat" (Hinkle, 2011). While this might be mistaken for a piece of journalistic hyperbole, it actually directly reflects statements made by Tommy Refenes both during the Meatmortum and since that it would have killed him if they'd tried to release the game on more than one platform at once (McMullen & Refenes, 2011).

I had purchased Super Meat Boy on Xbox Live roughly four months prior to GDC 2011, and clocked a substantial number of hours by

that March. I was far from completing the game, but I had already died countless times by that March. Dying repeatedly is in a very real sense the core dynamic of Super Meat Boy. Although it draws direct influence from Super Mario Brothers (1), unlike Mario and most other classic platformers, the player has an endless number of lives. Levels are generally rather short and a skilled player can complete most of them in seconds. However, many levels are extremely difficult and as a result most players die dozens of times on a moderately difficult level, and even hundreds of times on the most difficult levels. The magnitude of completing a particularly difficult level is also visually enhanced since on completion of a level, the player gets to see all of their attempts at completing the level play simultaneously (see Figure 1).
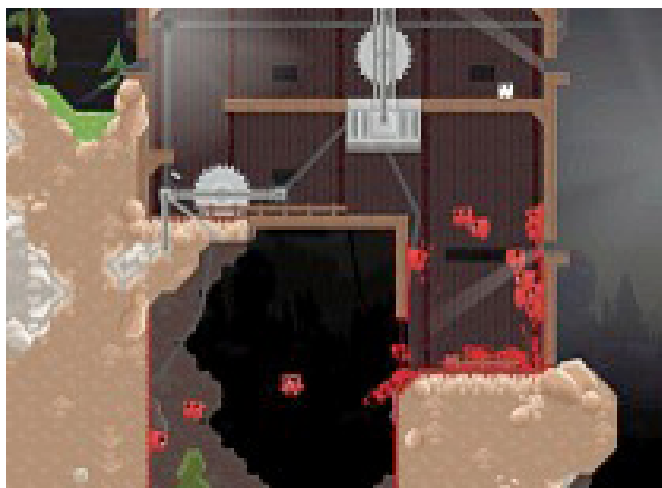
Figure 1: A replay of a level where the player died many times

As I write this I still haven't completed the game, although I'm very close to completing what might be considered to be the core of the game (2) and have been for some time. When I first began work on this paper for the 8th annual Games+Learning+Society conference (GLS 8.0) I was stuck on a level titled Omega. I have yet to complete it at present. It is the last level before the final boss fight in the game.

At the time of GLS 8.0 the part of Omega I was stuck on involves gently guiding Meat Boy over the edge of a cliff and down between some saw blades. I could get up the cliff to get the key necessary for unlocking a door below easily enough, but until the conference I'd only been able to get back down once.

Figure 2: A problematic drop on Level 6-5 "Omega"

Towards the end of the session at GLS 8.0 I attempted to play through Omega live in front of the audience. I forewarned the attendees that I had been basically unable to pass this particular section of the level for many months. I died numerous times on Omega that morning. However, when I reached this drop I was able to perform it without difficulty that day in two consecutive attempts, and have since been able to execute it at a commensurate level with my ability to surpass

other difficult challenges in the game. Since GLS 8.0 the length of the level and its overall difficulty have continued to prevent me from completing it. However, as I will discuss later, the sorts of psychological and physiological obstacles that continue to stand between me and the final boss fight in Super Meat Boy are very distinct from the block I experienced with that drop on Omega and in other segments of the game. Unlike segments of the game that have simply been physically demanding in some way shape or form, in those moments I was either unable to grasp what needed to be done in order to overcome a challenge or unable to execute the action necessary for success.

Coming back to GDC 2011 and the Meatmortem, I can't recall precisely where I was in the game at the time, but I had definitely been playing it with some frequency. It's extremely likely that I was stuck on one of those parts of the game that tends to cause me to swear extensively, literally hop up and down in frustration, and nearly hurl the controller across the room. Indeed, by the time I found myself sitting in that hall at Moscone Center listening to Team Meat discuss the suffering they endured in developing Super Meat Boy, I had already experienced a significant number of rage inducing moments while accidentally hurling Meat Boy's tiny red body into grinding gears, rotten meat blobs, or any of the other countless perils and enemies that can be found throughout the game. Sitting in that hall surrounded by game industry professionals and aspirants, I couldn't help but draw a connection between the suffering experienced by Team Meat in creating Meat Boy, and the more modest suffering experienced by players like me in playing it. As a games and learning researcher, I also found myself thinking about other instances in games research where boundaries between work and play have been observed to blur (Dibbell, 2006; Malaby, 2007; Yee, 2005), and about the theory posited by Roger Schank that learning takes place through expectation failure (Schank, 1983). When I subsequently began to replay earlier portions of the game, I was excited to find that these same themes were not

only instantiated as played experiences through game mechanics, but enhanced and extended through narrative design and art direction. that these same themes were not only instantiated as played experiences through game mechanics, but enhanced and extended through narrative design and art direction.

From The Forest to The End

Super Meat Boy is composed of seven different worlds, plus a "world" that is updated periodically with additional content called "Teh Internets." Most worlds contain twenty levels and a boss fight, and on each level the player's job is to help Meat Boy rescue his girlfriend Bandage Girl who has been stolen by the evil Dr. Fetus. The core of the game consists of the first six worlds called: The Forest, The Hospital, The Salt Factory, Hell, The Rapture, and The End. The sixth world, The End, only has five levels, and the seventh world "Cotton Alley," has the player play as Bandage Girl rescuing Meat Boy and can only be accessed after beating all of the boss fights on the first six worlds. The remainder of this paper will explore the worlds of Super Meat Boy offering a consideration of how the game progresses through stages of difficulty, supports a theme of suffering through its various design elements, and how that theme frames the process of learning to play the game. When relevant, I will also bridge to the topic of the development experience related by Team Meat during the Meatmortem at GDC 2011 and in subsequent publications.

Figure 3: Super Meat Boy World 1 Level Selection

The Forest

Super Meat Boy begins in the pastoral environment of The Forest. The color palette of the intro scene and many of the early levels is dominated by soft browns and greens, and 8 bit squirrels and other forest critters. While it's immediately evident to the experienced player that the game is a precision platformer based on the sensitivity of the controls, Team Meat eases you into that difficulty by providing a classic structure that use the first several levels to orient the player to the basic controls and types of challenges Meat Boy must face. The first actual danger the player faces is on level 1-3, The Gap, in which the player can accidentally guide Meat Boy into the titular gap plunging him to his doom. Giant saw blades are a persistent hazard throughout the game, and they are visible from as early as level 1-2 giving the player the suggestion of danger. However the blades aren't actually exposed until level 1-6. In short, the early levels of Meat Boy are designed to make the player comfortable with the basic platforming activity that will drive the rest of the game. Clickable signs are even deployed across the first few levels to provide the player with basic hints about the nature of the challenge on each level and how it can

be overcome with the appropriate controls.

Prior to picking up Super Meat Boy, the "hardcore" 2D platformer wasn't exactly a style of game that I'd spent a huge amount of time with. While I'd certainly played a number of the Mario games over the years and had completed Braid in 2010, I'd never devoted any real time to any of the more difficult platformers like Mega Man or Ninja Gaiden. Among other things, I grew up with a computer at home from the late elementary grades on, but I didn't have a game console in the house. Since the console with game pad style controllers has historically been the natural setting for platformers, this meant that the genre as a whole wasn't one that I had a particularly deep history with.

That said I knew what I was getting into when I purchased Super Meat Boy. Since I began studying video games I've made a point of trying genres that are outside of my comfort zone, and to some extent Meat Boy was just a continuation of that approach. Putting all of this together, the beginning levels of Meat Boy did exactly what they needed to do for me as a player. They got me comfortable enough flinging Meat Boy's body around the screen that by the time I got to level 1-8, the first level where I encountered a challenge that gave me any kind of difficulty at all, I was ready to press on. In fact, Team Meat does an interesting little trick right before 1-8 with level 1-7 as it introduces an element visible in the upper right corner of Figure 4, a saw blade that requires a relatively long wall jump to surpass. This jump appears extremely difficult upon first viewing, but is actually relatively easy. This prepares the player for future challenges by offering an opportunity to realize that even elements that might appear difficult or impossible are ultimately beatable.

Figure 4: Super Meat Boy 1-7.

The trick of warming the player up to a state of relatively fluid play and then producing a difficult level that the player has to push through is one that Team Meat employs several times in world 1. I experienced these sorts of choke points in The Forest on level 1-15 which combines collapsing walls and saw shooters, and 1-19 which is the longest level in The Forest. 1-19 was actually difficult enough that even on the playthrough I did in preparation for GLS 8.0 I died several times. To provide a point of reference, in the same playthrough I was able to finish the rest of the levels in The Forest with no deaths in a matter of seconds.

With the exception of The End, each world only requires the player to complete 17 of the 20 levels in order to unlock the boss fight that must be completed in order to open the next. When playing The Forest initially, I played through and beat all 20 levels which was a pattern I would attempt to keep, but would ultimately fail at, through my whole experience of the game. That first boss is Lil Slugger, a bipedal robot with a phallic chainsaw projecting from its front that Dr. Fetus drives across the level from the left to the right chasing Meat Boy through a series of perilous obstacles. As a result of its relentless push

across the screen I have to count Lil Slugger as the first legitimately difficult challenge in Super Meat Boy. Lil Slugger invokes a wide variety of prior platformer playing experiences by way of its structure of relentless advance. I've always had a particular dislike of platformer levels that force the player forward the entire time prohibiting exploration. It was likely for this reason as well as memories of my prior experience with Lil Slugger that I actually paused for a second before starting the level on my pre GLS 8.0 replay. In that moment I was struck by a feeling akin to fear as that earlier played memory lingered in my mind. Ultimately the level gave me little trouble on that playthrough. The same cannot be said for some of the other levels in the game I had beaten before.

Overall The Forest provides the player with an opportunity to generally get adjusted to how Super Meat Boy plays, and to some degree to inure the player to the experience of repeated death and the accompanying frustration that will characterize the rest of the game. There are minor challenges, but even a modestly competent player of 2D platformers like myself doesn't experience much in the way of frustration or suffering on a first play through of The Forest. I see a parallel here that probably applies to the development path trod by Team Meat, and that certainly applies to my own experiences in game development and other large-scale projects. In essence, the work starts out as a joyful experience. You might encounter a few difficulties early on, but the activity is fresh, exciting, and generally filled with promise. While you anticipate some trials ahead, you don't truly have any notion of the scope of those actual challenges. This is the point where your emotional investment in the process is relatively high and your material investment relatively low.

For all of the positive feelings that the early levels of Super Meat Boy invokes, the conclusion of the boss fight with Lil Slugger provides a

cut short as the squirrel is decapitated by a flying saw blade, and the player is pushed on to the next world.

The Hospital

The second world in Super Meat Boy is The Hospital, and everything about the design of world two tells the player that things are getting significantly more serious. While I still managed to play through the early levels of The Hospital in one attempt on my second playthrough, I found that I was gritting my teeth on occasion and had to remind myself to breathe. Beyond the general increase in difficulty, The Hospital's shift in mood is supported by a major change in aesthetics. The palette shifts over primarily to dark purples, blues, and greys. In supporting the theme of an abandoned hospital, the landscape is littered with piles of broken syringes that, like so many things in the game, spell instant death for Meat Boy. While I haven't mentioned the music thus far, it too is an essential part of the Super Meat Boy experience. Danny "B style" Baranowsky is the musician behind the Super Meat Boy soundtrack, and his work perfectly supports the evolving mood of the game. While the music for The Forest is generally light and upbeat, the music for the Hospital takes a very rapid turn in a darker, spookier direction (4).

World Two also pulls from the pages of classic game design by introducing a much wider array of features into the game's landscape. Giant fans are introduced starting on level 2-4, and while the player often needs to use these to propel Meat Boy to different parts of the level, a chance encounter with one can also shred him in a meaty mess. On level 2-7 Meat Boy has his first encounter with a staple of 2D platformers, moving enemies. While I found the complexity introduced by these variations presented very little challenge on my second playthrough, I can well recall the rising frustration I experienced the first time through. Team Meat very carefully introduces new elements into the game, usually presenting them first in isolation, and then in var-

ious combinations that force the player to adapt. Moving enemies in particular create a dynamic where the player has reduced opportunities to pause throughout the level. Level 2-13 introduces floating enemies that bounce around the level magnifying this issue further. Like the wall jump with the saw on level 1-7, the technical challenge posed by these enemies is no where near as significant as the psychological impact on the player upon first encountering them. Perhaps an even better example of this effect is evident on level 2-8. As you can see in Figure 5, this level shifts to a silhouetted view with a reddish background. There is nothing about this shift that makes the level harder in any technical sense, but the dramatic aesthetic shift definitely impacts the player's impression of the level's difficulty.

Figure 5: Super Meat Boy 2 - 8

That said 2-8 is a comparatively difficult level. It was somewhere in this vicinity that I began experiencing serious frustration with some levels, sometimes playing until my hand began to hurt from gripping the controller too tightly, or stopping when I was on the verge of throwing the controller across the room. I should note at this point that I've never actually thrown a controller while playing a video game or under any other circumstances. However, as anyone who has

encountered moments of extreme difficulty in a game likely knows, the temptation to do something physical in these instances of extreme frustration while gaming is a very real one (5). It is in large part the depth of frustration blended with the persistence that many gamers approach these moments with that has lead me to frame the experiences of playing a game like Super Meat Boy as a form of self-inflicted suffering. It certainly defies our normal framing of gaming as a fun activity, and arguably pushes on the boundaries of "hard fun" as used by various game designers and scholars (Koster, 2004; Lazzaro, 2003; Papert, 1998).ous combinations that force the player to adapt. Moving enemies in particular create a dynamic where the player has reduced opportunities to pause throughout the level. Level 2-13 introduces floating enemies that bounce around the level magnifying this issue further. Like the activity and arguably pushes on the boundaries of "hard fun" as used by various game designers and scholars (Koster, 2004; Lazzaro, 2003; Papert, 1998).

The Rapture via The Salt Factory and Hell

While the difficulty of Super Meat Boy increases substantially over the course of The Hospital, the escalation of difficulty over the following two worlds is much greater. At the same time, most of world three, The Salt Factory, was more approachable for me than The Hospital had been simply because I had already adapted my expectations regarding the difficulty of the game. By contrast, many of the levels on world four, Hell, managed to still be surprisingly difficult. I'm not quite sure how long it took me to traverse worlds three and four on my way to world five, The Rapture. Since I wasn't planning on writing a paper on the game at the time I didn't track my progress, and since I was pretty deeply immersed in gaming (running through many games relatively quickly while also playing Meat Boy), I have trouble positioning my experiences with Meat Boy in between other games to find some point of reference.

I do know that I was stuck for various periods of time on several levels across The Salt Factory and Hell, but that I persisted in trying to take an essentially linear approach to the game throughout these levels as I had with The Forrest and each world that followed. On Hell I began to break from this approach, coming back to a level if it was giving me too much trouble, but still pushing through all 20 levels before taking on that world's boss Little Horn. On The Rapture finally I broke from this approach entirely leaving two levels unbeaten at the point when I decided to finish that world and move on to The End.

Over the course of worlds three through five I began to get into a certain kind of rhythm with Super Meat Boy. I would work through several levels until I got to a level where I found myself stuck on some particular challenge. Sometimes it would be a sequence of jumps. At other times it might be the timing in dodging an enemy. At still other times it might be a challenge that seemed completely approachable, but which I simply couldn't muster the energy for at the end of an extended play session. If the challenge was either some puzzle I hadn't solved or some twitch of the controller I hadn't mastered, I would be stuck on a level for days, weeks, or in a couple of instances months. This was the point where I started replaying more levels to get an A+ or a bandage, pursuing some of the alternate content available by unlocking Dark World levels (see end note 2), and of course I played lots of other games during this time. When returning to Super Meat Boy I would pick up the controller and either start a level I was stuck on, or try it after warming up on a few other levels. Despite the trouble I may have had on a level previously, when I returned to it I would often find that I could blow through it in just a few attempts.

Two particularly notable instances of this phenomenon took place after GLS 8.0, and they serve to highlight a type of experience that certainly takes place in other games, and in contexts outside of video games. When I discussed the game at GLS 8.0, I mentioned that there

were two levels on The Rapture that I had been unable to beat, and that despite my intention to get to the final boss fight and beat Dr. Fetus once and for all, I was unsure as to whether I would ever actually complete those other two levels. In August of 2012 two months after GLS 8.0 I managed to beat both of them in one evening over a short period of time.

The two levels in question are 5:15 The Flood, and 5:16 Rotgut, and the challenges attending them are as different as can be. The Flood is primarily a test of motor control and understanding of how Meat Boy moves in the air. Like the Lil Slugger battle, it echoes the design of many classic platformers, moving from left to right with a constant threat following the player forcing a steady rate of advance. In the case of The Flood, the player is forced to guide Meat Boy through a series of precision jumps while staying ahead of a rapidly advancing flood of maggots. Unlike the relatively slow but steady advance of Lil Slugger during that battle, the flood of maggots moves at a fairly rapid rate.

Rotgut represents a distinct contrast to The Flood. While there are floating enemies called Oobs that will advance on Meat Boy if he gets in close enough proximity to them, the player can stop in a wide variety of spots to assess the situation. Although Rotgut does require some degree of dexterity as all of the later levels in the game do, it is primarily a puzzle where the player is presented with a fairly expansive level that can be conquered one of several possible ways. By exploring the layout of the level just a little, the player can discover some highly effective shortcuts that diminish the difficulty of the level drastically.

When I sat down with The Flood that day, I had a moment of game-play revelation very similar to the one I experienced at GLS 8.0 while playing Omega in front of an audience. Essentially, there was one jump that had been preventing me from completing the level, and on my second or third attempt that day it dawned on my that if I moved

the stick on the controller just a little differently I would be able to navigate Meat Boy to a safe landing. Once I had executed that maneuver twice in a row, the rest of the level opened out for me and I was able to complete it with just a few more attempts.

Encouraged by my success with The Flood, I pushed on to the next level. I had actually nearly beaten Rotgut once before by taking what I have since come to realize is the long way around to the end of the level. On that prior attempt I had overshot the final jump in the level sending me all the way back to its start. On first my attempt at Rotgut that day in August I approached it as I had every time before. I made it through a good portion of the level but due to the placement of just a couple of the obstacles my progress was uneven, and I was beginning to wonder if I had the where with all to persist through it that day. At that point, I decided to engage in a practice that Jim Gee has discussed on numerous occasions when talking about games and learning. I decided to experiment (Gee, 2003). I attempted to take a slightly different approach to crossing a large chasm in the middle of the level, and in the process I accidentally discovered that there was a route that I had previously thought to be inaccessible. Upon making this discovery I was able to complete the level in just a few more attempts.

I consider my experience with both of these levels to be particularly emblematic of a general phenomenon in which the player picks up the controller and suddenly makes magic happen on the screen after hours of frustration and defeat. It is in fact this core experience that seems to characterize playing difficult games that forces questions of learning into the spotlight. Too often in discussing learning in the context of education we look for ways to make learning easy. Yet, the moments players experience in games like Super Meat Boy where success and in some instances even understanding rest on the result of repeated failure offer a sharp counterpoint to the whole enterprise of making learning easy and safe.

This is not to say that learning only happens when this sort of "limbic" response is engaged, but rather that there are certain types of learning that seem to rely on repeated opportunities for failure. The process of learning is to a greater or lesser extent inextricably bound up with experiences of failure, and these moments are bound to bring about feelings of frustration and potentially even moments of suffering. There are of course other factors apart from failure and suffering that we can consider in thinking about what makes moments like this take place in games and learning. There is debate on whether "unconscious thought" is an effective aid in decision-making (Newell, Wong, Cheung, & Rakow, 2009). However, research in that vein might be an indicator that failure and its emotional consequences are not as relevant as the process of taking time away from the cognitive task represented by something like a difficult game level.

Still, it is hard to shake the idea that difficult experiences can be particularly impactful and as such, for better or worse, result in experiences that stick with the learner. It is for this reason that Roger Schank's concept of expectation failure (1983) seems to also fit with the learning that takes place during difficult moments in game play, as well as the learning that takes place in relation to the technological and sociotechnical constraints that impact processes of design and development. Certainly Team Meat encountered some particularly stressful moments in the process of creating Super Meat Boy, and the learning that they experienced as a result of that process seem to have had a powerful effect on how they have approached the process of game development subsequently. While this is distinct from the moments of expectation failure that I experienced in playing Super Meat Boy, both represent experiences that didn't fit our existing scripts for the challenges we faced. More importantly, both instances offer us an opportunity to observe learners being forced to produce solutions that were novel in relation to prior experiences.

Well Suffered

I almost titled this paper Well Failed, as it is the moments of failure that lay the bedrock for ultimate success in both working through difficult levels in an extremely hard game, and in the process of creating a complex artifact like a game. After all, the whole point of iterative development processes is to find the weaknesses in the product and create a better result by improving those failed elements in the next iteration. In this respect failure should certainly always be seen as a learning opportunity. However, in thinking about Meat Boy I ultimately keep returning, in a manner I hope is neither particularly Sisyphean or Nietzschean, to the theme of suffering.

While I can only hope that the level of suffering Team Meat had to endure in developing Super Meat Boy was not technically a necessary experience for deriving either the quality of game they produced, or the depth of learning about game design and the game industry that they received in the process, I cannot help but wonder if some aspect of the adversity they experienced was beneficial in some ways. Perhaps this focus on suffering is just the narcissistic tendencies of the academic, seeking to justify the value of the tribulations I and others have experienced over the course of the doctoral accreditation process by attributing value to the suffering endured by game developers whom I admire. I'm willing to acknowledge this possibility. However, it doesn't ultimately have that much bearing on my played experience of Super Meat Boy.

While I have yet to beat Meat Boy, and may never actually complete large swaths of the game, I ultimately regard the frustration that I have experienced while playing Super Meat Boy as a relatively small price to pay for the intense feeling of fulfillment that I have had in those moments of success that attend the completion of an extremely hard level. Even more importantly, I see in those moments of frustration and failure moments where I have come to understand something about myself as a gamer, and as a learner.

Endnotes

(1) In discussing the design influences of the game Edmund McMullen specifically cites Super Mario Brothers stating that the guiding design principle he and Tommy utilized for Super Meat Boy was re-imagining Super Mario Brothers in the present games market.

(2) As explained in the second section, Super Meat Boy contains a range of content that extends play beyond what might be recognized as the start and end of a traditional game. In addition to the inclusion of the Cotton Alley levels and the expanding world called Teh Internets, every level in the game has a hidden hard mode (called dark world) that is unlocked after the player has earned an A+ by completing the level. On top of this, there are also hidden warp zones in the game, and there is also the community driven Super Meat World which contains player generated content and is only accessible on the version of the game for Windows and OS X.

(3) The talk and the full paper will offer an exploration of the entire scope of the game including the worlds not included in this proposal.

(4) I actually liked the music for Super Meat Boy so much that I purchased a copy of the double disc Nice to Meat You when Baranowsky released it in January of 2011 and listened to very little else in my car for approximately 6 months. If you like video game music at all it really is a very compelling soundtrack.

(5) A great amount of research has been directed at the topic of depictions of violence in video games and aggressive or violent behavior. I believe that on a fundamental level this research is missing the obvious connection between video games (and games in general including sports, board games, and everything in between) and any kind of aggravated or irritated state the player experiences. Rather than looking at the imagery presented in games, it would likely provide researchers with far more direct understanding of these sorts of responses if they focused on the degree of difficulty or frustration (e.g. stress) that the player experiences while playing the game as the covariate in predicting aggression.

References

Dibbell, J. (2006). Play money: Or how I quit my day job and struck it rich in virtual loot farming. New York, NY: Basic Books.

Hinkle, D. (2011). Super Meatmortem: The almost death of Team Meat. joystiq.com Retrieved from http://www.joystiq.com/2011/03/01/super-meat-boy-postmortem/

Lazzaro, N. (2003). Why we play: Affect and the fun of games – Designing emotion for games, entertainment interfaces and interactive products, In Sears, A. and Jacko, J.A. (eds.) The human-computer interaction handbook: Fundamentals, evolving techniques, and emerging applications, (pp. 679-700) New York, NY: Lawrence Erlbaum.

Koster, R. (2004). A theory of fun for game design. Scottsdale, AZ: Paraglyph Press.

Malaby, T. (2007). Beyond play: a new approach to games. Games & Culture. 2(2), 95-113.

McMullen, T. & Refens, E. (2011) Super Meat Boy: A Team Meat Meatmortem. Presented at The Game Developers Conference 2012. San Francisco, CA.

Newell, B.R., Wong, K.Y., Cheung, J.C., & Rakow, T. (2009). Think, blink or sleep on it? The impact of modes of thought on complex   decision making. The Quarterly journal of Experimental Psychology. 62(4), 707-732

Papert, S. (1998) Does easy do it? Children, games, and learning. Game developer magazine. June, 1998.

Schank, R.C. (1983). Dynamic memory: A theory of reminding and learning in computers and people. New York, NY: Charles Scribner.

Yee, N. (2006). The labor of fun: How video games blur the boundaries of work and play. Games and Culture, 1(1), 68-71.

Super Meat Boy:
A Love Letter

Matthew Thomas Payne, University of Alabama,
mtpayne@ua.edu
Stephen Campbell, University of Alabama,
sccampbell4@crimson.ua.edu

Super Meat Boy

Meat Boy is a sprinting, leaping, sliding cube of bloody red meat. Meat Boy is also a love letter, albeit an unconventional one. The independently produced multiplatform game that bears his name, *Super Meat Boy* (2010) – sequel to the 2008 online and free-to-play *Meat Boy* – is a love letter to the 8-bit platformers of the 1980s and 1990s. *Super Meat Boy* is also a love letter to players who poured countless hours into those often grueling and unforgiving side-scrolling adventures. The game was a breakout hit for its creators Edmund McMillen and Tommy Refenes (Team Meat), with *Super Meat Boy (SMB)* earning a number of "Game of the Year" awards and going "platinum" (selling over a million copies) in only a few short months (Yin-Poole, 2012, n.p.).

SMB's success is no accident; indeed, the reason for the game's critical and popular reception is (at least) two-fold. First, it lures gamers to it with its incisive, self-conscious aesthetic and intertextual references. *SMB*'s tongue-in-cheek characters and its thoroughgoing black humor satirize the common platforming mechanics and narrative conventions from yesteryear. The game clearly knows and appreciates where it came from. But this by itself would amount to little more than window-dressing were there nothing more to hang these cosmetic design choices on. After all, video gamers are not for want of retro-chic titles that openly trade in gaming nostalgia.

The second, and far more significant reason for *SMB*'s success, is that it improves markedly on the core gameplay design that characterized its forbearers. 8-bit platformers are notoriously arduous, onerous, and capricious puzzles. Moreover, they are often unfair. They are labeled as such because they punitively punish players for the games' own design failures, including (among other problems) wildly uneven levels of difficulty and broken programming (i.e., the game is "buggy" or "glitchy"). SMB is not a simple re-imagining of previous titles. Rather, it is in effect what a great many of those previous platformers should have been. These interrelated points – the retro art style and its tight, gameplay design – will be assessed in turn to demonstrate why SMB has been lauded by gamers and critics despite its considerable difficulty.

Super *Treat* Boy

Super Meat Boy's inspiration begins with the title itself, or rather, with its abbreviation. It is not surprising that McMillen and Refenes would choose to model their game after what is arguably the best-known platformer of all time: *Super Mario Bros.* (1985). Shigeru Miyamoto's Nintendo classic is more than abstract inspiration for Team Meat. Indeed, they considered *Super Mario Bros.* to be an unofficial design template. According to Edmund McMillen: "When Tommy and I talked about attempting to remake the Mario formula, we didn't really discuss it publicly. Nothing could ever touch Mario, and nothing has ever come close, but as a designer I desperately wanted to at least try. *Super Meat Boy* is *Super Mario Bros.* if Tommy and I made it. If we had made a design doc, it would have been as simple as that" (*Super Meat Boy,* 2011, n.p.). Not surprisingly, allusions to *Super Mario Bros.* abound in *Super Meat Boy*: from the narrative catalyst of the kidnapped love interest (Princess Peach's kidnapping by Bowser in *Mario Bros.* and Bandage Girl's abduction by Dr. Fetus in *Meat Boy*), to the existence of "warp zones," and the levels' numbering nomenclature (e.g., World 1-1).

Super Mario Bros. is not the game's only point of 8-bit inspiration, however. The cut scene animations introducing each new Super Meat Boy world are themselves references to the opening scenes of other classic games including *Ghost 'n Goblins* (1985), *Street Fighter II* (1987), *Mega Man 2* (1988), *Ninja Gaiden* (1989), and *Castlevania* (1986), among others, with the *SMB* characters – Meat Boy, Bandage Girl, and Dr. Fetus – starring in these re-imagined sequences. The allusions to classic gaming culture extend beyond each world's introductory cut-scenes to the game's hidden levels and player-characters. These un-lockable levels are modeled after classic games and gaming platforms (such as Nintendo's original, black and white hand-held Gameboy device). But *SMB*'s playful, tongue-in-cheek humor is arguably no more evident than with its elusive "Glitch Zone" levels. In these hard-to-reach levels, the screen is made to look like a broken Nintendo game with missing textiles and jumbled text. (Unlike the original NES cartridges, however, you cannot blow into *SMB* to fix the glichy graphics!). Additionally, in a handful of the game's un-lockable "Warp Zone" levels, the gamer plays as characters borrowed from contemporary independent games who sport jumping abilities different from Meat Boy. These colorful characters hail from similarly challenging indie platformers such as Bit. *Trip Runner* (2010), *Mighty Jill Off* (2008) *Jumper* (2004), *Flywrench* (2007), and *I Wanna Be The Guy* (2007). Team Meat's inclusion of these characters gestures that they are as appreciative of retro games' influence on their creative process as they are of the indie game development community of which they are a part.

Figure 1: Dr. Fetus strikes Bandage Girl in front of Meat Boy.

SMB's visual design draws playfully upon a hodgepodge of intertextual gaming references. Level after level, gamers are offered visual treats that position them – Team Meat – and us – the gamers – as being hip to insider jokes meaningful to veteran gamers. But theses allusions are not the only reason for SMB's nostalgic appeal. In an essay appearing in an anthology on classic gaming, Sean Fenty argues that the lasting appeal of retro gaming is tied to the core, performative nature of games, and that nostalgia is perhaps more pronounced in games than in other media because they require actions which connect the game and the gamer. He notes: "Once we learn the rhythms, we are home – player and game, dancer and dance, one and the same." (Fenty, 2008, p. 22). Later, he continues:

New games continue to evolve increasingly complex and sophisticated graphic, incorporate increasingly complex storylines, and in general offer an interactive space for cinema-like representation. As such, they can evoke nostalgia for earlier days in much the same way as cinema, but with the added allure of interactivity. Video games can represent the past as it was, or as it never was, but they can also represent how

players wish to remember it, revisiting or revising the past to make players yearn for it, and they can offer players the possibility of not only being there but of doing things there – of playing the past. (emphasis in original, p. 27)

Experiencing nostalgia in SMB is irrevocably tied to playing SMB. And playing Super Meat Boy means dying in Super Meat Boy – a lot. How, then, does a game which kills players quickly and frequently nevertheless engender strong feelings of progress and accomplishment?

Super *Defeat* Boy

In addition to its playful 8-bit art style and bevy of insider jokes, SMB's negotiation of gameplay difficulty, punishment, and reward hails hardcore and ex-hardcore players alike. The game's level design and the player's progression through its eight worlds and over 300 levels accomplish this feat in several ways (1). First, with the exception of its "boss battles," most SMB levels are short and can be bested in little time; sometimes in a few seconds (if played properly, of course). (Indeed, completing a SMB level with an "A+" rating amounts to a de facto "speedrun"). SMB also saves the player's progress, inviting gamers to play the game in brief sessions and to revisit previous levels to attain better times. Games scholar Jesper Juul observes that this issue of time investment is one of the key differences between casual and hardcore game design. Juul (2010) notes:

A common complaint is that life with children, jobs, and general adult responsibilities is not conducive to playing video games for long periods of time. The player that at one time was a stereotypical hardcore player may find him or herself in a new life situation: still wanting to play video games, but only able to play short sessions at a time. Many players of casual games are such ex-hardcore players … they probably still have the same taste in fiction, but are unable to invest large amounts of time in playing games. (p.51)

Like the ability to save, most of *SMB*'s levels possess a tiered reward structure that encourages repetitive play in the form of hard-to-reach or un-lockable items. Somewhat paradoxically, this design choice makes *SMB* more accessible because it allows for different degrees of participation (i.e., making the game more "casual"), and deeper because it rewards the player for investing the time needed to overcome difficult challenges (i.e., making it more "hardcore"). For the casual player, *SMB*'s simple and short level designs are easy to understand and give quick, effective feedback. And because the beginning levels are mostly brief, players can play through them over a short period time. The hardcore player, meanwhile, can approach these same levels with an eye toward unlocking the game's secret characters, discovering the elusive warp zones, and earning "A+" level completion times. The game serves as a brief distraction for those looking to play only for a few minutes, or as a treasure trove of challenging rewards for those wanting to showcase their bona fides as skilled and dedicated gamers.

One of the more inspired and gratifying design choices accompanies the successful completion of each level. Once Meat Boy reaches Bandage Girl, triggering the end of the round (whereupon she is re-kidnapped by the evil Dr. Fetus every time), the gamer is treated to a replay of all their previous attempts at the level. This cumulative replay brilliantly unfolds along a single timeline, transforming the screen into a veritable fireworks display of leaping and splattering Meat Boys. Beyond its visual power as spectacle – which, for the record, should not be underestimated – these replays (again, featured round, after round, after round) remind the player that their hard work and perseverance have not gone unrewarded. Gamers also come to realize while watching these comically horrifying replays that SMB's levels are tightly scripted affairs; that they are challenging but not impossible puzzles (though they might seem so after the first dozen tries). The advanced levels are so meticulously engineered and demand such precise input, that SMB feels more like a rhythm-puzzle game than it does an action-platformer.

Figure 2: A torrent of meat boys on parade in a post-level replay.

And this is where SMB parts ways with so many other classic and classically inspired platformers. The game is difficult – painfully so at times – but it is not unpredictable. SMB's levels are complex, but they are not malicious. And SMB is demanding, but it permits gamers of different skill levels and time commitments to traverse its deadly platforms in ways that complement their play styles and lifestyles. Team Meat's Edmund McMillen lamented the state of difficulty in today's games, and commented on their way of addressing this problem, stating:

Difficulty has kind of been thrown out the door and replaced with accessibility over all else, erasing any real challenge. It was vital for us to bring back the difficulty of the retro age, but also reinvent the idea of what difficulty meant. Frustration was the biggest part of retro difficulty and something we felt needed to be removed at all costs in order to give the player a sense of accomplishment without discouraging them to the point of quitting. At its core, this idea was quite basic: Remove lives, reduce respawn time, keep the levels short and keep the goal always in sight. On top of these refinements, we added constant positive feedback, and even death became something to enjoy when

you knew that upon completing the level you would be rewarded with an epic showing of all your past deaths. The replay feature was a way to remind the player that they were getting better through their own actions and reinforce that feeling of accomplishment of doing something difficult and succeeding. (Super Meat Boy, 2012, n.p.)

But the real issue, as Juul correctly notes, is less about difficulty per se than it is about "how the player is punished for failing" (2010, p. 42). In an essay on difficulty in games, Juul (2009) strikes this distinction between failure and punishment: "Failure means being unsuccessful in some task or interdiction that the game has set up, and punishment is what happens to the player as a result" (p. 237). Juul posts these four categories of punishment:

(1) Energy punishment: Loss of energy, bringing the player closer to life punishment; (2) Life punishment: Loss of a life (or "retry"), bringing the player closer to game termination; (3) Game termination punishment: Game over; (4) Setback punishment: Having to start a level over and losing abilities. (p. 238)

SMB's lauded difficulty is mitigated by its uniquely balanced punishment system. Meat Boy is a valiant but fragile hero who is killed with a single hit or misstep. Or, using Juul's labels, the game's "energy punishment" is absolute and severe. However, when the player dies, she is instantly respawned at the beginning of that specific level without having to sit through any protracted death animations or suffer the inconvenience of restarting at the beginning of that world. There is also no cap on player lives (i.e., "game termination punishment"), and no stripping the player of abilities or forward progress (i.e., "setback punishment"). This means that with the exception of the "Warp Zone" bonus levels (where there is a strict allowance of three lives), players only return to the main menu when they decide to give up on a level.

SMB's difficulty-punishment design balance and its levels' tiered challenges (from one level to the next, as well as the reward structure within single levels) conveys to gamers that they are responsible for their accomplishments and failings. The failure to save Bandage Girl rests with the player, not with Team Meat. As Juul observes, "failure adds content by making the player see new nuances in the game" (2010, p. 237). In other words, failure in *SMB* generative; it is productive. The game's early stages show players how to sprint, allowing for faster speed at a cost of control, and introduce common platforming moves like the wall jump. Additional elements such as moving obstacles and dissolving floors teach players to think, act, and react quickly. As play continues, the challenges increase in difficulty as players struggle to anticipate where the next safe platform might appear. Misjudging the timing of a leap by a fraction of a second means the difference between threading the needle between two deadly traps, or jumping into a celling (or floor) of deadly needles. Of course, all of Meat Boy's moves must be combined to traverse his universe's innumerable hurdles, like deadly piles of salt, walls of saw blades, and other Meat Boy-killing nastiness. And while failure in *Super Meat Boy* is not an asset like sprinting or wall jumping, it is nevertheless an essential feature for deducing the level's logic. After multiple deaths a pattern and rhythm emerge as the stage becomes progressively easier because the player sees the level in its complexity. Punishment is, thus, meted out (no pun intended) in such a way that repeated failures do not inhibit success; rather, the opposite is true. Failures are necessary for success.

Super *Elite* Boy

Even one of the better-known web advertisements for *Super Meat Boy* is itself crafted in a retro style; specifically, that of a 1990s TV spot reminiscent of the commercials made for the NES and Super NES game systems (see, Super Meat Boy's 90s Commercial). This tongue-in-cheek advert reinforces the major themes of SMB – that this plat

former's playfully parodic content is a loving homage to our collective gaming past. Again, Team Meat's Edmund McMillen on the game's production:

Tommy (Refenes) and I bonded over the course of development, and *Super Meat Boy* was an expression of that. We had fun making this game and didn't hold those feelings back when it came to the decisions we made. *Super Meat Boy* was a schoolyard inside joke that just got out of hand. I think one of the things that is most appealing about *SMB* is anyone who plays video games gets to be in on that joke. (Super Meat Boy, 2011, n.p.)

But to understand *SMB* as some glorified joke – as a ludic punch line – is to miss one of the game's more substantial accomplishments. (Please understand that this is not to say that the game is not funny – because *SMB is funny.* Indeed, it is fantastically funny at times). The more noteworthy feat is that after enduring countless levels covered with gratuitous streaks of blood and epic replays of cascading and exploding lemming-like Meat Boys, that the game remains endearing and sentimental. Sean Fenty (2008) reminds us of the power of games to transport us through time, saying: "Video games may be, for some, artifacts of a past they want to return to, but video games also offer the seduction of a perfect past that can be replayed, a past within which players can participate, and a past in which players can move and explore" (p. 22). *SMB* presents older gamers with the complex and smart NES-style platformer that they craved as children but never had. And herein lies the game's nostalgic power. *SMB* offers us an illusory trip to a past that never was.

But *Super Meat Boy* is not only about replaying a past that never was. The game likewise assists us with our future platforming adventures, both in and outside of his treacherous world. Juul (2010) argues as much, saying: "The game that successfully manages to get a player to

start and keep playing adds to that player's knowledge of conventions. To play a new game is to learn new skills and conventions. The history of games leads up to your playing of an individual game; your playing of that game paves the way for playing future games" (p. 77). With this in mind, we can say that *SMB* is not just a love letter to the games and gamers of yesteryear – gesturing in more and less obvious ways to memorable titles past and present. *Super Meat Boy*'s tight gameplay and unique balance of difficulty and punishment works to "reset" the uneven history of platformers by demonstrating that "difficult" need not be synonymous with "unfair," and that poor design choices are better left in the past.

Endnotes

(1) As of the writing of this essay, the current PC version contains eight worlds.

References

Fenty, S. (2008). Why old school is cool: A brief analysis of classic video game nostalgia. In Whalen & Taylor's (Eds.) Playing the past: History and nostalgia in video games (pp. 19-31). Nashville, TN: Vanderbilt University Press.

Figure 1. Image captured from http://store.steampowered.com/app/40800/

Juul, J. (2009). Fear of failing: The many meanings of difficulty in video games. In Perron & Wolf's (Eds.) The video game theory reader 2 (pp. 237-252). New York: Routledge.

Juul, J. (2010). A casual revolution: Reinventing video games and their players. Cambridge, MA: MIT Press. Super Meat Boy. (2011). Game Developer, 18(4), n.p. Super Meat Boy's 90s Commercial. [video file]. Retrieved from http://www.youtube.com/watch?v=ZQZeQSaXwR8

Yin-Poole, W. (2012, Jan. 3). Super Meat Boy sells over 1 million. Eurogamer.net. Retrieved from http://www.eurogamer.net/articles/2012-01-03-super-meat-boy-sells-over-1-million

Response to Matthew Thomas Payne and Stephen Campbell's "Super Meat Boy"

Moses Wolfenstein, Ronin Studios and Consulting,
mwolfenstein@roninsc.com

I was a little surprised when I first heard that I wasn't the only present-er who would be talking about *Super Meat Boy* at the eighth annual Games+Learning+Society conference (GLS 8.0). My first thought was that many excellent games came out between GLS 7.0 and GLS 8.0, and that there was already a huge array of other recent and classic games that could benefit from being well played with the aim of informing games and learning research. After thinking it over briefly, I realized that *SMB* receiving more academic attention than other games really wasn't very surprising at all. McMillen and Refenes's indie plat-former has been something of a banner bearer for the contemporary indie games movement. As a result, multiple played perspectives on *SMB* are particularly useful in furthering the multidisciplinary project of video game studies. It also became immediately evident when I read Payne and Campbell's paper that the analysis of *SMB* they have conducted not only provides a thorough and enjoyable exploration of the game from a media studies lens, but also serves as an interesting complement to my approach. Their read focuses on the construction and significance of *SMB* as a media artifact within a long stream of played experiences. Mine examines personal played experiences of fail-ure and learning. Between the two, an understanding of the Meat Boy experience takes shape that points towards certain consistent features of what it means to have played *Super Meat Boy* well.

Payne and Campbell do an excellent job of situating *Super Meat Boy* within the longer history of video games, and doing so serves to emphasize why it is that *SMB* can be a uniquely powerful played

experience for some contemporary games. While I was also conscious of McMillen and Refenes active reliance on the history of games (and particularly platformers) in the design of *SMB*, Payne and Campbell expertly pick up the various threads of gaming history that Team Meat tug on and deftly unravel them to reveal how *SMB* operates as an experience for members of a demographic of video game players that might be characterized as "aging core" (Payne and Campbell use the more politic term "veteran"). As the two point out, the central (or in some sense most optimized) audience for *SMB* is those players old enough to remember the bad old days of video games. In their words, "*SMB*'s visual design draws playfully upon a hodgepodge of intertextual gaming references. Level after level, gamers are offered visual treats that position them – Team Meat – and us – the gamers – as being hip to insider jokes meaningful to veteran gamers." However, Payne and Campbell don't limit their analysis of the *SMB* played experience to its ties to video gaming's past.

Over the course of their work, they move on to examine the refinements Team Meat made to the platformer genre (and the experience of console gaming more generally) in the design and development of *SMB*. In their discussion they effectively capture how McMillen and Refenes pick up the existing language of video game play and use it to deliver a very specific kind of experience that could not exist without a deep enough tradition for them to draw on in creating intertextual game play that deliberately invokes both older and more contemporary video games. My work draws on learning theory to illuminate a personal experience with SMB and some possible implications for learning, particularly in informal environments. Payne and Campbell's helps to position that singular played experience within a much broader range of play and research. Their deployment of video game history and game design theory (including the use of work by Jesper Juul and Sean Fenty), alongside their consideration of Team Meat's own comments about the game creates a clear picture of how an entire

audience segment experiences certain aspects of *Meat Boy.*

Both Payne and Campbell's and my own work explore difficulty in *Super Meat Boy.* However both works also explore the unique roll of death in *SMB* and its impact on the player. Needless to say, the titular character's death and the difficulty of the game are intimately linked through the concept of generative failure Payne and Campbell suggest. Failure is of course productive in the form of player learning as Payne and Campbell emphasize when writing, "Of course, all of Meat Boy's moves must be combined to traverse his universe's innumerable hurdles, like deadly piles of salt, walls of saw blades, and other Meat Boy-killing nastiness." However, as the authors also note death, is literally productive as a played mechanic when the player has the opportunity to see their pattern of play reconstructed upon completion of each level. In considering this same mechanic that the authors point out, I see a very deliberate design move on Team Meat's part that directly upholds the claim Payne and Campbell make about the type of gaming experience *SMB* offers when they write that, "…failures do not inhibit success; rather, the opposite is true. Failures are necessary for success." Not only does this declaration ring true in a consideration of *Super Meat Boy*, but it also serves to reinforce the notion that failure and certain types of learning are deeply connected both in video games and in other arenas.

Ultimately the contrast between Payne and Campbell's mode of analysis and my own serves to highlight persistent aspects of *Super Meat Boy* that seem to emerge regardless of the particular played experience an author seeks to capture in providing a deep read of the game. *Super Meat Boy* is an undeniably difficult game. While I have emphasized this by relating specific passages of game play that have challenged me in a variety of ways, Payne and Campbell deftly illustrate the role of difficulty in the game in their discussion of how Refenes and McMillen lean strictly upon what Juul refers to as "energy punishment" in

creating a specific type of difficult gaming experience. While I may disagree with Payne and Campbell's claim that *SMB* is accessible to more casual players, their analysis of the construction of the difficult played experience in *Meat Boy* is superb. The notions they put forward of generative failure and a structure that invites returned play despite failure are incredibly useful for informing countless experiences of failure and learning that players have had with video games, as well as other experiences of productive failure that occur in both formal and informal learning environments. From a strictly personal perspective, when I reflect on the concept of generative failure, I gain a deeper understanding of the manner in which even now, over a year after I began playing *SMB*, I still find myself returning to it and making incremental progress. At the end of the day, it is of course also good to find that I have been suffering in good company.

Response to Moses Wolfenstein's "Well Suffered"

Matthew Thomas Payne, University of Alabama,
mtpayne@ua.edu
Stephen Campbell, University of Alabama,
sccampbell4@crimson.ua.edu

Thank you to Drew Davidson and the *Well Played* journal for the chance to respond to Moses Wolfenstein's essay, "Well Suffered." We were anxious to discover another "Well Played" piece about *Super Meat Boy.* After all, how different could two analyses of one small indie game really be? As it turns out: plenty different. We were pleasantly surprised at just how differently Wolfenstein approached this grueling gem. Where we framed *SMB* as a veritable love letter from its "Team Meat" developers to gamers – one that traded in gaming nostalgia while improving upon platforming's key mechanics – Wolfenstein's personal tale of his gameplay successes and (many more) failures mirrored Team Meat's own challenges of bringing the game to market, while also prompting him to consider how failure figures into his self-assessment as a gamer and as an educator. We'd like to focus on these two points, as we found them to be among his essay's most intriguing insights.

I. *SMB* as empathetic connection between player and designer

One of the more outdated critiques of video games is that they are too mechanistic, procedural, or computational to engender "real" emotional experiences. That is, video games are too "cold" to adequately convey or create empathy. For those who've spent any time with games, we know this to be patently false. Indeed, this is neither the case today, nor has it ever been. And yet the contention nevertheless

holds mysterious sway for some pundits and critics.

Video game scholars, journalists, and everyday apologists have battled this misconception for years in books, editorials, blog posts, and in the pages of journals like Well Played. James Paul Gee (2006), one of the foremost voices in game studies, has observed that players merge their own identities with gaming's on-screen avatars to produce new, emergent identities with unique story-based trajectories. We all have played with the same *Super Meat Boy* characters across the same *Super Meat Boy* levels, but our individual experience of those gaming adventures reflect our personal choices. No two victories or, as is more likely the case in SMB, no two failures are exactly the same.

Wolfenstein's piece builds tacitly on Gee's argument, but arms video game scholars with another piece of evidence that there is not only an experiential and empathetic linkage between the player and the avatar, but that there are connections of shared humanity to be found between players and game designers. "Well Suffered" carefully chronicles the gradual changes in *SMB*'s tone as the player travels through the game's increasingly challenging worlds. At its outset, *Super Meat Boy* is cheerfully saccharine in its presentation; in fact, the game begins in a happy forest complete with doe-eyed woodland creatures. But the game's initial art design, musical score, and juvenile humor are replaced with stark elements of danger and foreboding; as when, for example, future terrors like Stage Six's saw blades are previewed in the background of Stage Two. Despite its initial façade, *SMB* is not a happy platformer of yesteryear. It would appear that nostalgia is not all that it's cracked up to be. And neither is the work of game design. It is here where Wolfenstein makes a provocative connection:

I see parallel here that probably applies to the development path trod by Team Meat, and that certainly applies to my own experiences in game development and other large-scale projects. In essence, the work

starts out as a joyful experience. You might encounter a few early difficulties, but the activity is fresh, exciting, and generally filled with promise. While you anticipate some trials ahead, you don't truly have any notion of the scope of those actual challenges. This is the point where your emotional investment in the process is relatively high and your material investment relatively low.

Thus, Wolfenstein's piece implicitly asks us to consider the following: if the emergent identity of playing *SMB* is "player + Meat Boy = player is Meat Boy", then can we imagine a connection with one more linkage? Namely: player --> Meat Boy --> Team Meat? Does the experience of playing *SMB* become inextricably tied to the developers and their creative challenges? Is this perhaps especially the case when a game's development history is so widely known (e.g., in industry "post mortems," gaming blogs, and in films like *Indie Game: The Movie*)? We believe so. "Well Suffered" opens the conceptual door to empathizing not only with other players, but also with designers, granting a tangible sense of authorship to games. (Of course, it's much harder to make the case for identifying with a massive design team where authorship has been dramatically blurred in AAA titles like *Madden* or *Halo*).

II. Dramatic failure as an opportunity for self-reflection

Both essays also necessarily focus on failure due to Meat Boy's sudden, dramatic, and repeated deaths. But beyond teaching us about the game's operating logic, physics, or level design – a point that our piece examines – Wolfenstein's essay reminds us that games like SMB prompt us into asking bigger questions about ourselves.

These are not the kinds of standard learning outcomes that educators typically look for. Rather, SMB's absurdly difficult levels force the player to consider how it is they deal with failure in a way that most games do not. As we say in our piece, we give the game the benefit

of the doubt and return to it willingly despite the challenges because we trust the efficacy of Team Meat's game design. The game has not failed; it is we who have failed. But our response to the game's difficulty escapes its mediated bounds. It's almost as if the game transforms into some meta-commentary or reflection on the nature of failure and the fear of future defeats.

Wolfenstein notes:

I have to count Lil Slugger as the first legitimately difficult challenge in Super Meat Boy. In fact, I actually paused for a second before starting the level on my most recent replay. For just a moment I was struck by a feeling akin to fear, the memory of my first attempt at Lil Slugger looming large in my imagination.

Here, Wolfenstein recognizes the need for steeling himself against the inevitable pain that attends to his future defeats. We believe that this affecting gameplay dynamic primes gamers to prepare themselves for defeat, so they will be more open to learning from their mistakes. And this is the core of SMB's brutally elegant design (or design of elegant brutality), which becomes the fountainhead of its gaming pleasure. Or, to blend our essays' interpretive frameworks, the Super Meat Boy functions as an authentic love letter because of the suffering – both the player's and Team Meat's suffering – that brought it to life.

References

Gee, James Paul. (2006). "Why Game Studies Now? Video Games: A New Art Form." Games and Culture, 1: 58-61.

Wolfenstein, Moses. (2012). "Well Suffered." Well Played.