

Well Suffered

Moses Wolfenstein

Academic ADL Co-Lab, 5602 Research Park Boulevard, Suite 300 Madison, WI 53719-1245

Email: moses.wolfenstein@gmail.com

Abstract: This well played session explores the challenges and difficulties experienced by the author while playing the indie platformer Super Meat Boy over the course of more than a year. The author juxtaposes his own played experiences of failure and frustration with the suffering endured by Team Meat, the game's developers, during its production. The acts of playing difficult games and producing an independent game are of course different. However, as instances of self-inflicted suffering, the development experiences of Team Meat and the experiences of its players both provide interesting opportunities to examine phenomena of failure, learning, work, and play. Over the course of a selected playthrough of the game, the author will explore the themes of failure, suffering, & triumph woven into Super Meat Boy through game mechanics, narrative, and art, and how those themes both echo the developers experiences and advance one understanding of learning in games.

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, the session focused extensively 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 finishing the game at that point, but I had already died countless times. Dying repeatedly is in some sense one of the core mechanics 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 as 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 am very close to its technical end (2). In fact as I write this I am stuck (and have been for months) on a level titled Omega. It is the last level before the final boss fight in the game. The part of Omega on which I'm stuck involves gently guiding Meat Boy over the edge of a cliff and down between some saw blades. I can get up the cliff to get the key easily enough, but apart from one time, I've been unable to get back down.



Figure 2: The drop I'm stuck at on Level 6-5 "Omega"

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, 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 on how learning takes place through expectation failure (Schank, 1990). 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.

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 a few of 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 hardcore precision platformers like Mega Man or Ninja Gaiden. Among other things, while I grew up with a computer at home from the late elementary grades on, 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 2 (a saw blade that requires a relatively long wall jump to surpass) that 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 recently in preparation for this paper I died several times.

Each world only requires the player to complete 17 of the 20 levels in order to unlock the boss fight. When playing The Forest initially, I played through and beat all 20 levels before getting to the first boss Lil Slugger, a bipedal robot with a chainsaw attached to the front that Dr. Fetus drives across the level chasing Meat Boy through a series of perilous obstacles. 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.

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 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.

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 sharp counter point, and a clear reminder that this game is not really about relaxing and having a good time. After the completion of the level, a cut scene is triggered in which we see that the forest is on fire. The entire palette has shifted to red and black, and at the start of the scene we see Dr. Fetus escape to the next world taking Bandage Girl with him. Everything is burning and there are literally piles of dead squirrels strewn about. It is a scene of absolute pathos as a surviving squirrel surveys its dead kin only to turn and look at Meat Boy with tears streaming down its face. Of course, Super Meat Boy never takes itself too seriously. The melodramatic nature of the scene is promptly 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 one shot the early levels of The Hospital 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 various 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 3, 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 led 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; Papert, 1998).

The Rapture

I'm not quite sure how long it took me to traverse the levels between The Hospital and The Rapture. I know that I was stuck for various periods of time on several levels in between the two, including the particularly brutal boss fight at the end of World 3, The Salt Factory. That said I know I began to get

into a certain kind of rhythm with Super Meat Boy in those intervening levels, and that this same rhythm applied to my experience with The Rapture as well. I would get to a level and I would get caught up on some particular challenge in it. I would be stuck on it for days if not weeks. I played lots of other games during this time, but I'd keep coming back to Meat Boy. This was also the point where I started replaying more levels, or pursuing some of the alternate content available by unlocking Dark World levels (see end note 2). Then, one day 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 and whip right through it in just a few attempts.

This moment of picking up the controller and suddenly making magic happen on the screen after hours of frustration and defeat is of course the core experience 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, and it is more or less inevitable that when educating humans repeated experiences of failure are bound to bring about some moments of frustration and potentially even suffering. There are of course other factors that we can consider in this context. While there is debate on whether "unconscious thought" is an effective aid in decision-making (Newell, Wong, Cheung, & Rakow, 2009), it might be 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 (1990) seems to also fit with the learning that takes place during difficult moments in game play, and perhaps also in the context of learning both 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 has 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. 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 Sisyphian 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 degree of the adversity they experienced was at least somewhat beneficial. Or perhaps this 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.

While I'm willing to acknowledge this possibility, it doesn't ultimately have that much bearing on my played experience of Super Meat Boy. While I have yet to beat the game, and may never actually complete the core content, 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 the core of the 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 Meet 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/>
- 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. (1990). *Tell me a story: A new look at real and artificial memory*. 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.