

Well Played 3.0

Video Games, Value and Meaning

Edited by Drew Davidson

“The Well Played series is some of the most exciting writing in gaming. It is crisp, insightful commentary from top designers about the games they know the best. This series sets a new standard for how to best communicate what is important about a game.”

Jesse Schell

Asst. Prof. of Entertainment Technology, Carnegie Mellon University
CEO, Schell Games





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Value and Meaning**

Edited by Drew Davidson



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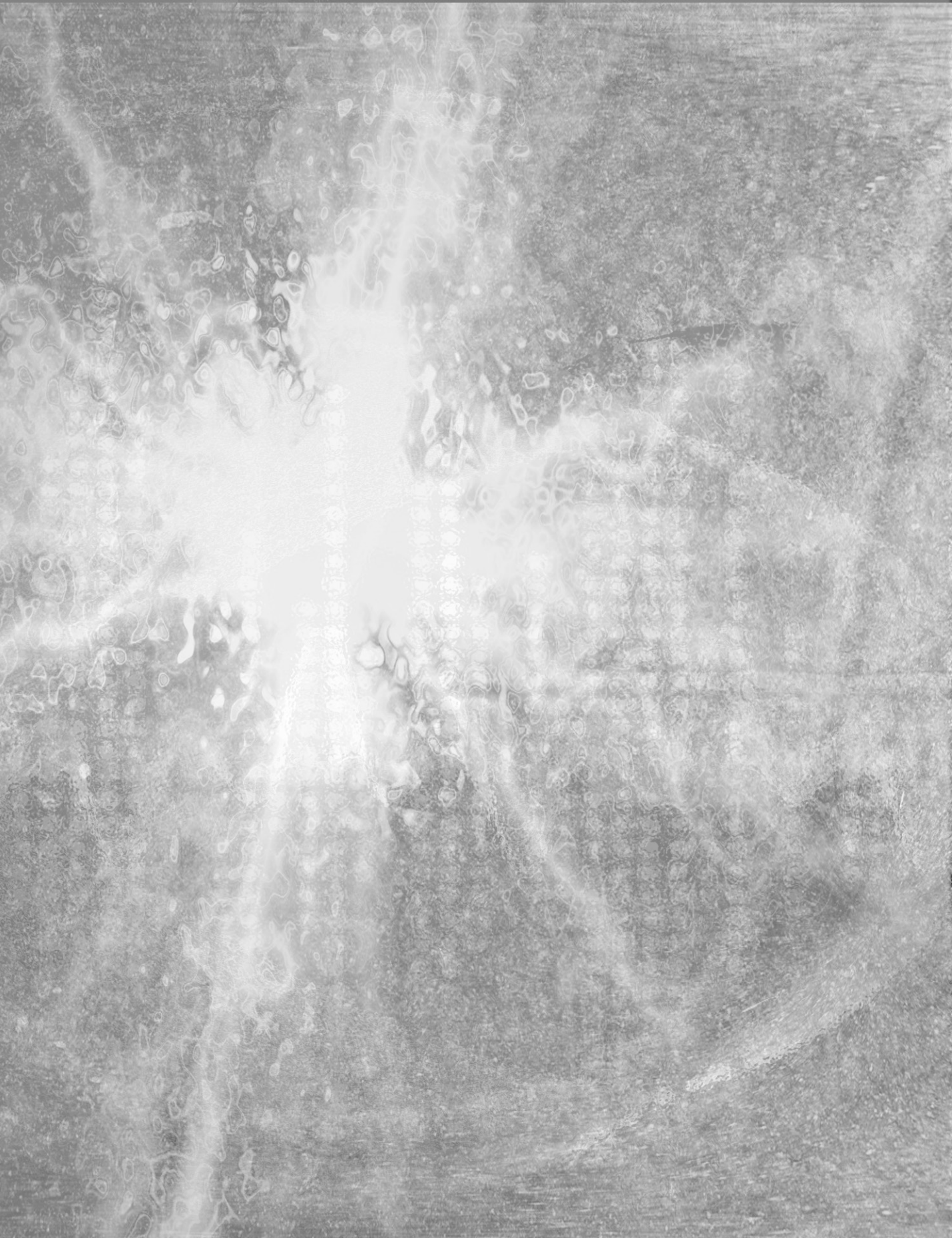


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Design & composition by John J. Dessler

THANK YOU

This third Well Played book was yet another enjoyable project full of interesting insights into what makes videogames great. A huge thank you to all the contributors who shared their ideas along with some inspiring analysis. A thank you to John Dessler for his great work on the book design. And thanks again to participation and support of everyone who has joined in the discussion around games being well played. And to my wife, as always.



CONTENTS

| | |
|--|------------|
| Thank You | V |
| Well Played 3.0. | XI |
| The Deeper Game of Pokémon, or, How the world’s biggest RPG inadvertently teaches 21st century kids everything they need to know | 1 |
| ELI NEIBURGER | |
| Hills and Lines: Final Fantasy XIII | 13 |
| SIMON FERRARI | |
| And if You Go Chasing Rabbits The Inner Demons of American McGee’s Alice | 25 |
| MATTHEW SAKEY | |
| Limbo | 37 |
| ALICE TAYLOR | |
| The Neverhood; A Different Kind of Never Never Land. You Had Me at Claymation | 45 |
| STEPHEN JACOBS | |
| Heavy Rain – How I Learned to Trust the Designer | 55 |
| JOSÉ P. ZAGAL | |
| Fallout 3: How Relationship-relevant Decisions craft Identities that Keep Bringing Us Back to Enjoy the Horrors of the Nuclear Wasteland | 67 |
| ALEX GAMES | |
| Uncharted 2: Among Thieves - Becoming a Hero | 77 |
| DREW DAVIDSON & RICHARD LEMARCHAND | |
| Mass Effect: Leveraging a Science Fiction Childhood | 113 |
| MATT MCLEAN | |
| The World Ends With You | 119 |
| THERESA CHEN | |
| Anything you can do, Chrono Trigger can do better | 127 |
| FRANCISCO SOUKI | |

| | |
|--|------------|
| The Opposite of Accessible: Street Fighter IV | 137 |
| JASON VANDENBERGHE | |
| Majora's Mask | 157 |
| SCOTT JUSTER | |
| Blocks, Planes, Drain, and Kain: Well Played for Legacy of Kain: Soul Reaver | 165 |
| MARK SIVAK | |
| Toy Soldiers | 177 |
| CHARLES PALMER | |
| Siren is the Scariest Game Ever Made | 193 |
| CHRIS PRUETT | |
| Narrative Reincarnation in The Way of the Samurai 3 | 205 |
| ARTHUR PROTASIO | |
| Limbo and The Misadventures of P.B. Winterbottom | 217 |
| ANDY JIH | |
| The Path | 231 |
| HEATHER CHAPLIN | |
| La Noche de los Muertos | 237 |
| GREG TREFRY | |
| Ding! World of Warcraft Well Played, Well Researched. | 253 |
| CRYSTLE MARTIN, SARAH CHU, DEE JOHNSON, AMANDA OCHSNER, CARO WILLIAMS, & CONSTANCE STEINKUEHLER | |
| Playing Ico: from Involvement through Immersion to Investment. | 273 |
| DREW DAVIDSON | |
| Well Read: Applying Close Reading Techniques to Gameplay Experiences. | 289 |
| JIM BIZZOCCHI & JOSHUA TANENBAUM | |
| Biographies | 317 |

WELL PLAYED 3.0

Further Perspectives on Video Games, Value and Meaning

Well Played 3.0 is another great book of in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game. As before, contributors have analyzed sequences in games 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. Across the three books, contributors have provided a variety of insightful perspectives on the value of games.

For those who have yet to see the two previous 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 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.

And this book is completely full of spoilers on all the games discussed, so consider this your fair warning. While it's not necessary, all the contributors encourage you to play the games before you read about them.

Well Played 3.0 is going to be the last book. We're now going to follow these three books with a regular on-going Well Played journal series open to anyone who is interested in submitting an essay analyzing a game. We're also going to host Well Played tracks with live play and analysis of games at the Games, Learning and Society Conference and at IndieCade as well.

The goal of all of the books, and the following series and conference tracks, is to help create a forum for discussion that further develops and defines a literacy of games as well as a sense of their value as an experience. Also, the books have focused specifically on close readings, having an on-going journal and conference tracks can also enable us to consider distant readings (a la Franco Moretti) of games and how they've evolved across time. Video games are a complex medium that merits careful interpretation and insightful analysis. By having contributors to look closely (or distantly) at video games and the experience of playing them, we hope to show how many different games are well played in a variety of ways.

“

*These are the minds of
the future. There's a lot
at stake. Fortunately,
Pikachu is on the case.*

”

ELI NEIBURGER

THE DEEPER GAME OF POKÉMON, OR, HOW THE WORLD'S BIGGEST RPG INADVERTENTLY TEACHES 21ST CENTURY KIDS EVERYTHING THEY NEED TO KNOW

1. Introduction

So, is *Pokémon* really that big of a deal? Yes, it is really that big of a deal. 200 million units sold, only the Plumber is bigger, and even runaway hit franchises like Halo or Madden can only dream of success on this scale. Most of these players are future adults, and the franchise ensnares their little minds with not just the narcotic Japanese adorableness of this little fleet of collectible fluffy ideas, but with a nearly bottomless gameplay, offering young players the opportunity to find out exactly how deep the rabbit hole goes... but almost entirely outside the game world.

While not discounting the masterful management of the property for Nintendo by The *Pokémon* Company, a big part of the enduring appeal is the slowly increasing complexity of the dynamics underneath the relatively simple and fixed surface gameplay, as well as a steady trickle of new creatures and features. Balancing this ever-deepening knowledge space with a front end that remains extremely accessible and inviting is a goal that few franchises attain; part of *Pokémon's* perennial success is due to the fact that each new release is devoured by the hardcore fans as readily as it encourages new fans to take the first step.

Pokémon is so big with so many kids, across its various formats, media, and series, that many adults can't help but look at it as some new hot impenetrable craze that these kids are into, and it snares them so deeply it must be because it's narcotic and nefarious, leading innocent children to commit crimes against culture and tradition such as naming the family dog Squirtle or other atrocities. On the lists of things banned from many elementary school classrooms, along with weapons, drugs, and cell phones, are *Pokémon* cards. While it's understandable that something so much more interesting than the curriculum would get a chilly reception from the teacher, it's an unfortunate perception because *Pokémon* is a powerful learning tool, far deeper and robust as a learning mechanism than the educational technologies normally found in a classroom.

Pokémon teaches some obvious things; one of the most powerful impacts, frequently overlooked by disapproving teachers and librarians, is that *Pokémon* is an outstanding literacy tutor. There are over 200,000 lines of text in a *Pokémon* cartridge and no voice or video; all the multiple layers of information that the players interact with through the game is plain old text, often with vocabulary far beyond grade level and ample opportunities to immediately apply the information gained through text parsing, one of the critical literacy building loops. And unlike the assigned curriculum, *Pokémon* players actually want to read and understand every single line of dialogue that every single player, terminal, or talking signpost says as they never know where critical information will be hidden.

In addition to being such a literacy driver, *Pokémon* is a very positive example of how to compete with grace and sportsmanship, what winning and losing really mean (not much), and how to balance risk and reward. Primarily, engaging in battles against other players risks nothing other than honor; the player's game save is unaffected by either a win or a loss. This sets up a low risk environment so that players are more willing to experiment, take chances, and go for the brass ring, with the option of trying it again and again if need be. Allowing kids to try challenging tasks repeatedly until they find success is not a common experience in today's test-driven schools.

However, the real power of *Pokémon* is that far beyond these benefits, the very fabric and gameplay of the series stretches young minds in exactly the directions they most need to be stretched, and that their 20th-century styled educations barely even poke, as they are required to actively subsume large bodies of abstract knowledge through play and experimentation (supplemented with online resources) and build a ready working knowledge of a complex and hidden set of rules. Most tellingly, the primary learning task of excelling at *Pokémon* is not to memorize as much as you can, but to learn which bits of knowledge you'd better have in your head, and which can safely be stored on the net, in your pocket, at your fingertips. As ubiquitous internet access continues to change our society, this skill, being able to subconsciously determine which facts must be stored onboard and which can be left in our extended knowledge corpus, is likely to become a prerequisite for success in technical work (if it isn't already) and it's safe to say that this is not a focus in most elementary schools.

In addition, the act of learning, researching, and playing *Pokémon* leads to emergent behaviors that take the gameplay far beyond the limits of their tiny screens as kids are drawn to do complex analysis, arrive at consensus, and quickly access the knowledge available in other heads, all while cheering each other on and encouraging originality. Most compellingly, the *Pokémon* world gives kids a model for how science is done by allowing them to participate in a world where

graspable new in-world science is actually being done, theorized, argued about, proven, and documented, among a community where credentials are irrelevant and only reputation and accuracy are prized.

While not every kid plays *Pokémon*, just as it used to be a safe bet that the kid with the Chemistry Set or the Soldering Iron (back when kids were allowed to have things like Chemistry Sets and Soldering Irons) will find a career in science, the kids who are drawn into the bottomless complexity of the *Pokémon* universe are likely the Scientists, Engineers, and Programmers of tomorrow, and the institutions they build to support the dissemination of the new science that happens within their beloved game worlds will set their expectations for how business and science are conducted online as adults for the rest of this century. These are the minds of the future. There's a lot at stake. Fortunately, Pikachu is on the case.

2. Knowledge Spaces

A big part of the reason that *Pokémon* is not very popular with grownups is that our ossified 20th century brains aren't quite up to the task of soaking it all in to the point that true proficiency would require. Of course, we also lack the single-minded enthusiasm of youth that allows a young mind to easily chase each thread of knowledge out to the end and see what else it's tied to along the way. When a kid is getting into *Pokémon*, their first advantage is that they're not immediately cowed by the scope of the gameworld, and their second advantage is that their supple young brains can easily stretch to store the barrage of multilayered knowledge that lies within.

There are so many *Pokémon*, places, objects, people, moves, modifiers, traditions, challenges and rewards, but they all collapse down to an approachable set of good and bad actions in a battle engine that has changed very little over the years of the series. The core of success and failure is the type matchup table, where each of the 17 types of *Pokémon* and attacks combine to determine the efficacy of an attack. Each *Pokémon* has one or two types, and each attack is one type; an attack can have one of 6 levels of efficacy depending on the types of its target. That's a 3-dimensional knowledge matrix with over 4,600 cells, and each of the cells with 1 of 6 potential values; making a space with over 23,000 incorrect possible values and 4,624 correct values. On the surface, the more of this matrix you can hold in your head, the better you will perform in battle. But some type matchups are exceedingly rare, and some never legitimately appear, making some cells of critical importance and some of no importance. The game of learning this table is knowing what you need to know and what is safe to look up if it ever comes up... but then finding that that distinction is irrelevant because you went and retained it all without even trying to.

Of course, this specific knowledge is unlikely to be useful to a player's future career (unless they pursue a *Pokémon* profession), but the ability to handle a dataset of this complexity and dimensionality while accounting for the varying importance of individual values will be a critical skill for a wide range of 21st century careers.

While *Pokémon* players, like all gamers, make a mental map of the game's knowledge space as they play, going beyond the surface of the battle interface and results reveals a deeper world of knowledge that, while almost completely hidden to the casual player, is essential to succeeding against elite players who may have already reached the heady echelons of Middle School. For a beginning *Pokémon* player, being asked "Have you heard of EV training?" is likely to be the first Morpheus moment of their young lives, and if they are intrigued, and curiosity leads them to choose the red pill, they will truly discover how deep the rabbit hole goes.

EV (Effort Value) training determines what a *Pokémon's* stats will be when it reaches max level 100, meaning that an EV-trained level 100 Charizard will kick the fiery ass of a noob-trained level 100 Charizard. EV training involves picking the XP-earning battles that you expose your *Pokémon* to carefully, and fully understanding the interplay of each *Pokémon's* mysterious Nature (there are 25 different natures that affect base stats, but also interplay with how a *Pokémon* is treated) to ensure that your *Pokémon* reaches its fullest potential. EV training requires extensive out-of-game recordkeeping as no part of the game's interface reveals anything about the EV progress your protégé may or may not be making. Discovering this arcane but critical knowledge is the first step into a larger world that says to kids, there is more, just beneath the surface, and you can understand it and use it to your advantage; just read this.

Pokémon is also a Global phenomenon (although limited to the types of places where kids have Nintendo handhelds or playing cards in their pockets) and while the wordplay-inspired names of *Pokémon* may be different in other territories, the numbers and many of the terms are international, even transcultural; kids can often play a robust *Pokémon* match even if they have no language in common and their cartridges come from different regions. There are *Pokémon* Wikis in 8 languages that have joined forces to become an Encyclopaediae *Pokémonis*; the English version, Bulbapedia, has over 16,000 articles.

One of the ways that the game world differs from the real world is that it is periodically and unmissably enlarged when a new game comes out. Of course the fans count down the days and hours, but the most inspiring part is the flurry of edits and fora activity as players race to discover the secrets of the new domain, be the first to confirm a rumor, document evidence in support of a theory, or just fill in a detail in the shared knowledge space that somebody missed. It's akin to medicine discovering a new organ to study every 2 years; the resulting explosions of shared theory, evidence, and knowledge are experiences few modern scientists will have had in their disciplines.

Most positively, even a kid who knows they know everything about *Pokémon* knows they don't know everything about *Pokémon*. With experimental conditions easily reproducible, there's little room for Dogma. Either's it's reproducible truth or it's just something somebody said, and with the steady growth of the knowledge space, it's a rare *Pokémon* player who will completely dismiss an assertion made by a fellow player who has proven themselves to be credible. *Pokémon* teaches kids that there is always more to know in a way that fills them with anticipation instead of dread, and it's critical for 21st century minds to feel this way about knowledge.

And the best part is that it's all just a side effect of pursuing the most entertaining, engrossing, satisfying gaming experience possible; these games are not intended to be educational. And thank goodness, because wouldn't that just SUCK? Part of the success is due to the slow reveal of the depth to new players; the player needs to know very little to have success as a beginner. Nobody ever tried *Pokémon* and put it down, saying it was too complex (except for adults). *Pokémon* teaches kids that learning more every day is fun, and that's unfortunately a very rare lesson in the classroom.

3. Knowledge Acquisition

Here's the most telling part of the *Pokémon* player's experience: they learn and apply all this knowledge with not a single lecture, textbook, quiz, project or report card. They learn it because it is challenging, engaging, and immediately actionable. Not even the most dedicated *Pokémon* players study the game; they just play more. Play is study. Our educational systems are built around Play and Study being polar opposites, and you only get the Play when you've slogged through the Study. The amount of information the kids absorb into their little heads in the course of simply playing this game is astounding, especially when you consider how slowly the game itself dribbles out information to make sure a wide range of players can keep up.

This actually helps the knowledge acquisition process along, because most kids rapidly want to know more about the game than the game is ready to reveal, leading more experienced players to be a critical resource without the baggage of a generation leap as looking to experience often requires. That said, no kids sit together and go over each *Pokémon*, with the master patiently reviewing each detail for the noob; instead the knowledge sharing is about what game knowledge is most important to success, directing attention to the less obvious aspects of the game that are key to success, then allowing the newbie to absorb the data as they play, leading up to the moment when the Red and Blue pills are offered.

One of the most striking aspects of *Pokémon* culture is that despite the intense competition, there is no spreading disinformation, no withholding of critical knowledge, and no proprietary ideas. Because the entire world is so meticulously and authoritatively documented on the web, any subterfuge would quickly be discovered at a massive reputational cost to the player. The *Pokémon* ethos makes it very clear that keeping secrets about the world is something that only bad guys do.

As a result, *Pokémon* knowledge is truly social knowledge; it's clear to every player at a tournament that the entire room of players knows much more about *Pokémon* than any single player in the room, and the more quickly questions can flit from head to head, the more quickly the head that contains the answer with a high degree of certainty will be located and tapped.

It's not that there are no tests, no success and no failure for the *Pokémon* player, quite the opposite regardless of whether they're playing the single player campaign or playing against other humans, but the challenges are structured to have very little risk and ample opportunity for learning. Beating a gym leader in the single player campaigns requires the player to learn enough about their style and their *Pokémon* to find a weakness and turn the tide of battle, and they can try it as many times as they need to. It's not that you never forget your first gym battle; you never forget any of your gym battles.

In addition to the gameplay experience, the *Pokémon* web offers such a huge body of text to rely on to extend the social learning, which drives interest in, and understanding of, online research, with a critical awareness of source quality. A forum post is not authoritative, but the community wikis or the writings of Talmudic scholars certainly are, complete with nearly divine, legendary sources that are fabled to have connections on the dev team.

This is important, because the *Pokémon* universe has an almost completely silent creator in The *Pokémon* Company, one that only speaks in marketingese and never says a single thing about the deeper aspects of the game. All that's known about that is the result of player theorization, experimentation, and documentation, often including elaborate tools and reference sources. At the same time, unlike the real world of science, the *Pokémon* universe is solely made of fully readable byte code for players who have the time, the tools, and the desire to examine the very fabric of their universe in its entirety. While only the most dedicated and patient enthusiasts can perceive the universe at this level, they report back volumes about what they discover, with complex analysis of the implications of this knowledge.

4. Knowledge Analysis

Even EV training is just the tip of the iceberg; understanding and applying knowledge about the *Pokémon* battle system is what separates the rookies from the masters. In addition to the authoritative wikis, there are several prominent sites that do detailed analysis on the huge possibility space that a *Pokémon* battle contains to condense the endless options into a set of best practices.

However, exactly how some of this information came into the hands of these scholars is shrouded in mystery and legend. It's believed that Serebii.net, the definitive source on information about EV training, was given some information by the developers, presumably with the expectation that it would be leaked, explored and dissected. There's no analog for this in the real world, unless you count inspiration delivered by Niels Bohr in a dream or the equivalent; a rare flash of insight that allows entire networks of mysteries to be unraveled.

While the leak, if it actually happened, rapidly advanced the science of *Pokémon* training, it's a law of gaming that everything that can be known about a game will eventually be known, inferring that the leak was intended to jumpstart the deeper analysis of the game and give older, more experienced players a whole new way to play the game that they could then evangelize to the little kids who were mystified by their powers.

At the same time, most of the game knowledge space is defined above the surface, in the menus and screens, in such a way that even a casual player can at least understand how much information there is that can be known. This provides an opportunity for players to get in on the act of collecting data, reproducing and verifying experiments, and filling in the well-understood blanks of the items, places, people, shows, and monsters that make up the world.

Nowhere is this clearer than in the flurry of edit activity on the canonical wikis in the months leading up to, and following the release of, a new title in the series. In the 4 months bracketing the Japanese release of *Pokémon Black & White*, the English-language Bulbapedia had (X) edits contributed.

Being a part of this process necessitates a solid understanding of the game knowledge space, external recordkeeping, and an appreciation of wiki etiquette; again, not projects kids of these ages are likely to tackle as part of a school assignment. The scope of the opportunity is made clear by official sources, such as formal announcements of new *Pokémon*, surface gameplay aspects, or advertised new features. Players can then jump in and start filling in the blanks.

Of course, the whole point of this knowledge is to succeed in as many battle situations as possible, and the pursuit of the ideal *Pokémon* team versatility drives deep analysis and optimization, complete with lineup-engineering-specific terminology like “sweeper” and “wall” and such. In addition, like many other games, the *Pokémon* scholars often develop consensus-oriented “tiers” of *Pokémon* to establish the fundamental worth of each *Pokémon*’s individual possibility space.

Succeeding in competitive play essentially requires the extension of the gameplay beyond the DS and onto external tools, both universal, such as EV calculators, and special-purpose, such as Lineup analyzers that draw on agreed-upon measures of *Pokémon*’s versatility.

In addition to these player-created analytical tools, players have also created online battle simulators and battle simulator networks that allow you to enter any starting conditions and lineup to try out your theories using a reverse-engineered battle process that behaves just like the real thing; in essence, a battle modeler, free to download.

Of course, all knowledge has its dark practitioners, and there is a great deal of hacking activity in the *Pokémon* world, complete with players who think that anything goes and others that find it an abhorrent practice. Because hacking devices like the Action Replay are sold at retail, many parents will simply purchase the tools without understanding or really caring what it means for their kids to send an artificially-juiced *Pokémon* into battle against a carefully raised organic free-range specimen.

This touches on the fact that *Pokémon* encourages kids to confront issues of Digital Ethics and the consequences of cheating in a much more nuanced way, thick with implications that their parents do not understand, with the only knowledgeable role models available to model good behavior as a *Pokémon* trainer being their own peers or slightly older posters on fora that no adult ever visits.

In short, it’s safe to assume that when a *Pokémon* player is deciding what move to use next, they’re doing more sophisticated thinking and applying deeper analysis when they’re playing *Pokémon* than they ever do at school.

5. Knowledge Creation

It’s hard to find real-world analogues of the phenomenon that the *Pokémon* world goes through when a new title drops. There have been breakthroughs that open up entirely new realms of science before (something like the double-slit experiment comes to mind) but they don’t usually have countdown timers that allow all the players to clear their schedules and just know that they’ll be researching the new domain of their expertise that month.

While it would normally be a stretch to consider all the text that happens about a popular game, including walkthroughs, tables, and FAQs to be a part of the gameplay, it's hard to separate out the activities that are required to keep the *Pokémon* world fully documented and discretely knowable from the highest levels of the gameplay itself. In fact, around the releases, it's clear that a considerable contingent of serious *Pokémon* players are more interested in being the first to formally document or confirm some new fact than in playing the game itself, making the knowledge creation an extended part of the gameplay of the series, and even another opportunity to attempt to express dominance.

Players understand, of course, that participating in the creation and refinement of reference materials about the game world is an optional activity; but it's clear that consuming the output of the contributors is not optional if you want your *Pokémon* to reach their fullest potential. This tilts the activities that happen outside the game towards a multiplayer model that encourages specialization and recognizes that the battle can only be won if you find your job and do it right. And again, while it may be a stretch to call these activities gameplay, it is clear that the play is happening on two levels; the surface battles with their attacks and items and statuses and winners and losers, and the collective action of the player community to achieve social mastery and grok each title in fullness, no matter how deeply the creators have obfuscated the game's true nature.

Along the way, the players are building tools, calculators, spreadsheets, standardized terminology, and databases that support the knowledge game and make the tools of the trade freely available to all players. The ubiquity of these tools (and of the games themselves) make it much easier for experiments to be reproduced and theories tested. This makes it much, much harder to perpetrate a hoax or spread disinformation in the community because the reputation hit would be so great if a player or site was found to be acting in bad faith. And a higher reputation weight and little room to argue over initial conditions, leads to trust networks growing more quickly because everyone knows that everything is being checked and would be quickly exposed if untrue.

So, as the trust networks expand, less original work needs to be repeated, allowing for greater specialization throughout the community and very short lives for competing theories. While every forum's denizens leap to defend attacks against their expertise, the fact is that a theory that is demonstrably untrue has a brutally short life in the *Pokémon* universe, and it goes without saying that nobody is interested in teaching any controversy.

Like other big titles, the fan consensus becomes a major component of the game, as player-created rankings and analyses make objective judgments about different strategies or lineups, leading players to insist on things like "Uber Bans" to prohibit the most powerful *Pokémon* or setting up Low Tier tournaments, using only the *Pokémon* that the community has judged the weakest to shake things up.

Again, the frequent drops of new titles, combined with an amazingly consistent and meticulously tended-to canon, leads to plenty of opportunity for players to get involved with knowledge creation. Even though not every player participates in this, they all understand that the body of knowledge is player-created, and there's something transformative for you to feel that your most cherished reference tools were created by the collective actions of your peers instead of the deliberate actions of some impenetrable scholarly body. Most tellingly, it's clear that all the print strategy guides are a joke, barely scratching the surface of the game and openly focusing on marketing over knowledge. For this generation, the only things that are printed are ads. At the same time, the player's understanding of the ever-shortening loops between release of game and completion of fan analysis changes expectations about science, knowledge, and collective action in the future.

6. Conclusion

OK, so obviously, this is a bit of a love letter, but there's never been anything as complex as this that kids have been expected to consume for fun. Most adults don't do anything this complex for fun, although lots of them do things this complex for a job. *Pokémon* combines the stats hunger of sports worshippers, the nurturing models of Tamagotchis and their ancestors, the completist drive of the collector, the safe thrill of close, friendly matches with little on the line, and a bottomless rabbit hole of knowledge to make a cocktail that gives players super-powers of retention, recall, analysis and decision-making when consumed.

Not every kid plays it, but tens of millions do, and a great many of them are going to grow up to have technical jobs. It's not that this is the only way that kids can prepare for a 21st century career, but I think you're going to have a pretty hard time, come 2030 or so, finding a scientist (especially in biosciences) who wasn't seriously into *Pokémon* as a kid.

The most amazing thing is that's its all about the gameplay and the game mechanic, on the surface and below, and it's inspiring that making something so complex and demanding should lead to essentially untouchable success in the marketplace. And yet this success makes it a target for controversy and misunderstanding. While school programs struggle to adapt to the 21st century, it's unfortunate that such a powerful framework for learning, that requires research, collaboration, documentation, analysis, understanding of complex systems and development of advanced conceptual frameworks, is being forcibly set aside when it's time to learn. Especially when it provides such a powerful and accessible model for how science is actually done, and the killer combo of no requirement to memorize facts, but a clear advantage in retaining them that leads to low-effort, experiential learning.

Just by pursuing commercial success, The *Pokémon* Company has built a world of knowledge and gameplay that spills over the confines of its tiny platform and rearranges fine young minds for the better, no matter how unreachable they may seem in the midst of a gym battle, and it's likely that just as current scientists have been known to cite Star Wars or Star Trek for getting them inspired about science, scientists of the 21st century will devote entire chapters in their eMemoirs to *Pokémon* and the expanding influence the consuming gameplay had on their formative minds.

“

Final Fantasy XIII argues that no player should be left behind, that no hill should prove impossible to ascend assuming a modicum of critical thinking.

”

SIMON FERRARI

Introduction

Final Fantasy has always been a JRPG (Japanese Roleplaying Game) about a group of dynamic, known mathematical values coming together in unexpected ways to tackle a static, unknown mathematical value. The former is the team of player characters, and the latter is the enemy. The major difference between *Final Fantasy XIII* and every past entry in the series is that it harbors no illusion that it is about anything else.¹ *Final Fantasy XIII* is not a story about two worlds, Pulse and Cocoon, standing in opposition. It's a process of blindly ascending hills, hills carefully placed one after the other in a line to make sure that the climber always has what she needs to make it to the top of the next in sequence. And I can tell you, as someone who lived most of his life in the foothills of Appalachia, that *Final Fantasy XIII* is as good as climbing hills gets.

Hills

Randomized encounters can never be as precise as explicitly designing them. Within the history of the *Final Fantasy* series, two constraints are placed on how random encounters work. First, zones in the world or dungeon map are delineated, and only certain enemies can spawn within those zones based on the probabilities of occurrence and volume---in the opening area of the first *Final Fantasy* I might have a fifty percent chance to run into 3-4 goblins, a thirty-five percent chance of two slightly stronger wolves, and a fifteen percent chance of a powerful but solitary nightmare.² Second, these encounters can be limited by the size of the monster relative to the size of the combat screen or zone. Two dragon-type characters might take up enough room on the combat grid (in 2d) or circle (in 3D) to prevent the occurrence of any of other enemy.

Final Fantasy XIII doesn't randomize encounters, and the player sees every threat on the map. Each encounter thus becomes a conscious choice to confront the enemy head on, to sneak up on the enemy for a preemptive strike, or to run past the enemy. What is the value of randomizing encounters over making threats visible on the map? Variety is the spice of virtual life, or so the thinking goes. The two constraints detailed above generate a modestly robust amount of difference. The downside of randomizing is that it becomes harder to account for the player's skill level (in fact, it seems strange that more JRPGs don't attempt to numerically gauge this somewhat intangible property). This means that a system initially set in place to provide variety often ends up creating a grinding experience---one trades the player's time for greater configurability.

“Grind” has become a naughty word in the wake of the Everquest widow problem.³ Some Western roleplaying games have attempted to deal with this problem through adaptive difficulty. But this fix has its own problem: the elimination of any serious challenge to the player. In a Bethesda or BioWare game, enemies simply take longer to kill as the game wears on. The player is never pressured to develop novel strategies or skills. A new time sink appears to replace the old one, and, considering the amount of people who claim to enjoy the gentle massage of the grind, it is unclear where the moral high ground for designers might be. *Final Fantasy XIII* does away with these problems altogether by compelling its players through a tightly designed obstacle course. Its literacy model is not built into the hundreds of tutorial and help screens; rather, it resides in the carefully staged progression of combat encounters.

Final Fantasy XIII's “paradigm” system is a natural combination of the series' earlier “outfit”-based systems in *Final Fantasy V* and *X-2* and the “gambit” system of *XII*. These are the six combat roles, roughly in order of importance: Saboteur (debuffer), Commando (primarily melee), Ravager (primarily magic), Medic (healer), Synergist (buffer), and Sentinel (tank). The player only controls the team lead, while the two other active party members always take the optimal action given the party's current state and known information about the enemy. Magic doesn't cost mana as it does in most games; it is simply an attack type, limited only by the time it takes to charge the action bar. Each party member is good at three roles, so there are around four viable party makeups (a combination of Fang, Lightning, and Hope being the most versatile). There are five slots for paradigms, which the player can customize in between battles. While in battle, the player can execute a “paradigm shift” to any of those five predetermined combinations.

The object of any battle is to “stagger” an enemy. When a Ravager inflicts damage, a yellow stagger bar slowly fills. Filling the bar both increases damage to the enemy and brings it closer to a stagger state, which makes it more vulnerable to afflictions and allows a Commando to launch it into the air (rendering it unable to attack or defend). Saboteurs and Commandos are the most important party members, because the stagger bar actually decreases over time. An attack from either of the two will slow down the speed at which this bar decreases. Many enemies, especially bosses, can only be significantly harmed while staggered. No battles actually require the use of a Sentinel, and the Synergist exists only to speed battles up. Many battles can be won without pausing to heal, but the Medic is almost always required for any key encounter.

Earlier I said *Final Fantasy XIII* is about climbing hills blindly. We're now ready to understand what the two elements of this statement mean. First (“climbing hills”), the carefully staged progression of encounters steadily elevates challenge while teaching the player how to kill each enemy. A level will begin, say, with two soldiers, and then it will add a third soldier to the next encounter. Then the player

will encounter, say, two slimes or a larger enemy such as a behemoth. After these smaller hills have been ascended, the final battle before a checkpoint will combine those enemy types: three soldiers and two slimes, or three slimes and a behemoth, etc. By slowly adding challenges and then combining different types of challenges, the game tests the tipping point where the player has to finally change her dominant strategy and develop a new cycle of paradigm shifts.

Second (“blindly”), every new enemy the player encounters has a data sheet explaining its strengths and weaknesses. This sheet always begins blank. When an enemy uses a special attack, one of its strengths gets entered into the data sheet. As the player damages the enemy with magic and melee, its weaknesses gradually become visible. Filling out the data sheet is vital, because AI teammates act on the best available information. The player can also spend a special, limited resource called “technical points” to use Libra. The player can only ever have five TP, and Libra costs one. These points are also used for summons and to revive the entire team in the event of catastrophic loss. Libra is a shortcut to the natural, gradual discovery process; it automatically tells the player most of the enemy’s weaknesses.

In past *Final Fantasy* games, Libra is a spell just like any other. I can distinctly remember never using it as a child playing *Final Fantasy I-VII*. If an enemy was aquatic, the player would assume that lightning spells worked best. If an enemy had a reflective barrier or can absorb fire damage, the player found that out naturally within the first few rounds of the battle. By making Libra a special ability, by separating it from all other spells, *Final Fantasy XIII* makes an argument about the essence of its system that was probably true of the series all along: the game is a matter of finding an enemy’s weakness and exploiting it. This isn’t a groundbreaking realization, and it isn’t a unique way to build a signature combat system. *Final Fantasy XIII*’s beauty lies not in innovation but in its minimalism, purity, and transparency. It recognizes its genealogy and invites the player to study it.

The purity of *Final Fantasy XIII* cannot be overstated. Absent are many traditions of the genre, such as conversation with NPCs, a world map, and villages to visit. Those subsystems that do remain---treasure hunting, weapon upgrading, and shopping---exist as options to help along players of lesser skill. They stand in for a difficulty slider and for the need to grind. A player who lets the game teach her how it works need not upgrade a single weapon or even open a single treasure chest. Experience points are still important for upgrading basic skills and attributes, but the player doesn’t need to stop at any point to harvest them. Summon spells, a staple of the series, have lost their ability to turn the tides of a battle. Instead, each character in the game must at some point confront the summon beast (called an Eidolon) within. These battles, perhaps the most difficult in the game, serve primarily to teach the player how to think about upcoming boss fights. The Eidolon are depicted as vehicles (horses, airplanes, motorcycles) for player characters within the game, while for the player they are vehicles for more nuanced knowledge about the battle system.

Final Fantasy XIII argues that no player should be left behind, that no hill should prove impossible to ascend assuming a modicum of critical thinking. In order to make good on its dedication to teaching the player, it features incredibly little of what Jesper Juul calls “setback punishment.”⁴ Whenever a player fails a battle, she will emerge with full health right in front of the encounter that felled her. After each battle, the entire party regains full health. Figure 1 shows what *Final Fantasy XIII* (left) feels like compared to *Demon’s Souls*, a game that surprised mainstream players in 2009 with its harsh difficulty curve (right).⁵

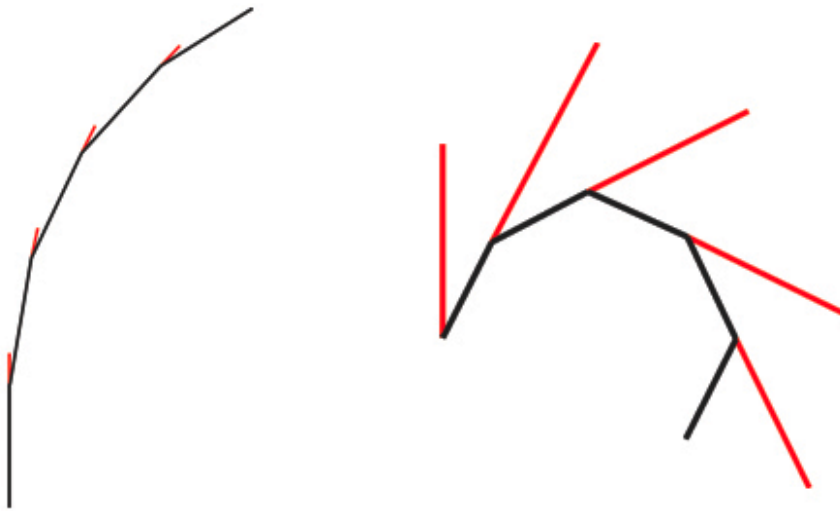


FIGURE 1: How the difficulty curves of *Final Fantasy XIII* (left) and *Demon’s Souls* (right) feel.

Black lines represent progress without death. Red lines indicate time spent on a failed attempt at some segment of the game. *Final Fantasy XIII* proves that “hard” is not “the new good.” Gentle games have just as much to offer us as brutal games do. Difficulty, like everything else about a game, serves a distinct expressive purpose. Painstakingly clawing one’s way up a mountain isn’t “better” than joyously bounding over a hill. The experiences are simply different in their demands and reward structures.

Lines

The first twenty hours of this game ask the player to follow a straight line toward a checkpoint. At intervals of fifty to one hundred paces, a group of enemies awaits. Floating treasure chests are placed after every fourth or fifth group of enemies. This corridor, perhaps the longest unbroken span of narrow, unilinear space in videogame history, makes one realize something that was true of *Final Fantasy*

games all along: we've always been running in a straight line. The decision to explore or not, represented here by the floating chests, has always been a matter of whether or not any given player is the kind of person who welcomes momentary distraction.

It has become increasingly common to see others criticize linear games for their linearity, without any effort to discern what the difference between good and bad linearity might be. An example of engaging linear space is the train-hopping sequence in *Uncharted 2*. The modularity of a train lends itself to constrained difference. The designer of the level has a few binary values to select for any given car: is it open or covered, is it a platforming challenge or a combat challenge (the latter being further divided between assault and stealth), is the arrangement of obstructions symmetrical or asymmetrical, and, if the car is covered, can its roof be reached and traversed?

Once each of these binary values has been determined for the individual car, one must arrange relationships between each car in the string. This creates a rhythm, which can be punctuated by unique scripted events---the helicopter, the "boss," and the heavy gunner on the log. All of this goes into describing what amounts to nothing more than a line, and a line is in no way deprecated by the fact that games can, as computational works, support other lines (and an opportunity for the player to choose between them) if its designers want them to. One of the values of identifying core pleasures of a medium in the first place---agency, immersion, and transformation in Murray's original account---is that the withholding of these pleasures can be used for the purposes of creating challenge, intrigue, variation, or expression.

Once one understands what a good line looks like, it becomes much easier to see why the first twenty hours of *Final Fantasy XIII* constitute a rather boring line---structurally speaking. There is no reason to create obstructions within, or alternate paths through, this space, because interacting with space isn't a value or strength of the JRPG. Environmental puzzles have always felt strange within the genre, especially in games featuring random encounters. Nothing is more tedious than trying to figure out how to shove a boulder from one end of a cavern to another with enemies interrupting every five paces. Golden Sun might be seen as the peak of poor JRPG spatial design, with its absurd reliance on pillar-pushing puzzles and point-and-click adventure guesswork.⁷ In the context of some JRPGs, environmental manipulation makes sense. These are almost always games with such a large cast of playable characters that splitting them into groups for solving interlocking puzzles in key dungeons provides an engaging diversion from standard play.

This works in the case of *Final Fantasy VI*'s Phoenix Cave and final dungeon.⁸ The encounter rate on enemies was low enough, and the cast massive enough, that dividing the heroes into three parties to solve puzzles made sense. There was also

a limited variety of puzzles that changed things up without being too confusing: the player could either push a pillar or pull a switch, which might trigger the shifting of a platform or the dispersal of lava. The same party-dividing conceit doesn't work in the more contemporary *Lost Odyssey*, which features a smaller cast, only two party-dividing and puzzle-solving dungeons, and only has one puzzle type, which we might call "push the transporter over the cliff."⁹ *Final Fantasy XIII* features a small cast of characters; it splits the party up for a while, but the player can't switch back and forth between them; thus, environmental puzzles have no place in the game.

Final Fantasy XIII was released in Japan at around the same time that *Mass Effect 2* was released worldwide. It should come as no surprise that both of these series transitioned from previously multilinear level designs to these unilinear, non-interactive corridors. For years, the makers of this kind of game were told that they needed to embrace the computer's ability to produce nonlinear game spaces. "Open" worlds of various quality proliferated, and players received hours and hours of "content" defined by the exploration of structureless, monotonous space. Everyone quickly realized that, perhaps, not every genre needs to maximize every affordance of the digital medium. This particular brand of stat-crunching, combat-focused game works just as well in a corridor as it does in a sandbox. It is also possible that many designers weren't ready to leave the comfort of the line; designing a nonlinear space demands knowledge of the line in much the same way that abstract painting demands knowledge of representation.

And that's the realization that the designers at BioWare ended with when they sat down to design *Mass Effect 2*—stripping away its "open world" hub spaces and replacing it with a number of smaller, more distinct portals to linear missions.¹⁰ The designers of *Final Fantasy XIII*, on the other hand, took the realization one step further: the shape of their game spaces could be used as spatial allegories. In the melodrama tacked onto this brilliant game about blindly ascending hills, two worlds (and the two factions of demigods ruling over them) called Cocoon and Pulse exist in perfect opposition. Cocoon, ruled over by the Fal'cie of the Sanctum, is a bounded sphere where humans are simultaneously provided for and controlled in every conceivable way. Hannah Arendt would identify it as the ideal centripetal totalitarian state, one in which the government controls a populace by dominating rather than destroying its public space.¹¹

Pulse exists outside Cocoon, or below it, or around it---exactly what their spatial relationship to each other might be is vague, but Cocoon appears to be some sort of moon orbiting the planet of Pulse. The Pulse Fal'cie determined that their world would be a *laissez-faire* one. It is simultaneously beautiful and deadly, a place where human civilization collapsed while demigods and beasts roam free. Pulse's absolute freedom, though, is a farce. The Fal'cie of Pulse exert a centrifugal totalitarian control, the manipulation of their human servants through the destruction

of a shared public space. In the minds of Square Enix's English localization team, this world connoted Australia. They probably did this because of Pulse's geography, natural beauty, and extreme wildlife. By doing so, they happened to connect the divine management of Pulse to the troubled history of British imperialism. Fang's and Vanille's brands become convict stains.

This story of two worlds is overwrought. One can only be thankful that it is only half-delivered by *Final Fantasy XIII's* myriad cutscenes. The other half of the story must be gleaned from information files generated after each cutscene. Or, if the player is smart, it can all be ignored; every cutscene can be skipped, every data file left unread. Grasping the conflict between Cocoon and Pulse requires neither video nor text, because their respective spaces structure play in a way that lets us experience the difference between them firsthand.

Reviewers of *Final Fantasy XIII* remarked that the game "gets better" or "truly begins to shine" when the player hits the 20-hour mark. That's when the player transitions from Cocoon to Pulse. We trade a series of stifling hallways for a wide, open world driven by the kind of hunting quests that dominated *Final Fantasy XII*. In Pulse, it is somewhat difficult to find one's way to a definite goal. Many enemies will instantly kill the player's team on being engaged. The literacy model carefully constructed throughout the first half of the game flies out the window. Instead the player is left to fend for herself, to pick her battles and hope for the best. She has left a world where everything a human needs is provided by divine stewards, entering another where the demigods have decided to let natural selection reign. Figure 2 is a phenomenological map of the spatial difference between the two.

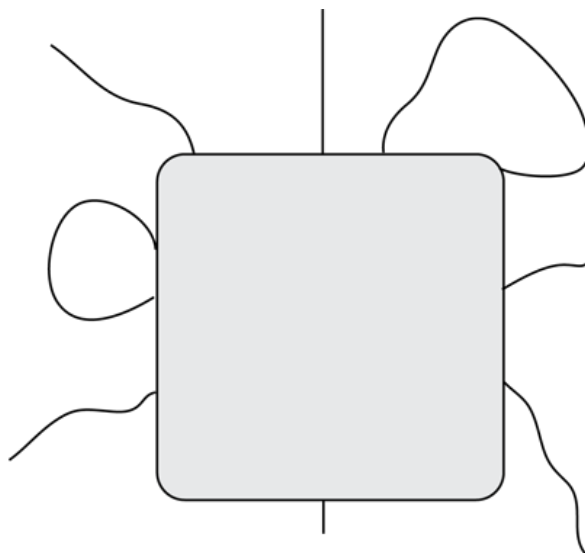


FIGURE 2: Spaces of Cocoon (left) and Pulse (right).

One can forgive reviewers for not understanding how carefully the distinction between the two worlds has been constructed. We are, after all, trained to make judgments about a game world from its story. In the case of the *Final Fantasy* series, we've come to expect this story to be delivered through elaborate cutscenes. And the cutscenes in *Final Fantasy XIII* tell players little about these two worlds. We might ask a negative reviewer: "How would you, without words, convey the feeling of living one's entire life on a string?" We can accept that it isn't necessarily fun to be forced to endure twenty hours of running in a straight line just to have a fairly simple truth bestowed upon us, but deep play demands deep structure. That so many have complained about the game's linearity is a sure sign of the design's success. Life in Cocoon is something worth complaining about.

Notes on method:

This critique is my first effort to use the framework developed in my Master's thesis, "The Judgement of Procedural Rhetoric." It contends that Ian Bogost's theory of procedural rhetoric describes the primary meaning-making structure of games—that a game uniquely makes an argument or expression through rules alone—while diverging from Bogost's formulation of the notion in two significant ways.¹² First, I argue that the construction of space has largely been misunderstood as a layer

of contextual information rather than a set of spatial, ludic rules.¹³ Second, that procedural rhetoric takes place not only from a designer's perspective—where one attempts to drive players toward a desired experience or argument—but also from the player's perspective. A critical player, armed with the proper analytic method, can articulate which rules mean what to her while ignoring others as personally non-meaningful.¹⁴

The method set forth in my thesis assumes that the non-meaningful rules of a game derive from its genre substrate. These generic rules are a form of literacy that serve to integrate players into a game's core mechanical loop. Designers can push new aesthetic experiences to players by incorporating new rules and spatial structures into play, subverting conventions and inspiring a player's reflection on divergence from the genre. My introductory example of this principle comes from the Call of Duty series, where infinite enemy respawns limited by a trigger point convey the futility of "eliminating" enemy numbers: enemies spawn continuously into a space until a pre-defined boundary is passed, at which point a new set of respawn locations perpetuates the experience of constant threat.¹⁵ This rule constitutes a significant divergence from the genre of run-and-gun shooters.

We can also separate a game's rules into material and conventional constraints. In an analog game, most constraints are conventional. They are enforced by the play community, and they afford both cheating and spoil-sporting as described by Huizinga.¹⁶ A videogame, on the other hand, is composed primarily of material constraints. One cannot change the numerical values and algorithms structuring its play experience without resorting to hacking or modding, which are meta-gaming practices quite different and more technically involved than traditional cheating. Some of the only conventional constraints that persist for a videogame are endgame goals: from speedrunning, to iron-manning, to generally deciding when a play experience is sufficient and complete.

I would argue that my analytic method uniquely suits two implicit goals of the Well-Played series: that some exceptional games demand close readings, and that these close readings are demonstrably unique for all possible players. For instance, in my reading of *Final Fantasy XIII*, I purposefully avoided two significant portions of the game that lend themselves to generic play. In the case of *FFXIII*'s genre, these conventional sections imply grinding. Both the middle portion of the game and its post-story play experience afford grinding for achieving the side goal of hunting enemies of difficulty greater than those found in the main mission. I would describe these, in my geographical analogy, as mires dotting the hills and lines of my phenomenological experience.

My *Final Fantasy XIII* is a game about numbers. It asks me to blindly ascend a sequence of hills, in a line, up until the point where it sets me free. It does so for the expressive purpose of make me experience firsthand the difference between total determination and complete freedom. *Final Fantasy XIII* teaches me how to gauge the strengths and weakness of each type of enemy, then it asks me to adapt to various arrangements of different kinds of enemies. It argues that the *Final Fantasy* series has always been about this sensing process, the conflict between known, dynamic numerical values (the heroes) and a single, static number (the enemy). *Final Fantasy XIII* is a game that eschews grinding, adaptive difficulty, and a difficulty slider. Instead, it argues that the traditional subsystems of treasure hunting, weapon upgrading, and shopping should exist only to help players with lesser skill. Anyone who lets the game teach her how it works needs none of these. Its possibility space is narrow, as much a series of puzzles as it is a game. But it's a good series of puzzles.

“

*The Alice of this game
is older than the character
in the novels, and has
suffered much tragedy
in her life.*

”

MATTHEW SAKEY

AND IF YOU GO CHASING RABBITS THE INNER DEMONS OF AMERICAN MCGEE'S ALICE

In 1884, Sarah Winchester – heir to the Winchester Firearms fortune – undertook a most peculiar construction project. She had been advised by a medium that her family was haunted by the spirits of those killed by Winchester guns, and in order to keep the angry ghosts at bay, she must build a house... and never stop building it. As such construction on the Winchester House went on 24 hours a day without interruption until Sarah Winchester died in 1922. It followed no strict plan and is full of meandering corridors, sudden dead ends, irrelevant wings and unexpected places.¹⁷

The Winchester House is an excellent allegory for the human mind, which also rarely follows a predictable pattern of growth, and evolves throughout our lifetimes. Everyone's mental Winchester House is their own, and only they know intimately the vast grounds, labyrinthine corridors, and layout of rooms. As individuals, we know our way around our own imaginations, recognizing the "good" and "bad" places, where we keep our dreams and thoughts and fears. And amongst the bright and airy, the well-lit and pleasant, there are without exception places in the human mind that are dark and dangerous, where terrible things go on. No matter how saintly a person may be, even they have cruel, deviant, monstrous playgrounds deep in the landscape of their imaginations. The mind is private. Unless willingly shared, no one can ever truly know what is going on in someone else's head. Most people only ever reveal surface thoughts, keeping the gates to the deep parts of their psyches closed and locked.

If you were granted an all-access pass to the mind of another person, you'd be horrified – just as that other person would be horrified to see the full activity of your mind. Consider all the terrible thoughts you think in the course of even a single day.

The casual cruelties you never verbalize, the vicious, inappropriate, shocking things you think about other people... people you've just met, people you love, people you hate, people you've known for decades. The alligator thoughts of despising the person ahead of you in the grocery checkout because he's arguing with the cashier over a thirty cent coupon, the flare of hatred for a person driving too slowly on the expressway. The sudden, instinctive emotional response upon seeing someone. Reflect on some of the sexual thoughts you've had but never revealed. From fantasies of "oh Hell yeah" (or Hell no) to reactions to strangers, to elaborately planned and imagined carnalities suitable for the *120 Days of Sodom*.¹⁸ The Marquis de Sade was less unique in his thoughts than in that he chose to share them. Yes, our own individual minds contain and generate shocking things regularly, thoughts we would never act on or even vocalize. But they are there.

Each of us is singular unto ourselves, and we know it. The innate interiority of the mental dialogue means that people are perfectly assured sharing their darkness with themselves, but know they need never, ever reveal the darkness to another soul. The mind is the ultimate secure facility, and naturally enough, its darkest aspects: meanness, self-loathing, desire to harm; they take up residence in the darkest corners of the mind.

What if someone lost control of their mind, and became trapped in one of those dark corners, cut off from hope, from joy, from optimism, from the positive fountains and playgrounds in the imagination's architecture?

While plenty of games put you "in" a character's head in the casual sense, very few have ever actually put you in someone's head in the more literal way. *Psychonauts*¹⁹ comes to mind; as a psychic detective trainee, you spend much of the game exploring other people's imaginations, which are by turns hilarious and shocking. *American McGee's Alice*²⁰ is another. This towering, underappreciated masterpiece of character-driven narrative went largely misunderstood by gamers and outsiders alike. People shortsightedly saw *Alice* as a twitch title, a third-person platformer with odd visuals, heavy on moodiness and lacking in depth. But the jumping puzzle-based play and lavish Quake 3 powered graphics were just a gilded and occasionally frustrating frame to the game's true strengths.

Beware the Jubjub Bird, and Shun the Frumious Bandersnatch

Set entirely in the catatonic mind of the former Wonderland explorer,^{21,22} now teenaged and institutionalized, *Alice* guides us through the deepest corners of a sexually maturing girl's imaginings. *Alice* is a patchwork nightmare that illuminates in rich strokes the precarious constitution of sanity and the secret shape of guilt. Like some of the great novels, it is a story about regret, estrangement and tragedy;

with the added layer of interactivity allowing the player to experience these emotions as no reader can. Hers is a mind consumed by misery and doubt, by natural hormones and unnatural self-hatred, where impish companions of the past manifest in adolescence as horrifying allegories of guilt and loss. Alice's old friends have reinvented themselves within her mind, using memories and traumas as grist from which their identities spring. From a deeply disturbed Cheshire Cat to a terrifying clockwork Jabberwock, they are now ghoulish, dementia-fueled metaphors for everything Alice has ever done wrong, everything she hates most about herself, and everything that drove her to madness.

Thematically, *Alice* existed on a whole other level than most games, particularly from what we tended to see in 2001. If you think gravel-voiced space marines with biceps like Christmas hams are commonplace now, travel back in time and get a load of the sort of crap we endured back then. Thoughtful, slow-paced shooter/platformers were uncommon to say the least. This was long before the brilliance of *Prince of Persia: The Sands of Time*²³ would reawaken in gamers and developers the knowledge that action-oriented games could be about more than just saving the world and the girl (*Sands of Time*, ironically, is about both of those, but in a very introspective sort of way). *Alice* blazed a trail – while it offered a fair amount of white-knuckled combat action and maddeningly devious jumping puzzles, the game also offered slow, thoughtful experiences in which there was nothing to do but think about Alice and the predicament that got her here, trapped in this madness of her own creation.

The game was unique in other ways as well. *Alice* gave us a protagonist who was female, teenaged, insane, sexually immature, completely unhooked from reality, and very possibly a parricide. Almost no actual background setting up the storyline of *Alice* is provided, aside from a doctor's journal included with the original release. The Alice of this game is older than the character in the novels, and has suffered much tragedy in her life; a fire at her home killed her parents and sister, while she slept upstairs. Her survival and escape are not chronicled, leading inevitably to a slim suspicion: a nagging doubt that maybe Alice herself had set the fire while playing. The possibility of her implication in the death of her family is not actually brought up during the game, but that tiny unscratchable question is there.

That she feels guilt for the deaths of her loved ones is unquestioned – not necessarily because she set the fire, since the game never brings it up – but because she was asleep and unable to help them. One of the game's key villains is quick to point out her culpability in their demise even if she wasn't the one who started the fire. "You were having tea with your friends while they burned," sneers the Jabberwock, its hissing inflection all that's necessary to drill home its cruel point: playing with matches or no, scatterbrained Alice was asleep and dreaming, happily lost in Wonderland, hanging out with the Dormouse and the Rabbit and all her imaginary chums, too much involved in her phantasmagoric tea parties to hear the screams of her real family as they died.

Themes like this pervade *Alice*. The girl is institutionalized after the fire; catatonic, either unable or unwilling to communicate. Her mind is active, but not in this world: rather than being a willing visitor, Alice is now trapped in Wonderland. And Wonderland has become a place quite different than the one she remembers. This Wonderland has gone to the dark corners of Alice's mind. The idyllic croquet games and tea parties are a thing of the past.

The Queen of Hearts has tightened her fist on the realm, enslaving some inhabitants while torturing and murdering others who stand against her. Many of Alice's old playmates – the Mad Hatter, the Duchess, the Tweedles, and plenty of others – have gone over to the Queen's side, while those few who remain to fight for freedom in Wonderland are either enslaved and subject to ghastly experiments, on the run, or disconcertingly changed from their youthful incarnations. Of course, the key to remember here is that Wonderland, even this warped and twisted version of it, exists only in Alice's head. The characters are like this because her mind made them that way; they are the gremlins of her id. The Jabberwock's cruel accusation is, when laid bare, self-reproach.

It begins, as one might imagine, by chasing the White Rabbit down a hole. Mr. Rabbit is definitely in quite a hurry to get somewhere, and Alice is intent on finding him. But navigation in Wonderland, never particularly easy, is even more challenging now because of the Queen's vicious Card Guards and similarly dangerous servants. We later learn that the White Rabbit is trying to lead Alice to the Caterpillar, but can't communicate with her as directly as he'd like. The Caterpillar, yet another transformed character from the novels, in turn has information necessary to destroy the Queen of Hearts, information without which Alice can't possibly hope to repair her shattered mind.

Alice's quest, therefore, is one of both self-redemption and self-healing. Her journey through this dark and terrible Wonderland, and her battles with the Queen's subjects, are part of her own mind's attempt to rebuild itself. Just like dreams often make no sense in a waking context, but are nonetheless necessary for the retention of sanity, *Alice* is rich in symbolism we needn't always understand. The mind is a complex place, and it uses complex imagery and experiences to represent other concepts. Being genuinely, as-if-you-were-awake, lucid in a nightmare (but not realizing it was a dream) would be strange indeed. Even understanding what's going on around you would be a challenge, and safely navigating the experience might border on the impossible. What we recognize as "real" here in the "real" world, the things we take for granted as physical and natural laws; they have no bearing on the world of dreams – which, when all is said and done, Wonderland is.

Thus Alice has to ready herself for a bizarre and surreal journey. Since she's already been to Wonderland she has a general idea what to expect, but this new dark mirror of the place adds a sinister tone that never existed before. She needs to be armed, and she needs allies. As befits a gothic lolita who may have murdered her parents, Alice comes equipped with a bloody butcher knife that she can swing and hurl with deadly efficiency. This weapon is the most important one you'll find throughout the game, though our heroine does come upon other ordnance, almost all of which are toys: jacks, playing cards, a flamingo in croquet mallet form. It's one of the many subtle disjunctions you'll see throughout your adventures in Alice. Children's playthings tend to be the most dangerous items, and places such as schools represent some of the most menacing and hazardous environments. The juxtaposition of youthful follies and very horrible adult concepts such as torture and slavery are part of what make the game so disturbing.

Because Alice is not a child any more. She's a teenager, with all the angst and raging hormones and general confusion associated with that species. But only a sublimely ignorant and insensitive person would see this as some kind of sexual fantasy. Popping Alice into a pair of S&M boots and clipping a skull onto her apron tie do not a sexually appealing character make. Alice's costuming is just the outward manifestation of her inner ghoul. Her clothing and demeanor match the disordered and unhealthy nature of her mind. The game is so adept at conjuring the reality of Wonderland that it's easy to forget that the whole thing is taking place in a mad person's fever dream. The fundamental difference between sane people and insane people is that the former can manage the flow and organization of their thoughts, while the latter are in thrall to the same. So long as the Queen of Hearts rules Wonderland, Alice cannot, and her mind is not under her control. Boots or no, there's nothing sexy about Alice; she is broken and very sick. She's someone players pity and worry for but aren't likely to find attractive.

Another interesting contradiction of *Alice*: typically, mature gamers are going to admire female characters that are strong, independent, and willful. Alice is certainly all of these, but I at least was not attracted to her even from a perspective of camaraderie or identification. She's not the kind of person you want to be around. She's crazy. "Crazy" in movies and TV is often presented as either blindly murderous or funny and inconvenient, but not necessarily all that bad. Real crazy is tragedy and broken families, real crazy is helplessly watching as someone you knew turns into something they aren't; real crazy is self-mutilation and voices and nightmares emerging into reality. Alice is real crazy, not cute crazy, and it's frightening. But because we are in Wonderland, "real crazy" is on the outside, the environments and creatures, rather than internal to her. Alice herself is quite rational in the game, because she's in her mind, and so what we see around us is what quantifies her insanity. Evil queens, enslaved gnomes, Mengele-like experiments performed on

March Hares and Dormice, broken clocks and moving floors. It is her relationships, and how the creatures and places in her mind have changed to reflect her madness, that define the themes of *Alice*.

If You've Gotta Go, Go with a Smile

The most important man in Alice's life is the Cheshire Cat, that grinning feline who told her flat out long ago that she was mad ("How do you know I'm mad?" asked Alice. "You must be," said the Cat, "or you wouldn't have come here")²⁴. He's right, of course, though Alice didn't go mad when Lewis Carroll seemed to think. That came later, and ironically enough, this time around the Cat never bothers (or maybe is too kind) to tell her the truth about her mental state.

The Cheshire Cat is useless throughout Alice's entire adventure. You can summon him for worthless, plauditory suggestions that almost never apply to the challenge at hand ("As knowing where you're going is preferable to being lost, ask"). But he is with her almost until the bitter end; invisible most of the time, appearing only when you summon him to emit one of those pointless lozenges of advice, or in the 'tween mission cutscenes, when he actually has information of some value to dispense.

I admit, during the first of my many playthroughs of *Alice*, this one back in 2001, I was fairly certain the Cheshire Cat would turn out to be a villain. After all, she'd been betrayed by others she'd felt close to. Even the Mad Hatter – never really a friend to Alice in Carroll's stories, but certainly no ally to the Queen of Hearts – quickly turned, as has Tweedledee, Tweedledum, and the entire Red side of the chessboard in Looking Glass Land. But despite his demonic countenance and attitude, despite his almost gleeful ineffectuality, the Cat is indeed your friend, the one friend who survives almost – almost – to the very end of the game. Like a real cat he doesn't actually contribute much besides companionship, but he is a good kitty.

The Cheshire Cat, though, is a remote figure of masculinity, and undefined by his gender. Since he's one of the first creatures Alice encounters on this trip to Wonderland, his startlingly different appearance serves to give both Alice and the player a warning of what's to come ("You've gone rather mangy, Cat," she says, "But your grin's a comfort"). His male-ness is insignificant to Alice's growth; like the creature in the novels, he is nothing but a smile, a talisman rather than a true character. It is only when she loses him that Alice realizes how much he'd meant to her.

Much more interesting from an Alice-as-maturing-teenage-girl perspective is Gryphon, who turns up about midway through the story, needing rescue from one of the Queen's prisons. His role in Alice is as her staunchest, bravest ally, and the one most dedicated to helping her free Wonderland. While the White Rabbit flees,

and the Cheshire Cat vanishes, and the Mock Turtle pleads for help, and Humpty Dumpty does nothing at all, Gryphon fights, he fights right alongside her and is a key player in the uprising against the forces that would keep her mind from being put together again. He is what little remains of her sanity and inherent goodness, returning again and again to save her when she seems doomed. Gryphon is very much the classic white knight of the tale (the actual White Knight, interestingly, doesn't appear in *Alice*, though many of the other White pieces do), and he's idealized by her in a very specific and natural way. Gryphon is bold, righteous, strong, and kind. He's also kind of a bad boy... just on the good side. He has no interest in joining with the Queen.

Teenage girls dig personalities like this, and since Alice is all a mental exercise, Gryphon doesn't need to have any of the flaws or weaknesses that human hero-figures inevitably do. His death at the claws of the Jabberwock is a blow to Alice for many reasons, not least of which because he sacrificed himself to save her; but more significant is the constant realization that the Jabberwock didn't actually kill Gryphon... Alice did. She created Wonderland and the creatures that inhabit it. She created this fearsome monster, this Jabberwock 2.0, with its clockwork innards and its laser beams and its scythe-like talons, and she created a Gryphon too weak to defeat him.

The death of loved ones is, obviously enough, such a pervasive current in *Alice* that by the end it's become the core theme. One by one her friends are cut down, unexpectedly and often quite gruesomely. Alice has little time to grieve when Gryphon falls, because she must immediately deal with the Jabberwock or be killed herself in one of the most challenging boss battles ever coded into a game.

If Gryphon is the fingernails of sanity still holding on, the Jabberwock is the madness that seeks to overtake her mind. The Queen of Hearts, though the final villain and the core of the disease that has inhabited Wonderland, is a distant figure who does not present herself until the endgame. The Jabberwock, meanwhile, torments Alice often, and their final confrontation comes at the perfect moment for him: a moment when Alice has lost her strongest ally and truest friend.

An interesting aspect of all *Alice in Wonderland* and *Through the Looking-Glass* reimaginings is the role – actually even the presence – of the Jabberwock. It figures prominently in most of the movies, cartoons, and television series devoted to Alice, and it figures prominently here. This is ironic because the creature never actually appears in either of Carroll's novels – the Jabberwock is mentioned, briefly, in a nonsense poem Alice reads in *Through the Looking-Glass*,²⁵ but it's not a character in the stories. It has become in modern adaptations Alice's key antagonist, a representation of her fears, of her failures... and most writers get it wrong even trying to use it as symbolism. First and foremost the creature is a Jabberwock, not

a “Jabberwocky;” that’s the name of the poem. Nor are we given to believe (in the novels) that it’s the only one of its kind. In *Through the Looking-Glass*, Alice reads the poem, declares it “pretty” without understanding it,²⁶ and moves on. The fell creatures described therein – the Slithy Toves, the Jabberwock, the Jubjub Bird, the Frumious Bandersnatch – never appear again in the narrative.

American McGee and his design team first deserve credit for bothering to read the books carefully enough to recognize the difference between the title of a poem and the name of a monster (Odyssey/Odysseus); but also for creating a Jabberwock that genuinely matches some of Carroll’s ideas regarding the beast – its “eyes of flame” transformed here into laser beams that rake the landscape, searing anything they touch, for example. Moreover we see the Jabberwock’s inherent cruelty. It does not simply attack Alice; it engages her in several conversations, taunting her about her madness, the loss of her family, and finally the loss of Gryphon. Only when it feels it has tortured her sufficiently does it try to kill her.

You’re Nothing but a Pack of Cards

Alice does defeat the Jabberwock, though, and is granted a moment to sob for Gryphon before the quest again takes the fore. At this point the Queen of Hearts is near, and Alice knows that by destroying her, she will regain control of what’s left of her mind. Still, though, the theme of loss is a crucial one in *Alice*, and the game has not yet stopped handing out defeats.

When the Queen finally manages to off-with-his-head the Cheshire Cat at the doorstep of her palace, it all becomes too much. Alice finally breaks down, lamenting that all who’ve tried to help her have died, and that she must go on alone. This is very Hero’s Journey. I don’t really support overzealous application of Joseph Campbell’s theories²⁷ to game experiences. First of all I think the entire concept of the Hero’s Journey is obvious, lacking subtlety or nuance, and qualifies as the sort of “well duh” knowledge that didn’t really need to be turned into a book to be validated. And I think that in order to validate it, Campbell inserted unnecessary specificity into something that should be much more fluid, creating an almost mathematical set of rules to define what is and is not an acceptable rite of passage for heroic growth. I also don’t like the sexism implicit in much of the monomyth philosophy – stuff like the “woman as temptress” and overall masculine bias of the hero. Heroes can be girls, and girls can be heroes. It works here largely for narratological reasons: like Harry Potter and Luke Skywalker, Alice must eventually face the danger by herself or risk cheapening the victory.

One thing that has always interested me about this game is the presentation of Wonderland as an individual’s private, fully-realized mental space. A dark part of that space, to be sure, but one as real as the streets and buildings of waking

reality. It's a place that Alice can enter, leaving this world behind. Of course, that this leads to tragedy is an important part of the game, but the concept of a completely immersive imaginary world has always appealed to me. Like the Winchester House, Alice's mind didn't grow according to some master architectural plan. Rooms and towers and wings were added as she matured. And one day she found herself locked somewhere inside the very house her mind had built.

That Alice does eventually triumph over her demons and gets released from the asylum is a victory of sorts, but even as she encounters and apparently adopts a stray cat upon exiting the hospital (during the only few seconds of the game that take place in the real world) there's a sense of loss. Alice defeated the Queen and saved Wonderland, but in so doing she had to abandon it and certain aspects of herself. The child locked in a teenager's body has been replaced with a mentally healthy young woman, and the ease with which she was able to shift into imaginary worlds has, with maturity, diminished. The price of that, of course, is the loss of those places and friends she once held dear. Though they always were just figments of her imagination, we get the sense that Alice is unable to resurrect the Cheshire Cat, the White Rabbit, Gryphon, and the others. We get the sense that Wonderland itself may be lost to her. Growing up doesn't necessarily mean that we must sacrifice imagination, but recovering from trauma, such as what Alice experienced, requires that she reinvent herself in a way that demands she let go of certain once-cherished things.

Of course, even as of this writing, *Alice: Madness Returns* has been announced by publisher EA and will likely be available by the time of this essay's publication. Due ten years after the appearance of McGee's first title, he has again been tapped to helm the next. It will be interesting indeed to see whether his team is able to accommodate Alice's healing process in their new game. By defeating her demons, Alice got better. Will new demons arise to recreate Wonderland? Or was Alice so unhinged by her earlier trauma that she never got better at all? Only time will tell.

Feed Your Head

Among its many themes, *Alice* is a rumination on insanity, and on the human capacity to use its own brain in odd ways to recover from terrible experiences. Dissociative disorders, fugue states, catatonia; these are the **In Case Of Emergency Break Glass** last-resort tools that a damaged mind can use to correct its course. Naturally, such tools are dangerous and don't always work, but they're better than nothing. It might be argued that being "driven mad" – versus suffering a documented illness like schizophrenia – is actually like having a fever. When the body is sick, it turns up the furnace to weaken and kill the invader; sometimes it loses control of the thermostat and winds up doing more harm than good. Alice's retreat into Wonderland was just a way to come to grips with the tragedies in her life.

The Wonderland of *Alice* reminds me of a similar concept presented in Sam Kieth's *The Maxx*²⁸ comics, which suggests that everyone has a private mental place called an Outback, literally in the back of your mind where it's safest. You can go to your Outback to hide or recover from traumatic events, though in *The Maxx* it can be dangerous to stay too long. Those who linger in their Outback may have difficulty differentiating it from reality, a risky situation that can lead to all kinds of problems. In both *Alice* and *The Maxx*, these mental shelters are intensely real to their occupants, but bizarre and dreamlike to viewers, which can be off-putting if you go in not knowing what to expect.

It's interesting, but back in 2001 publisher EA kind of expected that *Alice* would be a barrier-breaker for the industry, bringing in nongamers and vastly expanding the medium's playership. I don't know what planet they were on when they came up with this idea; presumably they figured that a tie-in to a popular children's story would be enough to draw grandmas and cheerleaders into gaming. But setting this sort of goal and then handing creation of the game to a mind as blighted as American McGee's is the gameic equivalent of hiring Terry Gilliam to direct a remake of *Winnie-the-Pooh*. If any nongamers did buy *Alice*, they were probably so horrified by what they saw that we've lost them forever.

McGee started at id Software, working on *DOOM* and *Quake*; after his unwilling exit *Alice* became his first post-id project. It was in this game that he firmly established his vision, and, to be blunt, he's been unable to recreate it since. His post-*Alice* work has ranged from merely bad to disastrous, leading many to wonder how much of *Alice*'s brilliance was actually McGee's doing and how much was someone else's. EA's recent announcement that there's to be a sequel at all, and that McGee will be leading it, is surprising, and cause for both ebullient hope and a little concern. Assuming American McGee was the creative steam shovel behind the original game, *Madness Returns* could be all we hope it will be. If he was not, however, it's very possible that the *Alice* sequel comes off more like McGee's famously dreadful²⁹ *Bad Day L.A.* than the rich, moody, and layered experience for which we're all hoping.

Alice stands out in game design as an early attempt to build a character-driven narrative around a true rite of passage, and it succeeds because it is able to effectively evolve the protagonist and weave the mechanics of gameplay into its themes without either one overshadowing the other. Because it did little to engage the player in the narrative, preferring instead to allow the environments and characters to speak for themselves, a lot of people didn't get it, seeing the game as just a fairy tale laced heavily with fear and loathing. To be honest, I sometimes wonder if American McGee and his team saw in *Alice* what the actual game turned out to be: a thing of incredible delicacy and beauty, as much a cautionary tale about the fragility of the soul as it was a piece of entertainment.

“

*At the end, of course,
he finds her. Bawl.*

”

ALICE TAYLOR

LIMBO

Limbo, the game that made me cry.

The game that made me cry: “games that make you cry” is a stone-cold cliché in game circles now, the gauntlet from the olden media that games will never be a true art form until games can make us cry. Why *cry*, game designers ask, per se? Will Wright, eminent games designer and creator of The Sims, wondered out loud what this obsession with crying was about, when games can invoke any number of other emotions that non-interactive media can't.

Like guilt, in torturing your creature in Black & White.

Maybe film or theatre can make you feel guilt?

What about responsibility? I've felt responsibility, as defense in Quake.

Ruefulness, when I probably shouldn't have blown all my money on

a perfectly-symmetrical train network until I had enough residents in Sim City.

Triumph, in any number of games. Accomplishment, ditto.

But, so, crying.

I cried at the end of *Limbo*. It might be in part because *Limbo* is so hard to play, maybe it was crying with relief: on reading the Wikipedia entry, its creators call the play style “trial and death”. It might be though because I'd done a bit of browsing beforehand, on the run-up to its release, and I already knew that the game was about a little boy searching for his dead sister.

Dead siblings or children always makes me cry. Is his sister really dead, or is it a dream? Actually, we don't really ever know, but the name of the game suggests perhaps they're dead. Or she's dead and he's not. Such nuance. At the end, of course, he finds her. Bawl.



Limbo is a black and white, side-scrolling, platform puzzler game. Which is to say, it's in light and shadow; you move left and right, you can jump up, down, and hang, and there are puzzles to solve before you can progress.

Puzzles like, how to get past the giant, quite terrifying spider with deadly stabbing legs. How to cross the electrified neon sign in the rain without being electrocuted. How to get across a ravine, by means of a rope swing, when there are open bear traps about. That kind of thing. For every single puzzle, you discover how it works by dying, a lot.

I'm not very good at dying. In all the games I like to play, I like to stay *alive*, to preserve my life and the life of my pals. In *Left 4 Dead* it's all about survival, and do I like to survive, I gravitate towards scenarios of helping people as part of a team, taking part together to survive and overcome. Parties of 5 in *World of Warcraft* where we will toil for 3 hours in a row to take down a creature.

Limbo had me die instantly, pretty much in the opening minute. Twice, three times. I went straight to Twitter: wait, what, why am I dying so much? What on earth, is this supposed to be fun? I'm going for the walkthrough!



There was a mixed response, divided into two camps: those who thought using a walkthrough would mean a diminished sense of accomplishment at the end (undoubtedly true), and those who thought the raised blood pressure, and time constraints of the working day, would mean a walkthrough is the only way to be able to complete a game like *Limbo*.

I went for the walkthrough. I'm short on time, and low on patience: maybe I could learn to use a game like *Limbo* as a form of patience meditation, but – of course - I don't have time for that.

Anyway, I want to get to the end, have some closure, learn what happens to these characters in this world. The walkthrough meant that after three deaths at each puzzle point – and they were mere inches apart in some cases – I probably finished the game after a few solid hours of gameplay. In reality, it was stretched over about a week. *Limbo* week.



Limbo is beautiful.

Haunting, melodious, atmospheric, sweet.

Still somewhat macho too, though, so as not to get too syrupy about it.

The deaths are very brutal. The ragdoll physics of the little boy's body

as he's hurled away by a monster, or cut into pieces by an advancing woodsaw, or snapped into mush by a bear trap. It makes you physically wince.

But then you respawn, and on you go.

What does this teach us? Try, try, try again. Keep trying, failure is simply a learning experience, not the end of the world. But *you* don't progress if you die.

That's true, I'm sure.

I steered the little boy along, past the puzzles. Through inverted gravity, across fields, through forests of giant spiders and humanesque enemies who shot arrows or otherwise attempted to stop my progress.

I was never told why, or who these people might be. Why are they shooting at me? Why did I not give up? Dying over and over is painful; I'm not sure why I didn't give up: probably because I wanted to see what was going to happen at the end, I felt riveted, and I found the whole experience to be gently satisfying, cosy somehow.

Solitary, but that's okay for such a thing, I knew the end was in sight. I knew I was *having a meaningful experience*. Somehow. I noticed the log's shadow is the shape of a wolf's head, and guessed it didn't mean anything but was a simple flourish. I liked that.



Eventually, after a set of particularly awful, world-shifting gravity puzzles, which told me the end had to be near – it couldn't go harder than this, that wouldn't *work* – my little boy burst out through a pane of glass, and landed again in the clearing in the woods where he started. But there's no buried body with flies buzzing here anymore: just a girl with her back to me, picking a flower.

Why are we at the beginning again, where's the buried body, am I even in the same place? She's startled by the crashing, and stiffens, and the game screen goes black. The End.

It's quite a shock, as endings go. I didn't realise I wouldn't be told what happens next, that it was over, and I found myself inhaling sharply, and happy for the little boy – he found his sister! – and having a good, sudden, short cry. What a sweet game! What relief!

But suddenly I also felt somewhat infuriated, who was the girl, was she alive, what did I miss? I certainly didn't get all the achievements or apparently play every corner of the game, my "percentage complete" score – and it measured me against my friends too, in a traditionally challenging way – was 83%. Higher than most, less than some. 83%? But I finished the game? I must have missed something in there.

I started it over again.

In retrospect, I can't say what *Limbo* means, or what it was designed to mean. There's plenty of discussion on the subject across the nets, and a lengthy Wikipedia entry. But I do know well that it meant something to me: I value those two hours of play over many ordinary things, as I appear to remember them very clearly. I tangibly remember the sense of curiosity, the tiptoeing, the fear of the next death. I remember the crying, and I remember it with a sense of peacefulness and accomplishment.

“

As with a classic silent movie, sight gags, slapstick and pratfalls abound.

”

STEPHEN JACOBS

THE NEVERHOOD

A DIFFERENT KIND OF NEVER NEVER LAND

YOU HAD ME AT CLAYMATION

Pity me, for I bear the dreaded Trifecta of Geekdom; obsessions with animation, science-fiction and computer games.

Animation came first, of course. Not just the Warner Brothers of hallowed Saturday mornings and the inevitable Rudolph and other Christmas puppetoons, but anything animatronic; display window shoemaker elves, dead presidents chattering away in Disneyland, you name it. In the 90's, I almost completed an MFA in computer animation, but that's another tale for another time

Science-Fiction came soon after, with vivid memories of getting to stay up late on a road trip to watch the "Spock's Brain" episode and getting "I, Robot" from the book rack in the hotel to read. I was about eight then and this vice led to years in high school working at the long defunct "Chaos Unlimited" used SF and Mystery bookstore in DC. The proprietor was the boyfriend of one of my physics teacher's Dungeons and Dragons buddies. We high school lab assistants played this middle-aged posse of educators and Interpol agents (I did say DC, right) in church basement campaigns on weekend evenings (just get's worse, doesn't it?).

Computers entered my life, as a middle-schooler in the 70s, as tools for communication. As I was stunningly dysgraphic (think of dyslexia for handwriting.) My mother of blessed memory typed all my homework for me until the Apple IIe arrived in my home with a word processor. (Those of you who missed typewriters, correction tape and fluid, and the pure hell of retyping the same damn thing over and over again for a clean copy of a final draft have no idea of how blessed you are.) Computer games came immediately afterward. Particularly story-based adventure games, since games at that time tended to be two polar opposites; long text-adventures with deep story or simpler space, arcade and platform type games. The latter were less popular with me as they generally required better hand-eye coordination than your average dysgraphic had.

So decades later, when Dreamworks Interactive released an adventure game set in an alternate universe built entirely in clay and animated via traditional stop-motion techniques, there was no way I could pass it by. I had to have *The Neverhood* (sometimes also written as *NeverhoOd* but *TNH* from hereon)

Outstanding in its Klayfield

TNH was, and is, a critical standout in the history of the adventure game genre. [IGN](#) gave it a 10, [Moby Games'](#) Moby Rank (an aggregation and average of numerous reviews) is 85/100 and the player community gives it a 4.1 out of 5.

TNH's design and gameplay are not only classic adventure game, but owe much to *Myst*. While the world of *TNH* is not as empty as the *Myst* island, it's sparsely populated. Like *Myst*, many of the puzzles to be solved involve the player using some control that actually affects something far away. The only indication of an action's result is often a sound effect off in the distance. *TNH's* back story isn't communicated in books, a la *Myst*, but in "video discs" scattered around the island and literally written on the walls in the game.

In *Myst* the game is played in first person perspective, without an avatar. *TNH* has a lead character, Klaymen, who speaks only once in the entire game, and near the end at that. Both games make a lot of use of ambient sound and sound effects, though some places in the world of *TNH* have rich acoustic music playing, rooted in traditional forms like blues and jazz but more surrealistic, matching the look of the game. If a given song has vocals, the lyrics are often difficult to make out, or make no sense at all. It's as if they're sung by the love child of Tom Waits and Leon Redbone who's deep in his cups and scat-singing along to the music.

What *TNH* has in spades over *Myst*, is a sense of humor that doesn't quit. The creative team (also called The Neverhood) was led by Doug TenNapel; a renaissance-man artist and writer. TenNapel's career output spans games, television, graphic novels and film. His creations best-known to gamers are the iconic *Earthworm Jim* games and television show. The look and feel of *TNH* was drawn from a 1988 exhibition of 17 of TenNapel's paintings called "A Beautiful Day in the Neverhood."

TNH came about after TenNapel and his team left Shiny and ended up, according to the "making of" video that comes with the game, pitching Steven Spielberg in his house on a new game. As a result of that pitch session, *TNH* was the first videogame title from Dreamworks Interactive, the joint venture formed between Dreamworks, SKG and Microsoft, with the latter acting as the game's distributor.

Though Klaymen is silent, that doesn't keep *TNH* from being a story-driven game. All 25,000 words of back-story are written into the walls in the Hall of Records; a 38 screen long hallway the player must traverse at one point to collect a video disc. This history on the walls is not crucial to the game, but the one on the video discs is. They tell the story of the current crisis of *TNH*, the one that Klaymen must solve if *TNH* is to survive.

Feats of Klaymen

After a seemingly random opening title sequence (viewing it again after the game is played shows that it actually gives you a first peek at key items in the game) , the first thing we see is a Pepto-Pink clay room with a baby-blue, off-kilter window frame, a lever, a button and a door with a giant mallet suspended above it. A Dixielandish theme plays, full of horns, banjo and tuba. Sleeping on the floor in the corner between the lever and the door is our hero, Klaymen. Klaymen has a white humanoid body with a red duck's beak for a mouth, two vertical slashes for eyes and a brown tuft on his head. He wears a bright red tunic with white ball accents and some small brown shorts. His hands and feet are large and the fingers on his right hand are brown. A click of the mouse pointer, which looks like it's also made of clay, brings the sleepy and loose-limbed Klaymen to his feet. Click again and Klaymen will move in the direction of the click. His basic walk cycle is reminiscent of a "truckin" Robert Crumb character and he comes to a stop with a slightly stomping shuffle.

A press of the button opens the window. Click on the open window and the game's camera shifts from 3rd person to first person POV, something that is a regular feature of *TNH*, as this switch will happen often, especially when you're looking around and navigating a space vs. getting Klaymen to interact with something. When we look out the window, we see a landscape of light and dark green spiraled grass, trees with spindly, twisted brown trunks topped by mushroom-shaped caps or Tootsie-Pop round balls, all in variegated greens, with reddish-brown mesa-colored mountains in the distance.

Pulling the lever once will bring the giant mallet slamming into the blue door panel, denting the heck out of it. Two more pulls blows it off the hinges and Klaymen can make his way into the next room.

The next room is blue with pink accents. Klaymen walks out onto a lofted platform near the ceiling with a ladder to the floor. Suspended from the ceiling are five brass rings suspended by ropes. Underneath the platform is a large, round Avocado-colored plant with maws like a Venus Fly-Trap. Across the room is a door.

Jumping straight off the balcony lands Klaymen into the maws of the plant, which spits him out after a few moments. Klaymen will be battered, bruised and mangled throughout the game, but being made out of clay has its advantages, he just bounces back or reassembles.

In fact, there's only one place in the entire game that Klaymen can die and if that happens the player has to restart the game. At one point Klaymen will need to descend into a drained lake (actually several times, but a player is only likely to do the forbidden act the first time they explore) and will come across the actual drain. It is well marked with three signs that say "Danger! Don't Jump In The Drain! You Will Die! Of course most gamers will do it anyway just to see what happens. Telling what happens would be cheating, but if you're going to try it you'd better save your game first.

Learning that Klaymen is invulnerable (for all intents and purposes) frees you up to explore *TNH* and try anything that comes to mind. This is important when a game is as unusual as this one is, because you'll need to really experiment to prevail.

Walking Klaymen over to the door and pushing the button next to it will get Klaymen punched so hard by a hidden boxing glove on a spring that it knocks him through the air, all rectangular and hard-edged for a moment, before he bounces gently on the floor.

On the floor of the room, Klaymen can jump up and grasp the rings, pulling them down with his weight. Doing so may or may not activate something in the room or elsewhere. The fourth ring from the platform will actually hold the door open, but only as long as Klaymen holds it and his weight counterbalances the door. As soon as he lets go to leave, the door slams shut.

Traveling down the ladder will take Klaymen to a platform under the house with a mailbox and a trash can. Music in *TNH* is localized to places, and many of them have no music in the background. So as we descend the ladder below the house we descend to silence as well. Obvious hints (and less obvious ones) will manifest themselves as letters in the mailbox.

Since, Klaymen awakes newly born, without any knowledge of himself or his world, he (and the player) must rely on the mysterious Willie Trombone. Willie communicates to Klaymen through hints in those letters in the mailbox. (so sometimes if you're stuck you need to trek back home to get your hint) Willie also stars in the 20 video discs scattered throughout the game world. Klaymen will need to collect those video discs and take them to consoles scattered around *TNH* to play back. The videos show Willie in a manner not unlike animated line drawings in clay as he tells story of *TNH*. Though the player may watch them as they are collected, he'll need to watch them again all the way through to collect a crucial game item.

The first letter from Willie is a rather clear hint...

“Dear Klaymen,

Please feed my pet flytrap.

He eats ring food.

I do not.

Love, Willie.”

After reading any letter, the tidy Klaymen will deposit it in the waste bin.

Others letters are less clear, such as...

“Dear Klaymen,

You may have already won two bricks of Klay!!!

Love, Willie”

*This one refers to the video discs you must collect throughout the game,
or perhaps not*

Some are not useful at all...

“Dear Klaymen,

Send this letter to three friends or you will fall ill.

Willie Dewan”

At a later point in the game, Klaymen’s nemesis, the Evil Klog will begin to send him letters as well.

Heading back up the ladder to the house, you can have Klaymen take advantage of the first hint by shoving the plant under the fourth ring. When the ring is pulled down within range, the flytrap will jump up and swallow it, holding the door open for Klaymen to leave.

When Klaymen leaves the house the camera POV shifts and we can look 360 around the environment. The music has stopped and we hear the wind and some spooky environmental sound effects as we pan around the immediate area. It’s a courtyard-like space and across it, and a little to the left from the house where Klaymen was sleeping is the Hall of Records. Entering the Hall kicks us back into third-person perspective. A new musical piece with a deep-voiced singer belting out unintelligible lyrics plays while a large overhead fan squeaks its blades in circles.

On the wall is a slider puzzle with a rune-like character displayed in a jumble. Next to the puzzle is the doorway and there's something on the floor in front of Klaymen. Clicking on that item on the floor (our first video disc) will get Klaymen to walk over to it and pick it up. Once he's got it he'll press one of the balls on his chest, open a hatch door in his torso and pop the item inside. Arranging the sliders in the right sequence to unscramble the rune opens the door.

The next room has a console-like device against the wall, another video disc on the floor and a solid wall with a mouse hole across from the door Klaymen has just walked through. Click on the console and Klaymen will retrieve as many disks from his chest as he's currently holding and insert them into the player. They'll appear under the screen in the order they're meant to play in. These first two are numbers one and two, but as you collect them through the game they won't always be in sequence like these are. There will also be other consoles along the way and any of them can take any of the disks and you can view all of them from any device.

"Um...

Hello!

Me Willie.

Me Willie Trombone!

These disks tell a story. Story about good. Story about bad.

These disks are all that are left of the TRUE story...

True story of the closing of the third age.

Willie know that once you know this truth, then you know what to do.

This, I tell you."

At this point, about 15 minutes into gameplay depending on how quickly you've solved the first puzzles and headed to the House of Records, you've pretty much learned to do most of what needs to be done, without any dry, formulaic training, cuz its just that simple to navigate and interact in *TNH*. You're also likely well-hooked, as I was, though the fun was just beginning. Nor was I alone. Jeffery Adam Young, from PC World, in an interview that was part of the [Video Press Kit from Dreamworks](#) said,

"I put the disk in thinking, oh this is kinda cute, and the intro was good enough. I started playing it and it seemed quirky at first and... uh, I didn't put it down. I played it eight and a half hours* straight. (laughs) I played the entire game in one setting."

Quirky it is. At one point Klaymen will enter a room where the puzzle is solved by building a Klaymen-like effigy made out of Dynamite. And outside of this room is another courtyard, open and with a large-sized, mushroom-shaped, berry bush. Click on the bush and Klaymen will pop a berry into his mouth and chew it with greatly exaggerated facial expressions, swallow it and burp. Second berry, bigger burp. Third berry, a burp that goes on for roughly 2-3 minutes.

Touring around the space will lead Klaymen to a vaguely crab-shaped icon on the wall that reveals some monstrous activity when clicked. More exploration will reveal a jack-in-the-box style music box that plays most of "Pop Goes the Weasel" and then stops just before the final punch-line of the song. There's a brief pause, the sound of large feet charging forward, a basso "Pop Goes The Weasel" staff line plays and a giant green crab-like "Weasel" burst through the wall to chase the Klaymen around the belch-berry bush. A quick application of the dynamite Klaymen effigy saves the day.

Like a silent film comedian, Klaymen's facial expressions, body language and physical movements make him an engaging protagonist. He projects the same kind of innocence and naïveté that a Chaplin or Keaton would to connect to their audience. That the game works as well as it does speaks to the skill of the animation team that brought him and his companions to life. As with a classic silent movie, sight gags, slapstick and pratfalls abound.

As the player progresses through the game, other adventure game staples make their appearance. Teleport booths to get Klaymen from place-to-place, item collection and inventory are at the heart of the game, but the inventory is manageable and items from it apply themselves appropriately, without the player having to puzzle them out. And like the old text adventures, pencil and paper are required. Several puzzles will require code breaking using runes and glyphs so you'll need to write them down, along with the sequence they appear in. In other places you'll come across vials of liquid filled to various levels, or need to listen to, and replicate, sound sequences. Noting these down for future reference can be helpful as well

Other, less traditional challenges and techniques in the game involve Klaymen shrinking and growing like Alice in Wonderland, blowing a hole in a lake with a Howitzer to drain it and motivating a giant, teddy bear loving robot to do his bidding, just to name a few.

The story that eventually emerges from the discs has a familiar, biblical ring to it. Hoborg, a being of infinite power and creativity, creates *TNH* and begins to populate it. Finding it lonely, he decides to create a being that is almost his equal, Klog. But Klog covets Hoborg's crown and the creative powers that it instills in the wearer. He steals it, putting Hoborg in a mystical coma. If *TNH* is to be saved, Klaymen must revive Hoborg and defy Klog. But will he? You'll have to play it through (or watch the youtube walk through video clips) to find out.

TNH and Klaymen, post-release

Though the game was a critical success, it wasn't a financial one, selling 41-42K copies according to several industry sales sources. *TNH* was released in Japan as "Klaymen Klaymen," and the Japanese market responded well enough to spawn some sequels. The first, "Skullmonkeys," a kind-of sequel platformer that takes Klog and Klaymen to another world, was released in 1998 for Sony's PlayStation. It did less well in the states than *TNH* did, but also fared well in Japan, where it, received the appropriate name "Klaymen Klaymen 2." A Japanese only PlayStation game set in *The Neverhood* universe called "Klaymen Gun-Hockey" came after that. It did have some of the *TNH* characters but wasn't a claymation game, nor was it developed by the *TNH* team; instead, it was developed by the Japanese game company Riverhill. The Neverhood, Inc. company, went on to develop the PlayStation game *Boombots*, and Klaymen appeared in it as a secret fighter. After *Boombots*, The Neverhood, Inc. closed up shop.

And yet, *TNH* and Klaymen just won't go quietly into the good night. In 2007, media company Frederator, inc. (best known for the cartoon shows *Fairly Odd Parents* and *Adventure Time*) announced Federator Films in 2007 with a slate of films (as yet unproduced) with *TNH* being one of them. Little more has been heard since (about *TNH*) but Frederator Films announced their first film in production in 2009, a feature length Samurai Jack production, with hints about more to come. IMDB lists the *TNH* film as in production with a 2011 release.

Type "The Neverhood" into YouTube and one of the first videos to come up is a Spore creature version of Klaymen. A fan game, "[Klaymen](#)" was produced in 2008. The soundtrack CD is still [available](#) new for \$20, and the copies of *TNH* can be found on [eBay](#) for \$40-\$100 depending on condition. Recently *TNH* was selected by "Microsoft at Home" as one of "[5 Cool Underrated Games.](#)"

In a landscape full of bloated, bloody action games, copy-cat titles and "financially safe" innovation-challenged game-of-the-movie titles, it's worthy to look back at games like *TNH* that dared to be different. I hope that Frederator Films does get a *TNH* movie out the door and Klaymen, Willie, Hoborg and the rest of the crew will be awakened from their slumber with a new crown on their collective heads.

* While today's hard core gamers often throw a shoe when confronted with games that have less than 30-40 hours of gameplay, in the case of this game one has to remember that it often takes 2-3 years to create 90 minutes of stop motion film. *TNH*'s 50,000 frames calculates out at about an hour of stop-motion animation utilized in the game.

List of links and resources for *The Neverhood*

http://en.wikipedia.org/wiki/The_Neverhood (General Overview)

<http://www.microsoft.com/athome/students/5coolgames.aspx> (recent plug)

<http://www.neverhood.se/olde/nev/index.html> (Archived site for the game)

<http://doo.nomoretangerines.com/nevhood/allabout.htm> (Collected Mail, Hall of Records, maps, etc)

<http://tennapel.com/> Home on the web of *TNH*'s gifted creative lead

<http://www.youtube.com/watch?v=Lt9Klidsjxtc&feature=fvw> (Spore Klaymen)

<http://klaymengame.blogspot.com/> (Fan Game, not played by this author so do so at your own risk)

<http://www.youtube.com/watch?v=C1nMoiNw42s&feature=related> ("Making of" video from the game, part #1)

<http://www.youtube.com/watch?v=PXHeCQb7lx0&feature=related> ("Making of" video from the game, part #1)

http://www.archive.org/details/dreamworks_neverhood_1996 (Dreamworks' video press kit for the release)

<http://www.danielamos.com/store/index.html> (On-line store for the Soundtrack)

http://shop.ebay.com/i.html?_trkparms=65%253A12%257C66%253A2%257C39%253A1%257C72%253A4026&_nkw=the+neverhood&_dmpt=Video_Games_Games&_sop=1&_trksid=p3286.c0.m14 (eBay link for *TNH* search)

“

*It wasn't something I
wanted to do. It wasn't
something I intended to do.
It just, happened.
It was a mistake.*

”

JOSÉ P. ZAGAL

HEAVY RAIN – HOW I LEARNED TO TRUST THE DESIGNER

Heavy Rain is a videogame developed by Quantic Dream and originally released for the Playstation 3 platform in 2010. The game, the brainchild of its director David Cage, was described in promotional materials as an interactive drama. The game features four main playable characters who are all involved, in some way or another, in the mystery of the Origami killer: a serial killer whose modus operandi is to kidnap a child during the rainy season and trap them such that they'll drown due to the continued accumulation of rainfall. The children are later found in a remote location with an origami figure in their hands and an orchid on their chest.

Heavy Rain first came to my attention after hearing about how its technological breakthroughs, such as highly realistic facial animation and modeling, would be used to provide an “adult emotional thriller” told “not through cutscenes but directly through the character’s actions: you don’t watch the story, you actually play it” (David Cage as quoted in Edge 2008). According to Cage, in *Heavy Rain* you play “with a story almost in the physical sense, changing it, twisting it, discovering it, making it unique, making it yours” (David Cage as quoted in Chester 2009). I confess I was both excited and skeptical. The game industry is no stranger to marketing and hype, and Cage’s earlier games, *Omikron: The Nomad Soul* and *Fahrenheit*,³⁰ only briefly caught my attention as they seemed to have received a mixture of praise and derision from the press. The idea of a fully realized interactive storyworld represents a sort of holy grail of gaming (e.g. Murray 1997; Crawford 2004) and it is something that David Cage, the game’s director, has arguably been interested in for some time. *Fahrenheit* (Quantic Dream 2005), was noted “for its inventive storytelling and immersive techniques” (Sheffield 2008), and was an attempt to push the boundaries of the medium of videogames by “remaining true to its still-young traditions and sometimes by breaking away from them” (Cage 2006). *Fahrenheit* experimented with new directions for the integration of narratives and interaction previously explored in the now-infamous game genre referred to as interactive movies (Lessard 2009). *Fahrenheit* was a bold experiment hampered, in part, due to the immature implementation of its action sequences and poor story (Cage 2006). Would things be different this time around? Mateas and Stern’s *Façade* (2005) had been released recently to much critical acclaim providing an example of what could be achieved on a shoestring budget. What could be done with a budget and team orders of magnitude greater? Could a fully realized interactive storyworld with mature themes and high production values finally be realized? *Heavy Rain* sounded like an answer to that question.

My nervousness, as I began playing, was unusual. I've certainly been excited, even thrilled, about playing a new game. Never before had I been nervous. Was I complicit in the hype, wanting to believe this game would "blow my mind"? Had I set myself up for an ultimate disappointment? Or, perhaps the worst outcome of them all, would I find the experience unremarkable?

As a games researcher, these are issues I've had to deal with before. What I think a particular game is, and what others seem to say when they talk about it, invariably shapes my understanding of a game. It also affects how I experience them. The questions I bring with me, together with preconceptions, and, of course, the social and cultural context in which the game is created all play a role. The question is what role is it, how do I articulate it, possibly disentangle it, and ensure that I come at the game from multiple angles and perspectives in order to really dig deeply?

Much has been written about the role of the player in creating an experience. Oftentimes that is how we describe games when comparing them to other media. Games are special because you, the audience, participate in the creation of an experience. Similarly, we talk about game design as 2nd order design (e.g. Fullerton, Swain et al. 2004; Salen and Zimmerman 2004). You do not design an interaction, rather you design a system so that someone else has an interaction. This rhetoric places the player in the center, largely disconnected from the designer. How you interact with the game, what you make of it, how it should be experienced, are all placed squarely in the hands of the player. We talk of empowering our audiences via games, of providing agency, personalizing their experiences, and so on. The magic circle, as it were, is only for the players. But is that really the case? In this day and age, we, the players, have an incredible amount of access to the thoughts, feelings, and ideas that game designers have. Their voices, in particular when they talk about their games, shape how we approach them, play them, and also understand them. *Heavy Rain* is no exception. As I will discuss later, *Heavy Rain* also complicates things.

A few months prior to the release of *Heavy Rain*, Cage wrote for a weblog hosted by IGN³¹. His blog covered a variety of topics providing insight into the development process of the game and his fears and concerns regarding the games' reception. More importantly, his blog (together with interviews and articles in other venues and publications) served to craft a contract between the designer and myself, the player. Cage was, sometimes explicitly and other times indirectly, asking me to trust him. Asking me, the player, to let go of my fears, to play along, to suspend my disbelief. To stop being a typical gamer. In return, he would offer an experience unlike any I've had before. Something new, something different.

We often talk about the language of games, about the difficulty of developing this language, of the challenges that people who don't play games face when first playing them, and so on. If we believe the hypothesis that the language we know

shapes how we act, understand and think about the world³², it should hold that being games literate does the same. Games literacy shapes how we think (Gee 2003). In order for this game to work, Cage was asking me to undo that. He seemed to ask that I become games illiterate. What follows is a reflection of the issues I dealt with as a player. These issues highlight some of the things we take for granted about games, and illustrates how *Heavy Rain* challenges them in interesting ways.

Meaningful Choices

As a player, the phrase “meaningful choices” is either a tired cliché or a conundrum. When is a choice in a game meaningful? As players we have become incredibly adept at recognizing the kinds of choices we make in games and the impact we expect these to have on our overall experience. We are well-versed in discriminating and categorizing the choices we are presented with, and then deciding, which choices we want to make, when and how. Thanks to increasingly more effective signposting by game designers, we distinguish between those choices that matter, and those that do not.

As players, we know that not all choices matter in the same way. That is why we distinguish between side-quests and missions that are required for making progress in a game. Similarly, in games in which we collect things, we discriminate between collecting items that are essential (I need the key to open the door), those that are useful (I found some healing potions), and those that are not (I found a collectable sticker, now I just need 4 more to have them all). We understand how some choices may affect gameplay, some may affect a game’s narrative, and also how the choices we might make now, imply a different set of choices available later on. Thanks in part to how gameplay is segmented, we even understand which things can be “undone” and which cannot. When we can go back and redo, and when we can’t. Sometimes we know this explicitly: *Starcraft II*’s campaign mode warns the player when deciding how to spend research points investigating new technologies, that choosing one option will make the other unavailable (Blizzard Entertainment 2010). In other games, such as *Jedi Knight*, the narrative context of the game helps players understand that choosing to join the Dark side of the Force closes the doors to using the Light side powers of the force (LucasArts 1997).

Heavy Rain’s premise is that all choices matter because they affect how the narrative develops and unfolds. As a gamer, surely this cannot be true, but how do I know? Most (if not all), story-driven games are just that, driven by their narratives. The player understands that certain things must occur in order for the story to advance, and that others may or may not occur, because they’re not relevant. *Heavy Rain* upends that, and as a player, I found myself continually second-guessing myself, wondering if I had missed something important or if a seemingly innocuous decision

would have far-reaching effects. In the opening scene of the game, does it matter if I don't look at the bird in its cage or if I choose not to work in my office and goof-off instead?

While the pressure of the uncertainty was initially overwhelming, it ultimately became liberating. I began to assume that everything mattered, somehow, and that I should take care with everything I did in the game, focusing on what I felt was right over what I felt the game's designer may have chosen to be "right". I had to trust the designer. Cage promised that regardless of what I did, the game would move on and provide a coherent, and hopefully compelling, experience.

Action as the driving force

Try as we might to think about games in terms of stories, worlds, and choices, in the end we always end up talking about action. As Crawford has noted, verbs are the vehicle of choice in games. "Whenever we make a choice, we are choosing between verbs. We don't choose between Door #1, Door #2, and Door #3; we choose between *going through* Door #1, *going through* Door #2, and *going through* Door #3" (Crawford 2003). Perhaps more importantly, for the player, one of the pleasures of playing videogames comes from witnessing the tangible results of the actions taken based on the choices we've made. As Murray describes, "agency is the satisfying power to take meaningful action and see the results of our decisions and choices" (pg. 126, Murray 1997). As players, we are keenly aware of the importance of action. Nowadays, we expect to learn how to play a game by experimenting with it directly. We are no longer content to read the manual in order to learn how to play, rather we wonder what each of the buttons does, and what happens when we press them.

Crawford argues that videogames (and interactive storytelling more specifically) are hamstrung by the limited diversity of verbs (actions) used. *Heavy Rain's* director notes how "when you look at most of the games you see today, they are based on patterns, on loops; you always do the same things, whether you shoot, drive, or jump on platforms. They've been based on the same rules for 25 years" (David Cage as quoted in MacDonald 2010). *Heavy Rain* is unusual because, although at any given moment there may be only three or four possible actions available, over the course of the entire game the player can perform hundreds of different actions. Players can "toss a boomerang, rock a baby or stove in heads with a wide selection of electrical appliances. *Heavy Rain* is a point and-click adventure with a massive verb sheet; new actions are as much a twist as the narrative reveals they prompt." (Edge 2010) "Rather than making large choices every hour or so, the game has you

constantly choosing every minute detail of these people's lives. Every action, every step is entirely up to you. Of course, there has to be a finite number of options, but the way Quantic Dream presents them, they can often feel limitless." (Orca 2010)

The combination of the sheer variety of actions and the certainty that, in some way or another, all of them matter, results in an experience that is not only intensely personal, but also meaningful. While it may not matter in the grand scheme of things whether I turned on the radio or not, it matters to me because I made that deliberate choice.

In addition to providing a wide spectrum of actions, *Heavy Rain* does something perhaps more interesting: it highlights how action (or acting) isn't the only driving force or motivator for gameplay. In other words, it creates agency from inaction or non-action. *Heavy Rain* features moments when inaction or passivity, perhaps the anti-thesis of gameplay, is not only a valid choice, but may even be the preferred one. For example, towards the end of the prologue, Ethan can play with his kids out in the yard. One of the activities is a mock fight with toy swords. Success at this fight requires that the player match a series of timed-button presses to prompts that appear on-screen. Doing so correctly results in Ethan either gently hitting his son or successfully blocking his son's attack. In this case, should the player try to do her best and not miss any of the cues, yet soundly defeat the child or, should she purposefully miss some of the cues in order to let Ethan's son win? Sicart, in his description of the virtuous player, describes *achieving* as a virtue "present in those players who compete fairly against the challenges of the game and against other players, respecting social norms and rules, and for whom victory is a desirable state in the game but not the most desirable- for that would be enjoying the game, alone or with others" (Sicart 2009). By Sicart's definition, the virtuous player (and father) should let the son win. However, in order to do so the player must resist the temptation to follow the game's on-screen's directions. The player must decide not to act instead of reacting.

The meaning and agency that results from these non-actions isn't necessarily acknowledged by the game. Rather, it results from the player's interpretation and understanding of who the characters are, and what they should be doing. The third chapter of the game, "Father and Son", takes place two years after the prologue. Jason, Ethan's eldest son, died in a car accident (played earlier). The tragedy has had serious consequences on Ethan's life. Ethan no longer lives in a beautiful house, his marriage has apparently disintegrated, and Ethan, now shabby and unkempt, has failed to deal with his role in his oldest son's death. As its title implies, this chapter focuses on Ethan's current relationship with his surviving son, Shaun. After picking up Shaun at school, Ethan takes him home. A detailed schedule posted on the wall provides a framework for what Ethan should do next: snack, homework, dinner, and bed. Although there is no need to rush through each of the tasks, there really isn't

enough time to look around or explore. Bogost describes the sequence in which Ethan makes dinner for Shaun, “Ethan sits as Shaun eats, his pallid face staring at nothing. Time seems to pass, but the player must end the task by pressing up on the controller to raise Ethan from his chair. The silent time between sitting and standing offers one of the only emotionally powerful moments in the entire game.” (Bogost 2010) This moment of silent contemplation only occurs because the player chooses not to act, to ignore the prompt that appears on the screen. It is a powerful and meaningful moment because of all that is left unsaid. Sticking to Shaun’s schedule is simply going through the motions, what the player wants is for Ethan to somehow repair their relationship. To try something. Shaun’s relationship with Ethan is so awkward and strained that the player desperately seeks a father-and-son moment that provides some hope for the future. “The game would clearly like the player to believe that this chapter will allow the player to alter the game’s narrative based on decisions made on behalf of Ethan.” (Bogost 2010) Perhaps Shaun will warm up to Ethan if he simply accompanies him? Maybe if they both sit on the couch together watching TV? Perhaps if Ethan cuts Shaun some slack with the strict schedule letting him stay up later than usual? All of these moments are examples of consciously choosing to ignore the prompts and instructions on the screen, in order to create meaning for the player from the character’s circumstances. What would a good parent do? Efficiently shuffle his child through a schedule, or try to create time together hoping to recover a relationship that was once close and loving? Inaction in *Heavy Rain* shifts the player’s responsibility from simply choosing the right action from a pre-determined set to one in which the player must additionally contemplate whether or not the set of actions makes sense.

Discomfort and Ambiguity

I felt uncomfortable playing *Heavy Rain*. In and of itself, this isn’t a new thing for me (Zagal 2010). *Heavy Rain* has a fair share of intense and dramatic moments. It features scenes in which the characters are under an incredible amount of stress and tension because of the situation they’re in. It’s hard not to be affected hearing characters sob, cry, moan, or doubt themselves. It’s perhaps harder to understand how, thanks to the game’s novel interface, the discomfort the character’s face is projected upon the player.

In terms of gameplay, the player can interact with the game in several ways³³. These include:

- moving the main character around the environment;
- pressing a button to select different camera viewing angles;

- responding to onscreen cues. Some cues appear suddenly, while others are triggered contextually based on the character's location or current situation. Responding to these cues usually involves pressing buttons, moving the Dualshock controller's right analog stick in a specific manner, or moving the entire motion-sensitive controller in a certain way, or;
- pressing a button to see what thoughts the character is currently having on certain topics or issues (these constantly change throughout the game). Pressing an additional button (depending on the thought selected) allows the player to hear an internal monologue on that thought.

Additionally, some actions may lead to additional actions that also need to be completed. These additional cues are "chained"; they must all be accomplished in order to fully complete the action. The additional onscreen cues appear alongside the earlier ones in the chain. Also, some actions must be executed slowly while others must be completed in a certain time limit. The cues for which buttons must be pressed, which controller actions must be taken, and what thoughts the character currently has, all appear in different places onscreen (e.g. floating around the characters' head, next to an item in the scene).

The interface also provides insight on, and takes account of, the character's emotional state. Having access to the character's thoughts allows the player to better understand what the character is going through, as well as understand what potential options are available. For example, towards the end of the chapter called "Jayden Blues"³⁴, FBI agent Norman Jayden has a panic attack. He mumbles, "Triptocaine... The tube is on the bedside table... All I need is... to take some... and the pain will go away." He continues, "I should resist. This is going to kill me. I know I can resist. I just need to stay in control and do something until it goes away." Four icons float around his head: *Tripto*, *Withdrawal*, *Temptation*, and *Calm down*. From the player's perspective, it is not entirely clear what Jayden will do (or think) if *Temptation* is selected. Will Jayden give in and consume the drug on the bedside table? Will he think something about how hard it is to resist the temptation? Similarly with the environment cues, "the cues make clear what can be interacted with, but not necessarily how". (Edge 2010) If you were an addicted drug addict experiencing withdrawal symptoms, are you sure you'd be able to control your impulses and not give in to the temptation? Furthermore, there is additional pressure on the player because he's not sure what happens if no action is selected, does Jayden break down and consume the drug? Is this something that will happen if the player does not intervene? If so, how much time is there before that happens?

There is an additional complication, when a character is stressed or emotionally affected in some way (e.g. angry, scared, etc.), the floating icons shake, shift, and move around. The effect is unsettling because it makes the icons hard to read and figure out. The challenge the character faces (I'm stressed and I can't think clearly,

what should I do?) is passed on to the player who can't easily figure out what the available options are, making it more likely that she will make a mistake or do something she'll later regret. It makes it harder to make a choice, it is uncomfortable to watch, and because of these things, is ultimately effective in creating meaningful experiences.

Additionally, the shaky icons nicely simulates how, in the heat of the moment, things oftentimes can, and do, go wrong. It also facilitates role-taking by literally forcing the player to suffer as the character is suffering. There is a scene where Norman Jayden and a detective are interrogating a suspect. Things quickly get out of hand and the suspect draws a gun on the detective who in turn yells at Norman to shoot the suspect. Almost immediately, multiple icons appear and begin rapidly circling Norman's head. All of them, except for the one labeled R1 (with no accompanying text) flit in and out of view. This last one simply wobbles next to Jayden's head. It is hard to read what the icons that circle around Jayden's head say. While this happens, the detective continues yell and insist that Jayden shoot the suspect. Under this pressure, it is easy to simply press R1 (e.g. Short 2010). Dawdling while trying to figure out the other options might take too long and the suspect, clearly emotional, might shoot the detective. Pressing R1 results in Jayden firing his weapon, instantly killing the suspect. It is obviously the wrong choice, but it's understandable, perhaps even forgivable, given the dramatic tension of the moment.

I was surprised when I shot the suspect. It wasn't something I wanted to do. It wasn't something I intended to do. It just, happened. It was a mistake. However, by this point in the game I realized that it was a mistake I was willing to live with. Not willing in the sense of, "oh, it doesn't really matter, just move on". I was willing to live with it because it stood for my experience. I had to trust the designer that, yes, it is ok to make a mistake. Don't worry, the game moves on. When I realized that I could trust the designer, I was able to come to terms with my mistake. It made me uncomfortable and I regretted having shot the suspect, but it was meaningful.

Shaky icons aren't the only interesting thing about the game's interface. "During some of the more strenuous tasks, [the player] may need to hold down four or five [buttons] at once, twisting [their] fingers into a knot. It is hard to describe how much more immersive this technique is than a flashing icon in the middle of the screen, or a black bar at the top of the frame listing all your possible choices." (Orca 2010) In this case, an extended action consisting of multiple button presses is chained together in such a way as to physically strain the player who must maintain an awkward and uncomfortable hand position that in some way reflects the discomfort the character is experiencing on the screen.

The idea that a game's designer might choose to intentionally abuse its players has been explored as a way of spotlighting the relation between the player and its designer (Wilson and Sicart 2010). In the case of *Heavy Rain*, however, I argue that it is done to create meaningful experiences. It brings out the difficulty of the actions in the game into the player's realm of experience, thus resulting in a greater sense of personal investment in the game.

Conclusions

Can you have a deep reading after only one play through? In his introduction to this series, Davidson notes how this series consists of multiple "in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game (Davidson 2009)." The series' title, *Well Played*, means two things: looking closely at the experience of playing a game and looking at a game in terms of how well it is designed and developed. I feel that these are both things that I have done in this chapter. However, I cannot ignore whether or not I should have played the game again.

I don't want to play the game again. It's not just about "spoiling the experience" as we understand it when we nostalgically talk about certain games we may have played. I don't want to play the game again because I feel that I will diminish the meaning and value of the game I played. It will make my experience less personal, less unique. Less special. All those things I saw, those things I did, the things that went wrong, my mistakes as well as my triumphs, all of that will mean less to me if I play the game again. I won't be able to ignore the alternatives. I won't be able to avoid peeking behind the curtain to see which choices mattered, how things could have turned out differently, or not. I don't want MY experience to compete with all the other possible experiences I could have had. I don't want to regret how I played, or second guess myself.

This is perhaps *Heavy Rain's* greatest contribution to the medium. As a player, I've been given the choice of replayability: there are probably millions of possible playthroughs. As a player, however, I choose to reject the game's replayability not because the game isn't worth playing, rather because it IS. "I would like people to play it once ... because that's life. Life you can only play once ... I would like people to have this experience that way," explains Cage. "I'm fine with [people reloading saves to avoid bad endings], but the right way to enjoy *Heavy Rain* is really to make one thing because it's going to be your story. It's going to be unique to you. It's really the story you decided to write ... I think playing it several times is also a way to kill the magic of it" (Cage, as quoted in Berghammer 2009).

Once again, the designer was right.

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Fallout 3 becomes a space full of opportunity to explore not only its world, but ourselves and what it means to be human.

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ALEX GAMES

FALLOUT 3: HOW RELATIONSHIP-RELEVANT DECISIONS CRAFT IDENTITIES THAT KEEP BRINGING US BACK TO ENJOY THE HORRORS OF THE NUCLEAR WASTELAND

Whenever I've had a hard day due during my roles as father, husband, or professor, all I need to do to make myself feel better is spend some time admiring the dystopian world of the *Fallout 3* nuclear wasteland. Right after, all I can do is think, yes, things could always be worse!

Indeed *Fallout 3* depicts a reality so grim that it parallels (or should I say is based on) the rich and nightmarish post nuclear catastrophe world depicted in Harlan Ellison's *A Boy and his Dog* or movies with similar themes like *The Day After*, and *Mad Max*. The realities depicted in these works are so harsh that I can remember shuddering at the thought of experiencing the destruction of nature and civilization, as well as the reduction of mankind to an animal-like state.

The horrors associated to fantasies of mass radiation, deformed bodies, charred landscapes, and near starvation, all come to life in this game of the year winner that is so carefully and painstakingly detailed that it undoubtedly deserves the title.

However, what is most remarkable about *Fallout 3* in my opinion, is that even given it's portrayal of a dismal reality, people love to come back again and again to play in it's world. *Fallout* is one of the most successful game franchises of all time, with three instantiations of the game having been released over the past two decades (four if you count *Wasteland*, EA/Interplay's original post-apocalyptic RPG game concept), and the franchise has sold millions of copies worldwide. It would then be reasonable for one to ask, "Why would anyone want to play in such a world, let alone keep coming back to it?"

In this piece, I try to give one of what I believe are many possible answers to this question, given the richness and depth of *Fallout 3*. I do so by reflecting on my experiences playing the game, and on my appreciation of one aspect of it's design

that is so carefully orchestrated that it manages to instill in its players a desire not only to tolerate exploring a world devastated by nuclear war...but to keep coming for the enjoyment it brings to them.

Narrative and Emotional Conflict

I have to admit that though I have been playing and designing games for nearly three decades and have seen nearly everything there is to see under the sun in this medium, playing the *Fallout* series -and *Fallout 3* in particular - I have found myself in a state of emotional conflict so intense that I can't remember any other game theme producing it. In this game, one plays the role of a dweller of an underground vault (Vault 101), a descendant of survivors of a thermonuclear war between the U.S. and China that took place two hundred years before the game begins.

The world of the game depicts an alternate reality to ours, where technology advanced much faster, but society remained stuck in the first half of the twentieth century, creating a world that feels like a future that would have been imagined by a science fiction writer in the fifties. The vault, as one can imagine, feels sterile, enclosed, suffocating. Spaces are small and crowded, and stainless steel illuminated by electric light is the only landscape one can see around. Life in the Vault is controlled by the overseer, a paternalistic and dictatorial character obsessed with controlling every aspect of the orderly life that vault citizens have experienced for two centuries, from their life long jobs, to their very thoughts.

While the earliest game stages introduce you to basic game control elements such as moving your character and picking up objects, the storyline in the game already begins giving you hints as to what the most fundamental play mechanic of the game will be. Just like in the "choose your own adventure" books of the eighties and nineties, *Fallout* follows on a long tradition of computer role-playing games where choices between multiple courses of action, shape the path that the players will follow as they progress through the game. These choices begin with choosing your character's gender, it's appearance, and it's S.P.E.C.I.A.L attributes (an acronym from values representing your character's strength, perception, endurance, charisma, intelligence, agility, and luck), which in conjunction will define the results of different interactions your character will have with the world (e.g. a more agile character will be more dexterous and likely to pick a locked door). Here, you will also learn to interact with game characters by selecting responses to their statements or actions using multiple choices from a branching dialog. One of the most remarkable features of *Fallout 3* however, is that unlike other RPG's, even these very early decisions are framed within social situations involving family and close friends. This begins with the death of your mother at birth, right after you have just finished creating your character, and continues throughout different mini passages that depict your life

during infancy, childhood, adolescence and early adulthood. During these phases, the game narrative takes care to show your father's care towards you, as well as the friendship you have with the overseer's daughter, Amata.

Your interactions with these characters become your earliest experiences with what I consider the most innovative and remarkable aspect in *Fallout 3*, the Karma system. This system works so that every action you take to help or hurt others will subsequently affect their disposition and actions toward you. More importantly perhaps, it will also affect the attitude of that character's "social network" and thus the attitude toward you that characters you may not have even seen before will take. In this way, if you affect a character in a positive way, their friends may also have a positive disposition toward you, and be willing to help you later, or if you hurt the character, they might do the same to you.

For example, during your 10th birthday party, Amata organizes a surprise birthday party for you where a variety of people are invited. In this group are included people like the overseer, people who are friendly to you, such as his wife and Amata, and people who are unfriendly to you, such as Butch, the local bully. When you interact with Butch, he tries to bully you into giving him your birthday present, to which you can respond either by giving it to him, by rejecting to do so, or by playing a trick on him. If you take the first path, he will make fun of you and leave you alone, if you take the second, he will threaten you, and if you take the third, he will challenge you to a fistfight. Should you take this last path, you will have made enemies not only with Butch, but with his gang as well.

Make no mistake, the fact that the game lets you choose your actions in different situations does not mean that *Fallout's* designer will show you a "better" or "worse" way to play the game, as it happens in most other RPG's. Rather, it is precisely the dynamic way in which the virtual world adjusts to your decisions as players that makes the game so interesting and one important aspect to why I believe people keep coming back to it's horrors. Taking an action, whether positive or negative towards a character in such a highly detailed virtual world renders it meaningful in the same way that an action we take in the world is rendered meaningful: through consequence. In *Fallout 3*, consequence is made visible to you in a myriad of modes, from the physical (your character could be maimed, scarred, or even experience mutations), to the social (your character may become famous or infamous, and attract resentment or praise from different groups). In this way the game lets the player enter a highly immersive experience, and in my case, this experience led me to project something about my real identity as a person into the virtual identity that I was playing in the game (a psychological phenomenon that James Paul Gee, in *What Videogames Have to Teach Us About Learning and Literacy*, has called the Projective Identity).

Very commonly, when people talk about immersion in virtual worlds such as the one presented in *Fallout 3*, they tend to place quite an emphasis on the graphic and physical simulation nuances that can be found in them. While I also believe these to be important, the sort of detail and immersion elicited in this game is special because it has less to do with them, and more to do with something as difficult (some would argue more difficult) to accomplish in games: character depth.

Bethesda accomplished this in *Fallout* through an orchestration of many things including physical locations, textures and visual effects, but primarily through a painstakingly detailed and interconnected system of dialog choices through which players explore the content of conversations and interactions different characters in the world of *Fallout*.

In my play experience I found that exploring the virtual world through these interactions, led me to a degree of awareness about the deep implications that a thermonuclear holocaust could have on our human condition in a way that graphics simply can't convey. For in these interactions, one gets to explore the mental life of people for whom the traditional institutional, social, physical, and even mental structures that one would associate with "civilized society" have been obliterated, and new ones are desperately being sought and built from the radioactive ashes. In this way, *Fallout 3* becomes a space full of opportunity to explore not only its world, but ourselves and what it means to be human.

Fallout 3 allows this in many ways, which I think will resonate with different audiences in a variety of manners. Beginning with the simple fact that one could choose to play the game as the most vicious of creatures, dealing with characters in the most selfish and violent manner possible should one wish to do so. In this scenario, the player could mimic a breed of player characters that the game calls raiders, who move around the world attacking the unaware and/or weak, doing all manner of atrocities to them (some of which I will let the kind reader explore on his/her own, for I do not mean to hurt sensibilities), taking what they want from them. And this would be close to the identities that post apocalyptic stories like *A Boy and His Dog* and *Mad Max* have imagined for humans living in such a hellish world.

However, this is not the only way that one can play the game, for there are many other identities that one could develop. And here I am not talking about the well-known role of the hero who, like in numerous other titles, travels around the wasteland saving oppressed people (which can be done). Rather, what is interesting about *Fallout 3* is that it allows one to choose at any moment from a spectrum of possible responses from the civilized to the violent, and in the process to examine some of the deep complexities that underlie human ethics and moral behavior. To explain what I'm describing, I will refer to an experience I had with a part of the game where I was asked by a girl in a town I visited if I could deliver a note to her brother, who was living in a town settled on the top of a ruined freeway. Upon getting there,

I discovered that the few settlers living there were in constant fear of a sinister group called "The Family". In talking to the settlers, one would get the sense that The Family is a group very similar to the raiders, but with a very peculiar custom, they come to towns at night and knock on people's doors. When the unfortunate inhabitants happen to respond to the call, they are taken away and never seen again.

They begged me to help them find one of their groups, a young man, who apparently was taken a few nights before. The young man, by the way, happened to be the person to whom I was supposed to give the note.

Upon accepting the quest, I visited the young man's house, only to find his parents dead inside, the blood drained out of their bodies. Following the trail of The Family led me to encounter a series of sites where I found dead creatures that had suffered the same fate, and this led me to immediately associate the Family with vampires. After searching the area for a long time, I was finally able to find The Family's hideout, and one of the most interesting exchanges with non-player characters I have found in any game.

Upon entering the hideout, I found several characters roaming its underground rooms, as well as several computer terminals with information about them. I learned that they only would come out at night, and look for people in the wasteland on which to feast. This made me think that the young man I was looking for was probably dead, as these monsters would undoubtedly have feasted on him. However, upon talking to The Family members I found, I learned that their leader, Vance, had actually "adopted" them, brought them to live with him, and introduced them to "the ways" of the Family.

I decided to go find this Vance, since I was convinced that, being a vampire, he had probably taken the young man to suck his blood and convert him into a vampire like himself. I was ready for a fight, "knowing", like we all do, that vampires are evil, and wanting to make them pay for what they did to the poor young man and his family. I was completely surprised when I found a well-dressed and well-mannered fellow (at least compared to the rough folk one can commonly find in the wasteland), and was even more surprised at the dialog options I found when I engaged him in conversation. First, he told me that this place, which he called Meresti, was the last bastion of hope for the downtrodden and misunderstood. He claimed he had brought all the people with him in order to save them, and teach them his ways. Not the sort of response I would have expected from a vampire, but I still thought what he said meant he was converting people to vampirism, like him. I confirmed this and felt repulsed when he said: "Men of science would call us cannibals, eaters of human flesh. Society labels us as monsters, demons and the unclean."

At this point, my first dialog choices became available. My first choice would have been to stop him from talking and attacking him. I must admit that I was very tempted to take this choice, since I felt that what these people were doing was terribly wrong. While destroying vampires is an act that I would have normally executed without much thought in any other game, the eloquence with which Vance presented his description compelled me to choose my second option, to give him the benefit of the doubt, and let him continue to learn more information.

What followed completely threw me off, for I did not expect a monster to say this. He said “I think of my teachings as more of an improvement, a way to transcend our cannibalistic nature”, and this sparked something in me that is so purely human, and so powerful that it made me forget that I was talking to a potential enemy: curiosity.

In the dialog that followed, I was given the choice of doing a thought experiment, by saying “If I accept that you’re no longer cannibals, what do I call you?” to which he appeared genuinely surprised, and responded that he found my open mindedness rare and fascinating. He then went on to explain to me that every day, The Family held a ceremony, in which every member had to speak one of the laws. That member was then responsible for remembering that law, and enforcing it upon herself and the others if she wanted to remain in the Family and not go back to living like an animal in the wasteland, for he saw The Family as the last remnant of civilized society. He then said that before telling me more about the young man I was looking for, I had to learn about each one of the laws, and then come back to him, for in this way I would understand what The Family really was.

I must admit that by this point I was fascinated, for I had never considered that a cannibal or a vampire in a game would be presented with such sophisticated a view of himself. But more than this, I was fascinated by the fact that Bethesda would have designed into *Fallout 3* –either deliberately or not, I do not know- a quest that in the real world would have closely mimicked a mini-ethnographic study of the cultural norms of a people. I decided to play along with Vance’s request out of curiosity of the level of depth and sophistication that Bethesda could have given to this code of laws, half expecting it to be a simple set of sentences regurgitating vampire clichés. What I found could not have been more different, as each member told me about his or her respective law, and as a whole I came to realize the sophisticated system of conduct they represented. They were:

**The First Law “Feast not on the flesh; consume only the blood.
This is our strength.**

We do not eat the flesh of those we kill for food. We will only drink of their blood and leave the body intact. The consumption of flesh is filthy and unclean. This action is what causes the humans to treat us like animals. We are not animals, we are The Family.

**The Second Law “Bear not the child; welcome only the exile.
This is our fate.**

Because we carry the stain of our past in our bodies, we can never let it pass to our offspring who would in turn carry out those foul actions beginning the cycle anew. The Family must seek the Wasteland for others of its kind in order to maintain itself. That is our fate.

**The Third Law “Feed not for pleasure; partake only to nourish.
This is our dignity.**

We only kill the humans when we are hungry or when we must defend ourselves, we never hunt for sport or pleasure. We do not prey on children for they are not yet tainted by society’s view of us. The Family will not tolerate murder.

**The Fourth Law “Seek not the sun’s light; embrace only the shadows.
This is our refuge.**

Because we are creatures of the night, we must not set foot in daylight. We move silently across the ground only under the watchful eye of the moon above. At the rising of the sun, we must seek the embrace of the shadows and never again gaze at its brilliance. The Family seeks the dark as its refuge.

**The Fifth Law “Kill not our kindred; slay only the enemy.
This is our justice.**

Above all, no member of The Family will ever take the life of another member without the consent of the current leader. Anyone disobeying this action, the most heinous of all our crimes, will be exiled from this place forever. We must not let our own inner demons cause us to fight amongst ourselves. We number only in the few, and we cannot risk extinction.

A perspective began to form in my head upon learning about these principles. Was this Vance just a cannibalistic lunatic trying to pretend to be some sort of twisted, vampire messiah? And if he wasn’t, what had they done to the young man? Had he brought him and others to indoctrinate them to become like him? I decided to go back and ask him about it, to demand that he release the one I was looking for. Surprisingly, after hearing that I had learned the principles, he said that I was welcome to talk to the young man, that he had never been held against his will, and that if he was isolated from the others it was because he was in a moment of reflection. This was not the answer I expected, since I thought from the beginning that the young man had been taken away.

What happened next made me realize and appreciate the level of sophistication and complexity of the relationship between narrative, dialog, and the social relationship mechanisms in *Fallout 3*. When I reached the young man's room, I found him sitting alone, silent, thinking. I told him who I was and that I had come for him, to take him back home. He responded he didn't want to leave cause he felt so ashamed of what he had done, and that this place was the only one where he felt "normal". I probed further, and he decided to tell me his story, which went something along these lines: Long ago, when he was just a boy, he and his sister had been out in the wasteland tending to their animals, and were being harassed by a scavenger. When Ian tried to stop him, the scavenger pushed him and he hit his head on a rock. At that moment, something powerful came over him; something that had lain dormant inside of him took over. Before he knew it, he had jumped to the assailant's throat and torn his throat open with his teeth. It was all his sister could do to pull him off, and she made him swear they would keep the incident a secret. However, the hunger remained dormant in him, waiting to come out in a cannibalistic frenzy. He was able to control it until his sister decided to leave for another town, and then, one night, the hunger came back, took over him, and he killed his parents.

And here, another decision moment that would shape my projective identity came into play, for at hearing the horrible thing this young man did, conflicting emotions filled my soul. On one hand, the man in front of me had murdered two people who had cared for him. On the other one, the fact that he had come to The Family gave me a realization that not only did he do it purposefully, but that as with many other horrors of the wasteland, he was just a product of the circumstances in which he had grown up, and an unfortunate victim of something he could not control. At this moment, the genius of the design in *Fallout 3* became clear as the light of day to me, for at this moment I could shape not only the future of this young man's identity in the virtual world, but also my own future both in and out of the game, through an awareness of the complexities that underlie the surface of the human condition. In the end, this second perspective touched not my projective identity, but my real one as a person, I felt truly sad for this kid, and decided to give him the note from his sister. In it, he read that she missed him, and wanted him to come back to his town to meet her and be a family once more. The young man, who had come to the colony of vampires to seek shelter in the night, had now found a glimmer of hope, hope of redemption in love.

Is feeling sad for a virtual cannibal proof of the power that *Fallout's* design brings into its play experience? Perhaps some would disagree, and for some others it might be just one more narrative trick used to produce emotions in players. For me, the mixture of storyline, interaction, environments, and episodes like this one, produced an experience of self-reflection and reflection on what it means to be human, and like all great art, allowed me to explore within myself, what lies beneath the surface of the human condition.

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We try to use techniques that are both narrative and interactive to set up and pay off situations that deepen and enrich the world of the game.

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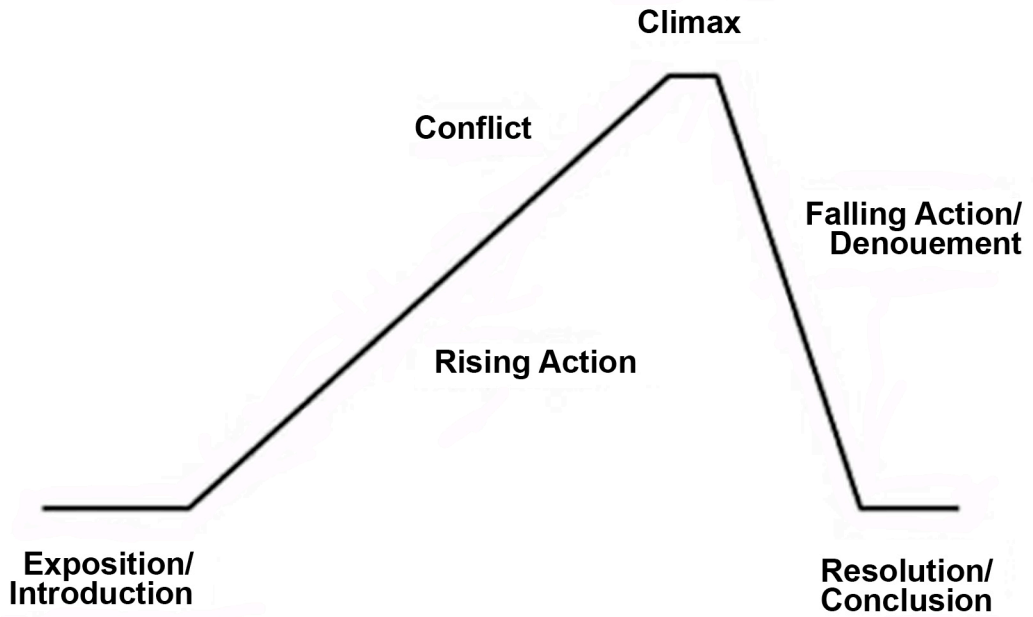
**DREW DAVIDSON
& RICHARD LEMARCHAND**

UNCHARTED 2: AMONG THIEVES - BECOMING A HERO

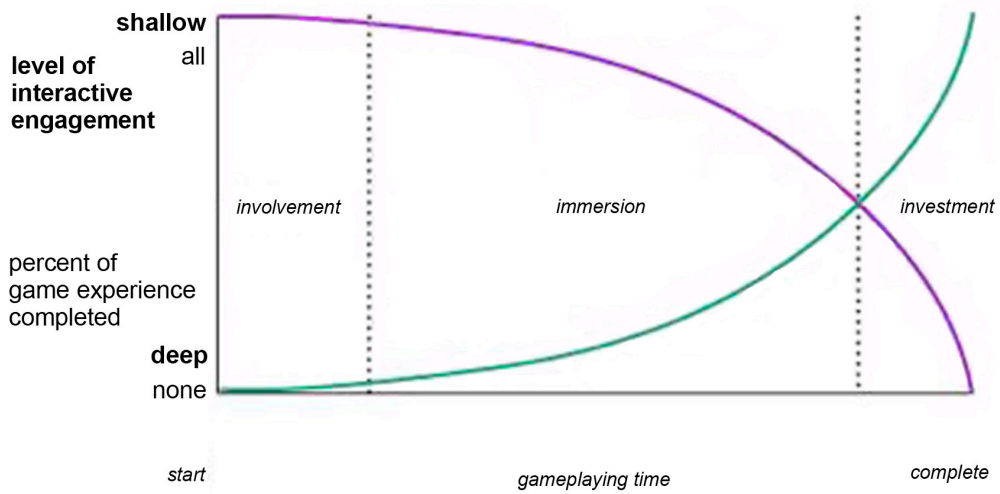
With this essay, we're going to unpack how the design of a game (*Uncharted 2: Among Thieves*) can offer players the chance to explore and learn all the possibilities within the playing experience. In other words, a good game can teach you how to play it through the very act of playing it. And players can develop a literacy of games as they learn through the playing of a variety of games.

With that in mind, Richard Lemarchand (Lead Game Designer at Naughty Dog and Co-Lead Game Designer of *Uncharted 2: Among Thieves*) and I are going to explore the making and playing of the game. We're going to analyze sequences in the 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. With this paper, I wrote a complete first pass unpacking my gameplaying experience (which included some discussions with Richard). Richard then added in his thoughts and responses to my analysis, to which I, in turn, replied. So, the bulk of the paper is from my perspective, but we've called out specific comments from Richard and my replies. Throughout, we've tried to capture the range of dialogue we've had around and about the game.

From a gameplay experience perspective, we're going to walk through how the game design and narrative development unfold. To help track this process, we'll refer to two diagrams. The first diagram used is a classic literary plot diagram.



Using this diagram, we can follow the story of *Uncharted 2* as it develops across key moments in the game. Next, we'll use a diagram illustrating the stages of interactivity.



This interactive diagram was developed in a previous paper (Davidson 2005) and outlines the interactive experience of playing a game. Briefly, the experience is posited to have 3 stages: involvement – being initially introduced into the game; immersion – becoming engaged with the gameplay and the gameworld; and investment – feeling compelled to successfully complete the game. The interactive diagram illustrates these three stages. The x-axis shows the relationship of the time spent playing the game, from start to completion. The y-axis shows both the level of interactive engagement, down from shallow to deep, and the percentage of game experienced, up from none to all.

Comparing the results from both of the above diagrams helps to illustrate the relationship between a game’s story and its gameplay and how they can fit together to create a satisfying and engaging interactive experience. Of course, this approach wouldn’t necessarily be the most apt for analyzing all the different genres and types of games, but we think it works well for *Uncharted 2*.

One method that isn’t directly explored is the procedural, computational nature of how this experience is created. Michael Mateas (2005) and Ian Bogost (2007) have written on the importance of procedural literacy, but for the purposes of this interpretation, the focus is kept more on a gaming literacy (GameLab Institute of Play 2007) and an exploration of the gameplay and narrative. Also, James Paul Gee (2007) has written on thirty-six learning principles associated with games, which illustrate how a game teaches us to play. And in performing this interpretation, Bogost’s (2007) ideas on “unit operations,” as an analytical methodology in which the parts of an experience are viewed as various units that procedurally inter-relate together to create the experience as a whole, are not explicated in detail, but combined with Gee’s ideas of learning principles, inspire an exploration of how the gameplay and story can be seen as learning units of meaning that inter-relate in a variety of ways and lead us to a literacy and mastery through the playing experience (Davidson, Well Played, 2008).

Needless to say, this article is full of spoilers on *Uncharted 2* (and some for the first *Uncharted*) so consider this your fair warning. While it’s not necessary, we encourage you to play the game(s) before you read on. A goal of this article is to help develop and define a literacy of games as well as a sense of their value as an experience. Video games are a complex medium that merits careful interpretation and insightful analysis. By looking closely at a specific video game and the experience of playing it, we hope to clearly show how a game can be well played.

Introduction

Uncharted 2: Among Thieves is the sequel to the hit game, *Uncharted: Drake's Fortune*. Released in the Fall of 2009 for the Sony Playstation 3 (PS3), it garnered critical acclaim (with a 96 MetaCritic score) and many game of the year awards (plus it often came close to sweeping many award shows across all categories). Within the world of the game, it develops on the experiences of the first *Uncharted* as we join the new adventures of Nathan Drake, the player character from both games. For the scope of this paper, we won't delve too deeply into details about the first game, just enough to help explain any events and characters that span both games.

Before we dive into the game in detail, let's start with a more high-level overview. Naughty Dog was known initially for their *Crash Bandicoot* and *Jak & Daxter* series of games, and is a subsidiary development studio of Sony Computer Entertainment. As a Sony subsidiary, all their titles are exclusive releases on Sony platforms (currently the PS3). In 2007, they branched out with a new title, *Uncharted: Drake's Fortune*. The game was a 3rd person action-adventure game that drew favorable comparisons to the *Tomb Raider* video game franchise in terms of gameplay and gameworld, and *Raiders of the Lost Ark* in terms of story and cinematic presentation, and it was the sleeper hit of 2007. It should be noted that Richard was the lead game designer on both of the *Uncharted* games (sharing lead design with Neil Druckmann on the second).

In *Uncharted: Drake's Fortune*, players play as Nathan (Nate) Drake, a contemporary fortune hunter, and they join in an adventure to find the lost treasure of Sir Francis Drake. This adventure leads to a forgotten island in the Pacific, and Nate and his companions discover clues, secrets, maps and more, that help them unravel the mystery and find the treasure. Gameplay consisted of plenty of combat (hand-to-hand and gunplay) as well as a lot of exploratory platforming as they work their way through the exotic environments.

Uncharted 2: Among Thieves picks up after the events of the first game. Drake is tempted back into this next adventure with a new group of mercenary companions. Characters from the previous game come to play a role in this adventure as well. Unlike the first game, which takes place primarily on one island, this adventure takes Drake to exotic locales all over the world on the search for the legendary Himalayan valley of Shambhala.

Richard Lemarchand: When Drew invited me to add some remarks to a paper he was writing about *Uncharted 2: Among Thieves*, I was immediately interested in having the opportunity to look at the game through a different lens – that of an analytical review. Of course, since *Uncharted 2* was released, my friends at

work and I have been studying the reviews that both critics and fans have written, looking for insight into where we had been successful with the game, and where there was room for improvement.

I have become increasingly interested in game criticism in past years, as my understanding of how film and literary criticism works has expanded, and I now see that a robust professional and academic critical context is an important adjunct to the creative culture that produces games, and that advancement in a form is rarely possible without it. I thought that *Well Played 1.0*, the book that Drew edited and partly authored, offered fresh and interesting takes on the games that it looked at, and I was curious as to what we would uncover if we looked at our game in a new way.

My personal experience of *Uncharted 2* had been intense and rewarding. The game took 22 months to conceive and create, and I was involved in the process from before the beginning, as we began to discuss ideas for a sequel during the closing stages of the first game in the Uncharted series, *Uncharted: Drake's Fortune*.

We had always imagined Uncharted as a series of games, and our contemporary reinvention of pulp adventure tropes gave us lots of potentially rich subject matter. Our decision to push both cinematic gameplay and character-driven storytelling beyond anything seen in videogames before provided many challenges, but also the singularly most rewarding and satisfying game development experience of my career. I'm excited to have an opportunity to share a glimpse behind the scenes of the process in the course of Drew's narrative.

Full Disclosure from Drew Davidson

In case it's not apparent, I should share that Richard and I are friends, and that helped spur the idea for writing this paper together. In the past, I've approached the analysis of a game mostly from my perspective as a player. Although, I recently did an analysis of *World of Goo*, and knowing Kyle Gabler (game designer) enabled me to participate in the beta testing of the game as well as to ask a lot of questions. And last year at Games + Learning + Society 5.0, I did a live play and analysis of 2008's *Prince of Persia* with James Paul Gee and Francois Emery, the lead level designer on the game. Francois and I were introduced by a mutual colleague, and we prepared through email, but we first met the morning of the presentation. The session went very well, with a lot of shared details coming out during the playthrough in front of the crowd. In fact, it led to an invitation to do a similar presentation for the Games + Learning + Society 6.0 Keynote. I thought of asking Richard about doing the keynote together, because I was excited about playing *Uncharted 2*, which in turn has led to our writing this essay.

At the time of this writing, I've only played through *Uncharted* about 1/4 to 1/3 of way through twice now. I started playing it during the winter holidays of 2007, and was enjoying it, but ran into the start of spring semester classes, and had to put it aside, and just didn't get a chance to pick it back up at the time. When *Uncharted 2* came out in 2009, I had the idea that I should go back and revisit the first game before I jumped into the second, but on discussing this with Richard, he encouraged me to play *Uncharted 2* first to enjoy all the new content and gameplay improvements they were able to put into the second game.

Taking Richard's advice, I played through *Uncharted 2* and completed it two times, while also playing some specific sections several times (I have yet to take advantage of the multiplayer gameplay). I then thought about starting the first game over again for the sake of being thorough, but only got a little further along in the game before getting too frustrated with the gameplay controls of the first game as compared to the improved controls of the second game (more on this below). During my playthroughs, I visited GameFAQs from time to time to double check to make sure I didn't miss anything major (although both games are fairly linear in their experience, so this wasn't too much of an issue). Finally, I should note that *Uncharted 2* is one of the rare games that my wife enjoyed watching me play from start to finish, as long as I was playing on the "Easy" setting (and more on this below as well).

Narrative & Gameplay Analysis

Now let's do a close analysis of the game. It's such a large experience, that I'm not going to cover everything that happens in great detail, but I do want to highlight key points and sequences in the game that contributed to the overall experience of playing.

Uncharted 2 starts with a bang that sets the tone for the pacing of the story and gameplay, and how the two are blended in the game through the use of what Naughty Dog calls IGCs (standing for In-Game Cut-scenes). IGCs are intricate moments that combine real-time interactivity (or briefly non-interactive but real-time rendered moments) with techniques from the language of cinema. In a lot of games there are Quick Time Events (QTEs) that are extended interactive cut-scenes in which a player has to press a button at key moments in order to advance through the cut-scene event successfully. Naughty Dog came up with IGCs as a term in order to help emphasize how the in-game cut-scenes in *Uncharted 2* are more seamlessly interactive and integrated into the gameplay than a normal QTE.



In the first moments of *Uncharted 2*, we find ourselves as Drake, coming to consciousness, wounded and bleeding, alone in a train car hanging precariously from a mountain in a roaring blizzard. You then gain control over Drake as you try to climb out of the train to safety. Throughout this initial sequence are several IGCs that help introduce players to a highly polished cinematic perspective meshed with integrated interactive gameplay moments. So you have very short periods where you actually don't have control of Drake, but you watch sudden events happen and then immediately gain control again. In this instance, the action comes to a climax with the train jerking and sliding off the cliff, while you race to get out before it does. You start getting a good sense of how the platforming gameplay works as you jump, swing and climb. Climbing out of the train gives you a good introduction to all the platforming mechanics. You work your way up and out, climbing the interior and exterior as stuff falls on you, handholds break, and you finally make a leaping run onto solid ground as the train goes crashing away below you.

Drake then loses consciousness, and this leads to a more traditional and extended flashback cut-scene that you get to watch. In this scene, Drake is at a beach bar and is met by an old acquaintance, Harry Flynn, along with a femme fatale, Chloe

Frazer. They have a job (presumably the reason Drake is currently unconscious on a snowy mountainside) and they want to rope Drake into joining them. This job has something to do with some lost treasure related to Marco Polo and his travels, and Drake is uniquely qualified as he is the only person to have pulled off this particular heist. Drake resists at first, but slowly gets tempted into helping out, the scene ends with them toasting to the adventure, and Drake saying, “What could possibly go wrong?”

Richard Lemarchand: I was glad to see your remark, that the job that Chloe and Flynn are offering in Drake is presumably the reason that he’s now passed out in the snow in the Himalayas, because that was exactly the kind of thing we wanted the player to think during the cutscene.

By showing Drake in a dangerous situation and an inhospitable environment at the very start of the game, our normally empathetic, curious audience starts to ask how Drake came to be in such a situation – even if they’ve never seen him before. By making our flashback cutscene start to tell the story of a chain of events that might lead to Drake’s disastrous circumstances, we naturally grab and hold our audience’s attention, right from the very beginning of the game.

This definitely worked on me as a player, as I was instantly drawn into the action (and what the heck has happened?). What could go wrong indeed. You wake up in control of Drake again, back on the icy cliffs in the middle of a blizzard. And now you get your first sense of the combat gameplay. Like the climb out of the train, this section of gameplay briefly introduces you to the combat mechanics as you get a sense of how to use various weapons that are strewn all around in the wreckage of the rest of the train along with some soldiers who appear to be after Drake. As you work your way through the wreckage from carriage to carriage, there are also explosions that rock you around, and Drake loses consciousness again.



Which cues up another cutscene that you get to watch. This one shows Drake and Chloe together. There are hints that Flynn is actually onto something real, and there seems to be a love triangle brewing, and some trust issues amongst the three of them. The scene ends with Drake regaining consciousness on the icy mountainside.

RL: In fact, as Drake regains consciousness we seized the opportunity to add an interactive moment. When control returns to the player after the cutscene, Drake appears to still be unconscious. He is lying prone in a smashed train car, with one arm slightly swinging, and his eyes closed. Only when the player touches the analog stick will he start to stir and then stand up.

It's one of those chances for us to give the player one of those "oh cool, I'm back in control" moments. It might be a little fourth-wall-breaking, but players generally remark positively on that moment of revelation as at least novel, and I think that we can probably leverage that type of experience towards both gameplay and storytelling ends in the future.

Interestingly, I didn't pick up on this initially, but did notice it after the fact. For me, I was eager to get Drake back up and on his feet and start actively playing the game. As you stumble back out into the blizzard, you come upon a unique looking dagger. One that shows up spinning every time a scene loads in the game. So, this dagger must be important (and in some way the reason behind all the catastrophe on this mountainside). As Drake cradles the dagger, the scene fades out, and then a new scene fades in, as you're told that it is four months earlier in Istanbul.

RL: One more comment about your not noticing that interactive moment when Drake regains consciousness: we've found that it's often the case with this kind of interactive finesse: many players will never notice it. Some game developers will use "hardly anyone will notice that" as a reason not to put something in a game, and of course, you have to draw the line somewhere. But when an opportunity, like this one, takes relatively little effort to put into the game and doesn't require the creation of new assets, I always jump at the chance to make our game even a little richer. Players also love the feeling that they've discovered a secret.

I'd also like to grab this opportunity to mention that *Uncharted 2*, like all of Naughty Dog's games since *Crash Bandicoot*, streams data from the disc so that players only have to experience load times at the start of a play session, and never during the flow of the game's action and story. This is very important for us, in maintaining the pacing we've carefully constructed, which is so critical to our creation of a cinematic experience that players get caught up in.

And this definitely helps to create a more seamless experience of the gameworld and story. So, you leave Drake on the mountainside, and back in time, you find him in Istanbul with Harry and Chloe ready to run the heist they were discussing in the

first extended cutscene. Before I get into the details of this first heist, I want to take the time to comment on the cinematic storytelling that has been used to introduce you to this gameworld. On a high level, in terms of the plot diagram, we're still getting some great introductory exposition, but also with hints of things having all gone awry (that's a huge mess on the mountainside). And I'd like to note that the game story is broken up into 26 titled chapters (so far, everything discussed has been in Chapter 1: "A Rock and a Hard Place.") To help with orientation, I'll refer to these chapters as we move through the analysis of the game. Considering the interactive diagram, we're still firmly in the involvement stage, we've had some initial practice with the platforming and combat, and have also been introduced to how the IGCs work.

But that doesn't quite do justice to the highly polished craft in which all of this is seamlessly blended together into an amazingly engaging and gripping experience. The IGCs are used to great effect, and you're able to watch and play your way into this gameworld. Naughty Dog has crafted the videogame equivalent of a thrilling action adventure movie. Pushing this comparison deeper, they've used the narrative conventions of these types of movies to help shape the story beats as they play out across the game (which I believe helps make it such a watchable experience). Story beats are the smallest units of a story, like an exchange between characters in a scene, that advance the narrative, and this initial sequence really does drop you right into the action. You then have some flashbacks to help break up the tense action, but also to start filling in some backstory on how it all started and how wrong things went awry. Simultaneously, you're gaining a sense of how the gameplay mechanics work as you play through the scenes, establishing how you, as Drake, are able to survive the straits laid out before you. The game pulls you into the story by requiring you to play through it successfully (as the hero in a movie would do as well).

And now you're back in Istanbul four months prior, at the start of it all. From here, the high-rolling, globe-trotting adventure kicks into gear. You're here to steal an artifact from a museum that should provide you with a clue to the ultimate treasure you're seeking. Chloe is the driver for the escape post-heist, and Harry and Drake go through the sewers to enter the museum from below. This is the beginning of Chapter 2: "Breaking and Entering," as you make your way through the museum to the artifact. There are some interesting dynamics to this chapter that again blend gameplay and storytelling well. For instance, Drake makes it clear that he doesn't want guns involved so as not to risk accidentally killing the innocent museum guards. This gives you some sense of Drake's character and motivations, while also setting up a level that is more about sneaking around than shooting it out. Harry has brought two tranquilizer guns though, so you can shoot some, but your focus is more about traversing through the museum while remaining undetected.

That said, there is a contradictory moment in this level where it appears that Drake actually kills a guard. He is hanging from a ledge high up on the roof of the museum, and a guard walks by, and the game prompts you to hit a certain button, which causes Drake to grab the guard and toss him off the roof to his apparent death. I've seen online that this moment disturbed players in terms of their sense of who Drake is and what he would, and wouldn't, do (Wardrip-Fruin, 2010).

RL: We were, of course, very focused on preserving the idea that Drake didn't want to take any innocent life during his time in the Museum. When the level's layout offered us the opportunity to showcase our "pull an enemy off a roof" stealth mechanic (one of a number of new "action-stealth" moves that we'd added to *Uncharted 2*) we couldn't resist seizing it, but we still didn't want Drake to appear inconsistent.

So we made sure that there was water below the roof for the guard to fall into, and even went so far as to create an animation that showed the guard swimming to safety, having survived the fall, and clambering onto a nearby rock to recover.

However, we now realize, based on what we've read on the Internet, that many players don't notice that the guard survives the fall, and they think that Drake has suddenly stopped caring about whether the guards get hurt. It's just one of those times where we have to realize that what we added doesn't "sell" or "read" – it's not completely, transparently obvious to nearly every player – and we just have to chalk this one up to experience and try not to make the same mistake next time!

To be honest, this moment didn't register strongly with me at the time I played through it, but I can see how players may not have "read" Drake's intentions. Moving on, Drake and Harry continue through the museum. Before we get to the treasure, I want to unpack how this buddy system works on two levels. In terms of story, you get to listen to the two characters banter back and forth while they're together, so it helps to establish their relationship for the player. In terms of Drake and Harry, you get the sense that while they don't fully trust one another, they do have a camaraderie in which they joke with each other. The dialogue pulls you into the characters in terms of content, but also in terms of delivery. The voice acting behind the characters is excellent and it's obvious Naughty Dog took great care in making sure the characters come across in the voices. Granted, often their dialogue is reminiscent of Hollywood blockbuster action movies, but that is the genre they're emulating, so it fits fairly well to the adventure in which you find yourself as Drake. And on a gameplay level, the buddy system is used to help keep you on the right track. Throughout the game, you're almost always with a companion (here it's Harry) and this buddy often is able to serve informally as a guide to lead the way so that you don't spend too much time getting lost, and also to give hints when you're

trying to solve environmental puzzles that always seem to require two people (like boosting Harry up to grab a ladder that he can then drop down to you). Once again, Naughty Dog is working with a high level of integration throughout the experience.

Drake and Flynn get to the treasure (and ancient oil lamp) that has a resin the burns blue and enables them to read a scrap of paper from the lamp, that tells of a tsunami that left Marco Polo shipwrecked in Borneo and the first hints that Polo may have found Shambhala (Shangri-La) with the help of a cursed Cintamani Stone (that may actually still be on a prominent mountain in Borneo).

So now they know roughly where in the world they need to go next on this adventure. But here the subtitle of the game (Among Thieves) really comes to the fore as Harry double-crosses Drake, leaving him stuck in the museum while also setting off all the alarms. So now you have to try to find some other way to escape, and you can manage to get out of the museum through the sewers, but when you exit you find yourself surrounded by armed guards.

RL: The characters that accompany Drake through the game are crucially important for creating an emotional reality for the player, and we think that it's this emotional reality that makes our game engaging. We use the characters that Drake interacts with to show different sides of his (often conflicted) character, and we work hard at every stage of the process – from their character designs, to our scriptwriting and performance capture processes, to the implementation of the characters in gameplay – to make sure that the people in our game are believable and nuanced in their characterization. We try to use techniques that are both narrative and interactive to set up and pay off situations that deepen and enrich the world of the game.

And I found the character interactions definitely helped flesh out the world and where you thought Drake stood within it. Three months later, you find that Drake is (still) in jail. Victor Sullivan (Sully) shows up to spring Drake. Sully is Drake's friend from the first game. Their friendship was called into question throughout that earlier adventure, but it all turned out to be a misunderstanding, and Sully is one of the few people Drake trusts.

RL: We think that Nate probably mostly trusts Sullivan, but I don't think he trusts him completely. The world that Drake and Sully exist in rarely allows for certainty about anything, and we try and use that to our advantage whenever possible, to heighten the mystery, wonder and romance of our game's world.

This is definitely taken advantage of as the reunion is complicated by the fact that Chloe is with Sully. As they dance around regaining some trust, it is revealed that Harry and his client (Lazarevic) have found Marco Polo's lost boats in Borneo, but have yet to find the Cintamani Stone. So, Sully, Chloe and Drake team up to try to go to Borneo to sneak the Stone right out from under Flynn and Lazarevic.

Off to the jungles of “Borneo” (Chapter 3), and in this part of the adventure you partner up with Sully. As you work your way into the jungle toward the camp, the stakes are raised as you now get into more deadly firefights with Lazarevic’s men. This is where you really get familiar with the combat gameplay mechanics with multiple encounters and a variety of weapons from which to use. At the same time, you’re also becoming more adept at traversing through the territory in which you find yourself. Chloe is acting as a double agent getting in close to help create a diversion and give Drake and Sully an opportunity to get access to all of Lazarevic’s notes, journals and plans (in Chapter 4, “The Dig”). This helps them realize that Lazarevic is off track in looking for the treasure. So, they have a chance to find it, as soon as they shoot their way out of the camp.

Stepping back for a second, this is where the story really aligns with action adventure movie blockbusters from the past, particularly *Raiders of the Lost Ark*. You can definitely see the similarities quite clearly, but it also helps you fall into the role of Drake. The familiar story beats give you a direction of how you should act if Drake is indeed the hero of this adventure. This in turn, aligns with your game goals as you play your way through the experience.

Back in the game, Drake, Sully and Chloe manage to find the resting place of the ancient survivors deeper in the jungle. They don’t find the Cintamani Stone though, instead they find the unique dagger (a Phurba) from the earlier scene on the mountain, which appears to be some sort of key to Shambhala which they now figure out is in Nepal. And then Chloe fulfills her double agent role twice. First it appears she turns Drake and Sully over to Flynn, but then it becomes clear that it was to help save them and gives them a chance to escape. And as they flee, we get a scene straight from *Butch Cassidy and the Sundance Kid* as Drake and Sully leap from a cliff into a raging river below and float away free and clear.

RL: We hope that we don’t draw on any preexisting narrative too much, and we are always walking a fine line between appealing to adventure stories from the past, whether it’s the more recent past of 80s action movies or the distant past of Robert Louis Stephenson, and approaching everything with a fresh eye that invigorates the characters and prevents them from feeling like clichés or types. It’s always a compliment to be compared to films as beloved as *Raiders of the Lost Ark* or *Butch and Sundance*, though!

From my perspective as a player, the familiarity of the story conventions helped draw me into my (or Drake’s) role within the adventure. Speaking of which, now it’s off to Nepal to try and find Chloe and the Cintamani Stone. At this point, we’re solidly into some rising action on the plot diagram with the major conflict coming into better focus (although I’m still not sure who I can trust or not). And we’re getting solidly immersed in the interactive experience. The last escapade gave you a lot practice

in gameplay (both combat and platforming) and at this point I've noticed I'm much better at both. I'm more accurate with my gunplay, and more strategic about taking cover. And I've learned to adjust the camera view to search around my environment to help find my way when I need to jump around and climb.

The experiences in Nepal last for several game chapters as we start with Chapter 5, "Urban Warfare," and it lives up to its title right away. As Drake is driving through the war-torn streets, it's apparent that the city is overrun with fighting. And we get to see a classic Naughty Dog gameplay sequence in which the perspective shifts and you have to run toward the screen. This is something they've done across many of the different games they created. It adds a unique control moment as everything is reversed, which adds an intensity to the gameplay as you have to adjust to the backward perspective and controls on the fly. In this case, Drake ends up running down an alley with a large military truck barreling after him. You have to run forward while shooting backward in order to cause the truck to crash as you flee from the wreckage in the alley. The switch of perspective makes it a challenging gameplay experience that adds to the cinematic action of watching as a truck comes bearing down on you. It's another great sequence that makes you feel like a hero when you survive (although truth be told it took me several tries before I did).

There are some other interesting gameplay twists that happen in Nepal. Right after the alley sequence, you're on your own for a bit before you find Chloe. So for almost the first time in the game, you're not buddied up with someone. This increases your immersion as you have to find your way on your own. Once you meet up with Chloe, the two of you work your way through the war torn city, traversing alleys and up and down buildings. There is a nice mix of platforming and combat as many of the buildings have been bombed or damaged, and there are soldiers and guerillas all around.

There's also an interesting story moment on the roof of a hotel that happens to have a pool. You're up there to scout for the right temple in this city full of temples, but you can have Drake jump into the pool, where he goofs around and jokes about playing the Marco Polo game. This shows a great level of attention to detail by the developers. Unlike many of the more sandbox, emergent games (like the *Grand Theft Auto* franchise) where players have an open world to wander around in, *Uncharted 2* is linear in progression, so you're always moving forward through the experience. But little moments like the pool scene open up the gameworld and make it feel fully fleshed out, and you're just moving through it on your adventure.

RL: It's always very satisfying when players call out this moment as enjoyable, because it was a particular labor of love for a number of us, including the actors who partly improvised the dialog and the game designer who carefully added the dialog to the game and made this implementation interactive – there are different

dialogue flows dependent on whether the player keeps Drake in the pool for a while or makes him climb out quickly. We even went so far as to re-jig our Trophy scheme at the eleventh hour, adding two Bronze Trophies: one for when Drake first jumps in the pool and yells “Marco”, and another one for the player who keeps Drake in the pool long enough for him to get Chloe to say “Polo”!

I’ve enjoyed how trophy schemes have developed to help track a variety of player achievements across a game, this provides players with another level of motivation to fully explore a game. And I really like how there are trophies for little narrative moments like these. It encourages me, as a player, to explore the world some more, which resonates well with the theme of game overall. And so, shortly after the pool, Lazarevic finds out that Drake is in the city, and sends out attack helicopters to deal with Drake. This leads to an amazingly cinematic gameplay sequence. You and Chloe are trapped high up in a building with soldiers chasing you from floor to floor, when a helicopter joins in the fight and starts shooting missiles at the building. As a player it was a confusing experience. I was in an office room using a desk as cover as soldiers entered the room, when the perspective started shifting and all the furniture and people started tumbling across the room as the building tilted. I wasn’t sure what was going on, but noticed I was sliding toward a window and could see that we were crashing toward the building next door. It all felt crazy, but I made a run for it with Chloe and we jumped through the window, landing in the adjacent building. And then it jumps to a quick IGC as Nate and Chloe turn back and watch the other building collapse completely. This is definitely an intense moment that made me feel like a hero. I was psyched to have survived (and actually managed to do it on my first try) and was impressed by how the designers created the gameplay sequence to line up with the story beats and enable me to perform like an action adventure hero.

RL: This sequence was very important for us – it was among the first of our major cinematic set pieces that we polished, and it showed off a system that represented an important technical leap forward for us: our Dynamic Object Traversal System. This system let Drake, and all his enemies and allies, use all of their moves on any arbitrary moving object in the world, and without it we couldn’t have realized either this collapsing hotel, or other emblematic sequences like the Train level. A system like this is pretty much the Holy Grail for character-action game designers, since it lets us do things we’d only previously been able to dream about, and it was incredibly difficult to implement, causing our programmers to change or touch almost every core system in the game. We felt that the sequence was very successful, and it inspired us to push ourselves ever further with our set pieces. It certainly seems to make an impact on players, and it was planned to punctuate the peak of action that this part of the game reaches.

What's important to consider is how seamless the playing experience was. It makes me realize that the technical challenges going into the Dynamic Object Traversal System paid off as I didn't even notice them (which meant I felt like I was able to play the set piece (and feel like a hero) even in the chaos of a collapsing building. Staying with this concept of being a hero, shortly after escaping the collapsing building, Drake and Chloe run into Elena Fisher and a cameraman (Jeff). Elena is a gutsy reporter from the first *Uncharted*, and through those earlier adventures Elena and Drake developed complicated feelings for one another. Chloe argues to leave them on their own, and Elena and Jeff seem a bit wary of joining Drake and Chloe. Based on previous experience, Elena assumes that Drake is up to something (and most likely it's no good). Drake insists that they could use their help, so he talks everyone into sticking together. What I liked about having this short story experience shortly after feeling like such a hero jumping from a collapsing building, is that it underlined for me that being a hero isn't just about those feats of derring-do, it's also about doing the right thing. And you see Drake stepping more into the role as a hero in this moment.

So, you now have a party of four, deep in a city surrounded by enemies out to get you. As you make your way through the violence around you, Elena reveals that Lazarevic is a psychopathic war criminal, and she's here to expose his war crimes to the world (so now you know who you're up against). The group works its way to the right temple, and then there is some amazing environment puzzle solving within in the temple that requires a lot of platforming by Drake as he uses his trusty notebook and works to unlock the clues found within and beneath the temple (Chapters 8 and 9). Once you successfully negotiate the puzzle platforming, and use the Phurba as a key, you're shown the location of Shambhala deep in the Himalayas.



Of course, Lazarevic's men find you, and you have to fight your way out. In the ensuing firefight, Jeff's get wounded pretty bad, and Drake has to help carry him away. This adds a gameplay wrinkle as well since Jeff really slows you down, so you have to work at a much slower pace. Again, this is combined with a story element as Chloe argues to leave Jeff, but Drake insists on carrying him. And once again, it looks like Chloe turns on you, as Flynn shows up, and we finally get to meet Lazarevic. Although it looks like Lazarevic suspects Chloe and has her taken her away to the train. He then kills Jeff and threatens Elena in order to get Drake to share what he's discovered. Once he has the information, Lazarevic leaves and asks Flynn to kill them. Elena and Drake manage to get away and head to the trainyard to rescue Chloe from Lazarevic.

RL: I'm not sure that I agree with your characterization of Drake at the meeting with Elena and Jeff as heroic, at least not at the start, but this scene is certainly a pivotal one for him. We use this moment to reset the rhythm of the action, and we do it somewhat at Drake's expense (and perhaps partly to his credit).

For a start, Elena openly challenges Drake about the nature of his quest, saying, "So let me get this straight: you're competing with a psychopathic war criminal for a mythological gemstone?" In a single sentence we say everything we need to about the breakdown of any romantic relationship that may have formed between Nate and Elena at the end of the first *Uncharted* game, and we characterize Nate, rather negatively, as both a criminal and a dreamer. We've grounded our story in the context of the real world (or at least, a real world) and we've moved both Drake and Elena's characters forward a step in their relationship.

Secondly, this is the first time that Elena, a woman for whom Nate may have had deep feelings, meets Chloe, Nate's sexy sort-of current lover. Amy Hennig, our Creative Director and head writer, says that this scene was one of the most difficult to write in the whole game, and commentators have paid us the compliment of remarking that many games – indeed, many films – would have played this scene badly, perhaps showing Drake as swaggering or cocky as his conquests past and present cross paths, and leaving all the characters stuck playing out banal stereotypes that do nothing to honor them.

But instead Drake seems awkward and embarrassed – it betrays a kind of vulnerability that I think is appealing, and also indicates that he's not just a regular Joe in terms of his sloppy fighting style and frequent clumsiness: he can be conflicted and self-conscious, just like the rest of us. The women are confident and funny in counterpoint to Drake, and even seem to rather like each other, even in the midst of a difficult situation.

So I think that the scene works tremendously well, not just to tamp down the pace of the game after such an intense crescendo of action (and before a relatively sedate sequence of exploration and puzzle solving in the Temple complex), but also to shed some new light on the characters and the relationships between them, and to bond the player to Nathan Drake as a likable guy with some serious flaws.

I would agree, that within this scene Drake isn't necessarily heroic. But for me, having him being awkward also read as a moment where he was having to assess what he's doing and why he's doing it, and that got me thinking that in order for Drake to become a hero, he has to figure out how to do the right thing. We're now at Chapter 12, and looking at the plot diagram, we're well into the conflict of rising action, so this mirrors the conflict Drake is displaying in this scene as well. I'm feeling empathy with the characters and want Drake to help thwart Lazarevic and save the day. In terms of interactivity, I'm solidly immersed in the gameplay. I'm at the point where I don't even have to think about what buttons to push. For the most part, I'm able to maneuver Drake as I need to, and now the designers do a nice job throwing another wrinkle into the mix.

With Elena's help, and a lot of improvising with many different vehicles, you're able to get onto the train for a thrilling extended action sequence in Chapter 13. Plus if you recall, the game began on a wrecked train on a snowy mountainside, so even though you're down in the valley, this very well might be that train since Lazarevic knows Shambhala is up in the mountains. Now Drake has to work his way through, under, over and around the train as he makes his way forward toward Lazarevic, Flynn and Chloe. The train is a limited spatial environment so you have to be careful (plus you can fall or get knocked off). And this train is loaded for war; there are soldiers, weapons, tanks and helicopters. This is one of the longest combat sequences, although because your goal is to get to the front of the train, there is a lot of platforming as well. And the combat is mixed up as well, as you have to take on soldiers in train carriages, on top of the train, on the sides of the train as well as helicopters flying beside the train. Plus the environment the train is moving through comes into play. You have to watch out for, and avoid, signs near the side of the train and also for signals above the train. And then the next thing you know you're in a long tunnel and you come out in the mountains (uh-oh).



Drake finally finds Chloe, who asks him to leave. As they argue, Drake gets shot by Flynn. Then Chloe starts arguing with Flynn and Drake is able to run to another carriage followed by some soldiers. Wounded and trapped, Drake takes aim and shoots some propane tanks, setting off some huge explosions, and causing a massive train wreck.

We're now back at the same sequence that started the game. Recall, the game up to this point has essentially been an extended flashback from the start of the game. And once again, we have to climb Drake back out of the train again. And then fight your way through the exploding wreckage and surviving soldiers out to get you. You manage to get out and away, but now you're basically wounded and lost in a blizzard on a mountain. Drake collapses in the snow and someone walks up to him as he loses consciousness (again).

RL: It's good to read your remarks, here. It was easy for even us on the team to forget that nearly the first half of our game takes place in flashback (when viewed in a certain context, at least).

Non-linear temporal flow is a hallmark of some of my favorite films, from *Rashomon* to *Lola rennt* to *Memento*. Indeed, discontinuity of space and time, bridged by the edit, is a character of nearly all film.

I think that, partly because of pragmatic issues to do with camera control in third-person character-action video games, and partly because we perceive a relationship between digital games and digital simulations, both developers and players are somewhat over-focused on maintaining temporal and spatial continuity in narrative video games.

Few games have taken advantage of the opportunities offered by thinking about time and space as the plastic, collapsible continua that they are in cinema. When we remember that games are different from simulations, new creative possibilities open up, and I'm happy that the talented team members that came up with the temporal sequencing of our game did so.

As a player, the non-linear way the story is revealed created a more complex set of expectations in terms of how I was experiencing the set pieces across time and places. In the back of mind, I always had this feeling that I was heading for a catastrophe on the side of the mountain, so I was paying attention to the choices and consequences of Drake's actions. Moving forward, Drake comes to in a small hut with a small girl looking at him, and the man who rescued him. The man speaks to Drake in Tibetan, which Drake doesn't understand, but he notices that his wounds have healed. We're now in Chapter 16, it feels like we're both literally and metaphorically getting close to reaching the climatic moment in the story. And I'm starting to feel invested in the gameplay experience. I want to find Shambhala and keep Lazarevic from ruining it.

The Tibetan man beckons Drake to follow him out of the hut. Which starts a short sequence that has a similar effect to the earlier game of Marco Polo in the pool. As Drake exits the hut he finds himself in a Tibetan village, he can follow after the Tibetan rescuer, or walk around and play soccer with some kids and pet a yak. Again, what's nice about these little moments is that you don't have to do any of them, but if you do, you can feel more of the world in which you find yourself. Also, in talking with Richard, he related how they designed these particular moments so that players couldn't go around and punch the villagers. Instead, those familiar button presses lead to Drake offering handshakes or waves of hello since Drake doesn't speak Tibetan.

RL: Indeed, the idea for those hand-shaking interactions emerged directly from playtesting. I was in charge of the "Peaceful Village" level, and I noticed that about half of our playtesters ran straight up to the villagers and threw a punch at them when they arrived in the Village for the first time. By talking to them afterwards I worked out that they weren't really trying to hurt the villagers – they wanted to test the bounds of our system, by attempting an interaction with the world.

Experimentation of this kind is a fundamental aspect of the way that players relate to video games – they make hypotheses about the game and then test them out, and by doing so they learn the rules of the game and how to succeed. Video game players are a lot like scientists investigating a world in this regard.

We'd initially set up the villagers so that if Drake threw a punch at them, nothing happened. Games that reward experimentation on the part of the player with reactions that are interesting or entertaining are generally considered better

than those that don't, and so we decided to make the extra effort to add a set of animations to show Drake and the villagers shaking hands or waving to each other, should the player try to throw a punch at a villager. I'm still very grateful to the animators and programmers who expended elbow grease on this.

It's a moving experience whenever I hear that a player was delighted when they found themselves shaking an old man's hand or patting a yak on the nose. It feels like the realization of a playful dialog between the player and me, the designer.

And building on the earlier scene with the pool, players have been encouraged to explore, so it's likely that they'll encounter these unique interactions, which again enhances and expands the feeling of the world in the game. Back in the village, the Tibetan rescuer leads you into a house, and lo and behold, there's Elena (who speaks Tibetan to boot!). She followed the tracks from the train wreck and found Drake. Elena introduces Drake to Karl Schafer, an older man who went on an earlier expedition to find Shambhala. Schafer introduces Tenzin (the man who rescued Drake) and shares some advice and warnings learned from his experiences, and lets Drake know that the phurba is the key to Shambhala, so Lazarevic is going to be coming for it. He also relates how the Cintamani Stone will give Lazarevic great power to rule the world. During this conversation, Drake wavers about doing anything more, he feels like it's all been a big mess and actually says that he's through playing the hero. Elena argues that they should try and stop Lazarevic, and Schafer offers to show Drake proof by having Tenzin take Drake into the mountains to the remains of Schafer's earlier expedition.

RL: In terms of Joseph Campbell's monomyth as reconfigured by Chris Vogler in his screenwriting book, *The Writer's Journey*, this is a moment where Drake makes his final and most emphatic refusal of the call to adventure. It's a low point for Drake's character, and an important point for us, as it helps us show that Drake isn't a straightforwardly crusading altruist. He doesn't want to get killed in the service of some abstract, even ridiculous-seeming, quest. His world is a serious, dangerous place – just like ours – and he's a sensible guy – someone just like us. Having Drake pass through this moment – where he simply can't accept that he's a hero – grounds his character in reality and helps us to relate to him.

This underscored how Drake really struggled with doing the right thing (which is more important than "playing the hero"). So, Drake now buddies up with Tenzin and heads off into the mountains for Chapters 17 and 18. You make your way into a mountain cave system, where you start finding some of the dead men from Schafer's expedition. There is a lot of platforming gameplay here with Tenzin as you make your way through the icy cave system. You also start getting hints that there is some sort of monster in the caves with you, and then you're attacked by a ferocious yeti. Together with Tenzin, you are able to fend off the beast, and continue deeper

into the caves. Soon you come upon a huge underground area with large statues. This leads to another intense sequence of puzzle platforming as you work your way through the environment with Tenzin. They then discover more dead men, and find out they were Nazis after the Tree of Life and immortality. And it's apparent that Schafer killed the Nazis to prevent them from succeeding in their quest.



This discovery significantly raises the stakes of our current adventure, and it is followed with an attack by a bunch of the yetis. So Tenzin and Drake have to fight them off and escape by activating an ancient elevator that gets them above ground away from the monsters. From their perch in the mountains, they can see that Tenzin's village is being attacked.

So they rush down into the village and into Chapters 19 and 20. They find Elena, who confirms that Lazarevic has found them. Tenzin is worried about his daughter and Elena tells them that she is hiding with Schafer, before telling Drake that this terrible destruction that has been brought down on the Village is all their fault – people are dying because of Drake and Elena. Drake and Tenzin head out to find Schafer and Tenzin's daughter, only to run into a tank, which then pursues them through the village. This leads to an out-of-control action sequence as you and Tenzin play cat and mouse with the tank. One moment stands out in particular for me, it reminds me of the scene in the *Bourne Ultimatum* in which Bourne is chasing an assassin through the medina in Tangiers. Except in this game scene, I'm running with Tenzin, trying to keep some houses between us and the tank. And there's this intense moment, when the tank actually crashes through the walls of the house that we're running through.

In this moment, a quick (all of a couple of seconds) IGC shows Drake getting bowled over by crashing tank, but the camera angle during the IGC is such that I'm instinctively trying to guide Drake out of the room, so when I do regain play

control, I'm already heading in the right direction. This is some very clever design as it makes me feel as if I'm playing through the short IGC, while also using the IGC to up the intensity of the moment. I've talked to some friends who wondered if they were actually in control at all or not, but for me, it all lined up. Yet another moment where I felt heroic in performing some crazy feat of action.



Drake is able to take care of the tank finally, and Tenzin finds his daughter, but Lazarevic's men have taken Schafer away with them in a convoy of trucks. Drake and Elena manage to hijack the last truck and take off in pursuit and into Chapter 21. This leads to a gameplay sequence somewhat like the train, but ramped up a level, as you now have combat while also jumping from truck to truck across crazy terrain.

RL: This long sequence, leading from the peaceful village to the ice caves to the frozen temple and then back to the now-besieged village is a pivotal section of the game. As you've identified, there's a lot going on there, in terms of cinematic gameplay – sequences where complex set pieces play out almost entirely in gameplay, with the player directly in control of Drake nearly all the time.

We switch things up a few times, using moments of constrained gameplay in a narrative way – like the climax of the first encounter with the 'yeti' – and we pull out every single trick in our bag to guide and sometimes push the player from A to B to C, using 'characters' like the tank or the transformed village to effect moment-to-moment emotional change in the player. We even sucker-punch the player a second time, having already brought Drake low by his near-refusal to continue with the quest, by having Elena blame him for the awful transformation of the formerly idyllic community.

But Tenzin occupies the heart of this sequence, of course. Drake and Tenzin do not share a common language, and that gives us an opportunity not only for a few gags, but also for the player to become bonded to this unusual, dynamic character almost entirely through their collaborative gameplay actions. As Tenzin sets up ropes for Drake to swing on, boosts him up to otherwise inaccessible ledges, and catches him as he is about to fall to his death, we hope that a connection is slowly growing between Tenzin and the player (or Drake, by proxy) in a way that the player barely notices.

When Tenzin's village comes under attack – and his small daughter's safety is in doubt – we hope that the groundwork we've carefully laid gets activated, and that the experience of fighting through the war-torn village is charged beyond what might expect from even the most epic, awesome battle scene in another video game.

Interestingly, I really wasn't thinking about Tenzin specifically during this (he was just another buddy as I was playing) but I really felt the responsibility of causing the attack on the village and putting everyone's lives, especially Tenzin's daughter, at risk.

RL: I should be clear in saying that the effect we were trying to have wasn't one that the player would, or should notice, and it is interesting that you weren't really thinking about Tenzin during this sequence. Either we did our job really well, or what we did with Tenzin didn't make much difference! I do think this sequence would have had far less – or perhaps just different – emotional impact if you'd played through the Ice Cave with Chloe or Elena.

I would agree that playing through with Tenzin gave it a better context in which to have that emotional impact. Again, I felt like I needed to step up and do the right thing. Back in the game, Drake and Elena end up getting forced off the pass and over a cliff. The soldiers assume they've died, but Drake and Elena (of course) survive and climb up and follow the convoy on foot to a monastery. Spying from afar, they see the Lazarevic has Schafer. So now in Chapter 22, they sneak into the monastery to rescue Schafer and stop Lazarevic. This requires a lot of combat and platforming, as Drake and Elena work their way through the monastery, fighting off soldiers as they go. They get to Schafer in Chapter 23, but they're too late. Schafer has been shot and left for dead, and Lazarevic has the phurba and is off to find Shambhala. Schafer tells them that the monastery hides the entrance to Shambhala, and as he dies, he implores Drake and Elena to stop Lazarevic.

This further underscores how high the stakes are in this adventure. So Drake and Elena decide they've got to find a way to save the day. As they try to pull together some sort of plan, they notice that there are yetis loose in the monastery as well, adding to the challenges ahead of them. They split up so Drake can get the Phurba

and Elena can find the secret entrance. Drake manages to find Chloe with the Phurba (with Lazarevic and Flynn nearby). Using the Phurba and his notes, Drake is able to solve a tricky environmental puzzle to find the secret entrance which is cleverly hidden in plain sight.

They manage to sneak into the entrance and into Chapter 24. Of course, Lazarevic manages to trap them in the entryway. Lazarevic threatens to kill Chloe and Elena if Drake doesn't help him. Under this coercion, Drake solves the puzzle that opens the entrance and leads to some puzzle platforming with Flynn and some combat with some yetis as well. Lazarevic enters and kills the yetis just as they're about to kill Drake and Flynn, and in looking at the corpses they discover that they're actually men, guardians of Shambhala (granted really strong men who are extremely hard to kill). They now finally enter Shambhala, which is a large ancient city overrun with greenery, and they're immediately attacked by more guardians.

RL: Chapter 24 gave us an opportunity to do something we hadn't ever done before: a sequence of play where Drake is accompanied by someone with whom he is in an antagonistic relationship. Drake and Flynn still need to cooperate to complete the sequence, but we had a lot of fun with the banter between them as they travel through the area, and we hope it is another technique that helps raise the emotional stakes as we race towards the game's climax. We also took the opportunity to add in another bit of finesse interactivity, as anyone who decides to take a swing to Flynn's irritating grin will discover.

It does add a tension having to work with Flynn in this scenario (although I didn't take a swing until you mentioned it and I played through the sequence again). In the following confusion of entering Shambhala, Drake, Elena and Chloe escape into Chapter 25. Here you have combat with both soldiers and guardians as they try to beat Lazarevic to the Cintamani Stone. Drake is now adamant about setting things right (and saving the world). He's become a hero, and it's up to you to succeed and save the day. As they make their way through the ruins of the city, they notice more of the blue resin on trees, and when it's shot it explodes. This becomes a way to clear a path as well as a weapon to use against others. They work their way to a temple, and solve some puzzle platforming which leads them to the Cintamani Stone which is embedded in the Tree of Life. Drake starts worrying that something is not right. He then figures out that the Stone isn't a gem, but is made of resin, that can be eaten to gain immortality (or at least you're pretty near invincible).

They then spot Lazarevic by the tree, but before they can go, Flynn shows up, mortally wounded and holding a grenade with the pin pulled. He sets off the grenade, killing himself, leaving Drake and Chloe woozy, but severely wounding Elena. Chloe ends up carrying Elena, while Drake goes to stop Lazarevic, and into the final Chapter of the game.

At this point in the plot diagram, we are firmly in the climax of the story, we're out to stop the villain or die trying. Which gives you a clear sense of where we are in the interactive diagram, deeply invested and committed to successfully finishing this experience.

Drake moves toward the Tree of Life and see Lazarevic drinking from the pool of sap. Drake shoots at Lazarevic, but the bullets don't see to have any effect, and he now comes after Drake. In gameplay terms, we're in the final boss battle, the climax of the story. You then have to figure out how to kill Lazarevic (hint, use the exploding blue tree sap) and once you've managed to catch him in enough explosions, he weakens and falls.

Drake approaches Lazarevic, and Lazarevic calls him out on how similar they are (look at how many people Drake has killed, just today even). But in the end, Drake doesn't kill Lazarevic in cold blood: he leaves him for the guardians. In this moment, Drake makes the right choice and acts as a hero. And now, of course, the whole city starts collapsing. So, Drake goes and finds Chloe and Elena, and they manage to narrowly escape. You have a great scene where the perspective shifts again, and you're running toward the screen on a bridge while everything collapses around you. This is another effective use of the perspective as you really get to see the chaos all around you as you try to stay just ahead of it at all and escape (to be honest it took me a couple of tries) as we fade to black with Drake holding Elena, hoping she'll survive.

And now we're in the denouement, the active gameplay is over (we won!) as we return to the village and see Drake standing over a grave, at first it's not clear if this is Elena's grave, but it turns out she did survive. Chloe says her goodbye (they joke about playing the hero) and she encourages Drake to tell Elena about his feelings for her, and Sully shows up to help with the recovery. The scene, and the game, comes to an end with Drake and Elena joking about how much he cares about her, as the boy (might actually) get the girl.

Meaning and Mastery

With that, we've completed the narrative experience of *Uncharted 2*. There is the multiplayer gameplay (which I have yet to experience) but I want to discuss how the gameplay controls improved in this game as compared to the first *Uncharted*. As I mentioned at the start of this essay, I actually played a bit of the first game initially, then played through all of the second, and then I tried to go back to finish the first. But Naughty Dog didn't rest on their laurels between the two games. The gameplay controls have been refined and improved (in terms of responsiveness and accuracy in both combat and platforming). So after playing all the way through the second

game, it was hard to go back to the first game with the older controls. Interestingly, in talking with Richard about this, he noted that the development of the multiplayer portion of the second game played a big part in how they improved the controls.

RL: When we first announced that *Uncharted 2* would have a multiplayer component, some internet-posting fans of the first *Uncharted* were concerned that the single-player game of *Uncharted 2* would suffer as a result of the fact that our attention would be divided between two different parts of the game. As Drew says, it turned out that multiplayer actually *helped* our single-player game.

In order to make the online multiplayer game as on-the-button responsive as a great multiplayer game needs to be, we had to tighten up our player mechanics and make them even snappier than they'd been in *Uncharted: Drake's Fortune*, and this fed back directly into a better feel for single-player, which used the same executable (i.e. the same game code).

And this made for a more playable game from my perspective, as I felt that I had better control of Drake's actions throughout the game. At this point, I want to take a step back to discuss how the meaning of the game came through a mastering of the gameplay mechanics across the experience of the story. In a well-designed game, the experience is kept pleasurably frustrating; it's not too easy, nor is it too hard. Ideally you get increasing challenges followed by a reward, and possibly increased abilities that make it a little less challenging for a bit, but then soon ramps up again.

Crawford (1984) refers to this as a smooth learning curve in which a player is enabled to successfully advance through the game. Costikyan (2001) notes that "play is how we learn" and move from one stage to the next in a game. Csikszentmihalyi's (1991) notion of flow, in which a person achieves an optimal experience with a high degree of focus and enjoyment, is an apt method for discussing this process as well. And Gee (2004) notes that well designed games teach us how to play them through rhythmic, repeating structures that enable a player to master how to play the game. In terms of unit operations, the units are being juxtaposed well so that the meaning and mastery builds as you play. I believe this creates an aesthetic performative experience unique to games.

In *Uncharted 2*, the developers do a nice job of striking this balance, on three levels. First of all, the game has a fairly even mix of the two major types of gameplay (combat and platforming) so that you are continually doing one or the other (and often both) throughout the game. Second, there is a good flow to the increasing level of difficulty across the game. It builds on your successes, offering more daunting challenges. And finally, it blends the narrative and gameplay quite seamlessly. The clever use of IGCs throughout the game helps create the feeling of being an integral part of an amazing action adventure. Combined together, the overall effect is one in which you start out as a bit of a bumbling ne'er-do-well and as you play through this experience you become a hero who saves the day.

RL: Thanks very much for the kind words, Drew, and for the favorable comparisons to the academic work around this subject. We worked hard to create a structure for our game where the peaks and valleys of its respective narrative and gameplay rhythms would be well-aligned, creating synergistic effects for our audience of players.

We tried to create patterns of rhythms that would be irregular enough to avoid the repetitive feelings that some games suffer from. We feel like we did pretty well in this regard, with the exception of a sequence of gameplay in the Monastery that doesn't have quite enough story beats to support the ongoing gunplay action, and where the pace of the game starts to flag a little.

We also worked hard to introduce the game's mechanics in a way that would allow the player to learn about them without ever feeling like they were being taught something. Our usual technique was to couch the 'tutorial' in terms of an action sequence, the opening train wreck 'climbing lesson' being a good example. This fed into a ramp of action where we offered successively more complex challenges, building on the player's previous experiences and the skills they'd acquired from them.

We do our best to plan these things in advance, but there's also a good deal of iteration and trial-and-error involved. We try to constantly put ourselves in the mindset of someone who has never seen the game, and we do a lot of playtesting with people who haven't played before, to help us find and fix problems.

In truth, we use a lot of gut instinct, too. As well as the conscious approach we try and take to these issues, there's also a little bit of something intangible and unpredictable involved. So for me, when everything comes together – as it did for *Uncharted 2: Among Thieves* - it makes the creative process all the more satisfying.

Now that you mention the Monastery, that actually still sticks out in my mind as the longest gunfight (and I recall my wife mentioning it as well). This leads us into some ideas on what good game design can do to create an engaging experience.

Ludic Narrans

A good game can and should teach players what they need to know and do in order to succeed. Ideally, the very act of playing the game should enable players to master the gameplaying units of the gaming situation so they can successfully master the rising challenges and complete the experience. If a game gets too hard, too easy, too confusing, or if it just is too long and seems never-ending, players may not finish. For these reasons and more, players can reach a point where they

drop off the curve and lose their sense of engagement, becoming bored, frustrated and tired of playing the game. But if a game enables players to stay on course and continues to hold their attention, players will advance to a point where their immersion develops into an investment in which they truly want to successfully complete the game experience. And when there is a lack in the balance of the interactivity, the story can actually help keep the player engaged in order to move from involvement, through immersion to investment and successfully complete the game (Davidson, 2008).

RL: We've noticed from the online data that we gather that about half our players complete the single-player, narrative part of *Uncharted 2*. This figure is quite high for a contemporary video game, which famously have poor completion ratios. We'd like to drive this number higher though, in future.

This gets me thinking about the various reasons people play games (since completion rates are normally low) and how some games are designed in such a way to help make this happen. *Uncharted 2* is an example of how a game can combine gameplay and story together in a resonant manner. As I mentioned at the start of this essay, my wife actually enjoyed watching me play through the whole game because she engaged with the story experience, but only if I were playing on the "Easy" difficulty level (the levels are Very Easy, Easy, Normal, Hard and Crushing). I usually play games on normal, but I sometimes switch to easy depending on how a game fits my skill level as well as the amount of time I have to devote to playing games. Similarly, I will sometimes use GameFAQs when I get stuck for a while (again, this depends on the amount of time I have to play the game). What was interesting about *Uncharted 2* was that I started on normal and was doing fine, but the firefights took me long enough (due to the number of enemies or the number of times I would die) that my wife would lose interest in watching as she lost the thread of the narrative, and didn't have fun watching the seemingly endless firefight. But if I set it on "Easy" this enabled me to advance through firefights more readily, which kept the story beats coming at a pace that was enjoyable for her to watch.



In talking with other colleagues and Richard, it seems that a lot of people enjoy watching people play this game. I think this says a lot about how well it does blend the two together, and how games are becoming an even more performative medium, akin to theatre or sports. *Rock Band* and games on the Nintendo Wii are other examples of games that are fun to watch. It seems as if designers are becoming more cognizant about creating games that enable performative experiences that are fun to play and to view.

I think it has been useful to consider this game (and games in general) from a variety of perspectives. In doing so we can, as Marie-Laure Ryan (2001) notes, observe features that remain invisible from other perspectives. Engaging this medium of videogames, we tell our stories of the game as we relate the varied and visceral experience of the games we play. Noah Falstein (2004) discusses the “natural funativity” of games, how they are activities that help us live in the world. And stories are how we stitch together a continuity of our experiences. They are our “mystories,” our stories that enable us to understand the world (Ulmer, 1989). Narratives are how we convey the perspective of our experiences (Meadows, 2002). So, we are both *homo ludens* and *homo narrans*, or as Greg Costikyan (2001) states, “Play is how we learn; stories are how we integrate what we’ve learned, and how we teach others the things we’ve learned ourselves through play.”

Now, in following the idea that humans begin life in a pre-linguistic consciousness as babies, it seems that we start solely as *homo ludens*. We literally learn everything through play as we interact with the world. And then we learn language, and a new phase of consciousness begins, one that dominates, shapes, and constrains our worldview for the rest of our lives (Huizinga, 1950). We are now *homo narrans*, we discursively talk about what we play, what we learn, what we feel, believe, think, etc. (Schank, 1995). But being *homo narrans* does not erase our foundational *homo ludens* character; we are always already *homo ludens*, it’s just now we talk about it.

I believe that games are an interesting medium, because there are definite para-linguistic activities involved, meaning is conveyed through gesture, space, color, sound and activity and agency. And these all can combine into engaging aesthetic experiences. I think one of the reasons these experiences are so compelling is that they enable us to tap more directly into our pre-linguistic *homo ludens* consciousness as we play them. Of course, we then step back and talk about it, which engages our discursive *homo narrans* consciousness. Hence, ludic narrans, playful stories (Davidson, stories in between, 2008). I bring this up because I believe *Uncharted 2* is a good example of a playful story.

Playing Well

On reflection, I think the dual approach of analyzing the narrative plot and interactive levels enabled me to show the moments in this game in which units of both elements were working together to truly engage me in the experience. It was also a useful method for exploring moments throughout the experience that didn't work as well as they could have. Overall, the story development and the rhythmic gameplay help players understand the gaming situation, the "combination of ends, means, rules, equipment, and manipulative action" required to play through the game (Eskelinen 2001). That said, I kept my analysis with both diagrams at a general, high-level progression of the plot and the stages of interactivity. I think this was useful, but I also believe it could be interesting to get even more granular with both diagrams and really dig into units that show the details of the diversity of peaks and valleys of interest curve in the development of the plot of the story as well as the moments of engagement, disengagement and reengagement that occur during the progressive stages of interactivity. I think both macro and micro perspectives would be worthwhile to pursue in analyzing and interpreting interactive experiences.

RL: As we create and playtest our games we gather metric data about how long our playtesters take to travel between the game's automatic save points, and the numbers of attempts - how many times each player dies and restarts - in each of these intervals. We look at the maximum, minimum and median values for these data, and doing so helps us to discover potential problems with the game - places where some aspect of the game is making it arbitrarily or needlessly too difficult (or, more rarely, too easy).

These data can also be viewed as a kind of intensity chart for the game, with peaking median attempt counts denoting places where the game reaches a crescendo of challenge. It's a crude method of visualizing the data, but it does help us ensure that the plans we've laid, in terms of the rhythms of play we've attempted to present to the player, are bearing the right kind of fruit.

As new technologies appear that gather biometric data, like pulse rate, galvanic skin response, and even EEG activity, to interrogate the player's biological state and attempt to make inferences about their emotional state from that data, we will have even more opportunities to confirm that the experience we've crafted is having the affect on players that we intended.

However, planning and designing an experience like that of *Uncharted 2* will probably remain a craft that relies partly on our experience as designers and players, partly on our skill as craftspeople and storytellers, and partly on what our gut instinct tells us, for the foreseeable future.

This helps summarize what we've been exploring in this paper, how the meaning of playing a game is designed and experienced, and how a game can be well played in two senses (Davidson, *Well Played*, 2008). Lev Manovich (2001) notes, when engaging new media (or playing a game), we oscillate "between illusionary segments and interactive segments" that force us to "switch between different mental sets" demanding from us a "cognitive multitasking" that requires "intellectual problem solving, systematic experimentation, and the quick learning of new tasks." Together, an aesthetics is formed out of the game design and the experience of playing through it. So, when the units of story are effectively intertwined with the units of gameplay, the rising action of the plot can parallel the rising challenges of the gameplay, and enable us to have a compellingly engaging experience. Overall, *Uncharted 2* does an elegant job of combining its narrative and gameplay to provide a well played and fulfilling interactive experience.

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*The answer for me was,
of course, both.*

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MATT MCLEAN

MASS EFFECT: LEVERAGING A SCIENCE FICTION CHILDHOOD

In 2007, video game developer BioWare released *Mass Effect*, a science fiction action game that went on to garner a number of top game awards for its absorbing storytelling and cinematic gameplay. Its successor, *Mass Effect 2*, was released early in 2010 to rave reviews, making its way to the top of many game-of-the-year lists. As a fan of science fiction, I was immediately intrigued by *Mass Effect* and its promise of an interactive space opera.

At the time of this writing, I've played at least two hundred hours of *Mass Effect* across both of its video game incarnations. As a gamemaker, I was intrigued by my own behavior in that I'd often pass up playing another game – even that shiny new purchase - in favor of putting more time towards *Mass Effect*, a series of games I'd already played thoroughly. One reason I did this was because I had a limited time available to play video games and I mentally viewed the decision as a better or more satisfying way to spend that time. In general, I wanted to return to the world of *Mass Effect* on a more regular basis. I began to wonder why this was the case as there are certainly other titles out there worthy of my play time.

I've always been something of a science fiction nerd. When I think back on my childhood, it was full of detailed spaceship drawings, imaginary playground games that transformed structures into space stations and shuttlecraft, and hours spent reading novels by Arthur C. Clarke or watching episodes of *Star Trek*. I was fascinated by the idea of leaving Earth on a daring adventure to other worlds, meeting all kinds of people and creatures on the frontier of known space. At age 24, playing *Mass Effect* rendered this boyhood desire more clearly than any other interactive experience I had encountered. As Commander Shepard, I was an experienced space commando on a state-of-the-art ship, fighting or talking my way through any number of exciting situations and leading a squad of aliens and humans on a quest to save the galaxy. The game tapped directly in to the worlds that occupied my time as a kid and a teenager.

When I was younger, there were two basic tenets of my imaginary games in space: there was going to be fighting, and there was going to be exploring, which are, of course, the core experiences found in the *Mass Effect* series. The first game takes on the responsibility of introducing a large, detailed world and focuses on fostering

a sense of awe and vastness, encouraging exploration. I used to spend hours building space stations out of Legos and simulating dramatic fly-bys – a feeling that was instantly re-created in the games by the reveal of the epic Citadel space station, nestled deep within a picturesque nebula. The limitless potential for discovery and the typically expansive scope of the future of humanity had always captured my imagination as a kid, and continues to do so today. Combat was an important part of the game, but it became more so in the award-winning sequel, which by contrast was fast-paced and designed around creating intense situations. Whether I chose to be a soldier or a manipulator of *Mass Effect* fields (known as a biotic), or some combination thereof, *Mass Effect 2*'s combat was polished and exhilarating, letting me feel like the hardened space warrior I had often imagined on the playground.

One thing my imaginary experiences shared in common was the assumption that a vast universe existed in which my adventures took place. The details weren't important – the fact that I believed it to be there as a backdrop was. In the same way, the core exploratory and combat elements of *Mass Effect* are supported by the depth of a consistently visualized and interesting universe - complete with cultures, politics and technology. The player comes into contact with this world simply by virtue of moving through the game and story, but there is also a rich backdrop that the player can explore by accessing their in-game 'codex.' Containing information on everything from weapons to cultural customs, the codex is automatically updated with information throughout the game, so if, for example, a particular planet is mentioned in conversation, it's easy to refer to that entry without requiring lengthy exposition from the characters. This completes the illusion that Commander Shepard knows enough about galactic culture to get by in conversation while allowing the player to access more detailed information at their leisure. Even if the player rarely accesses the codex, it plays an important role in letting them know there is an extensive galaxy of different species, customs, technology, planets and politics that underpin their interactions. The conviction and confidence of that world perpetuates in other parts of the games, grounding the story and character interactions in something that feels quite tangible. *Mass Effect* doesn't require that the player be interested in the details, but puts forward the important effort to make sure the details are still available. Additionally, the consistency of that world makes it accessible and easy to understand.

That accessibility also extends to character interactions in the game. Shepard's squad is composed of a variety of species, and they learn to work together as a team in order to accomplish great things. By having a wide range of cultural backgrounds interacting with each other and the player, the depth of the game increases a great deal. The player now has access to the personal stories of each of the teammates, all characterized not only by their personalities but by the extra dimension of their cultural backgrounds. Indeed, prejudice between races is one of the themes of the games. While the same depth could be approached with a multi-cultural, all-

human crew, the idea of working with alien crew members taps directly into the fantasy of the space opera. Players who share an enthusiasm for science fiction adventures thusly find another, more personal means of learning about the game world. The *Mass Effect* games embed these interactions further into the world by making sure that the choices the player makes in conversation can directly affect the characters with whom they interact, allowing the player to participate in individual character arcs.

The absorbing fantasy of *Mass Effect*, perfectly attuned to my nerd frequencies, also supports a feature that many games aspire toward and often fall short of grasping: replayability. The completeness of the world and interactions foster the same experience as re-watching a favorite film or thumbing through a beloved, dog-eared copy of a book or graphic novel – the pleasant rediscovery of places, characters and scenes. In my teenage years, I would often repeatedly immerse myself in fictional worlds, consuming every bit of information I could find. As adults, we like to think that we grow out of this type of intense study when it comes to the imaginary, but television shows like *Lost* demonstrate that many of us love to explore mystery and mythology. The *Mass Effect* games take this a step further by inviting the player to participate and giving them a choice in how events unfold. This, however, is the power of interactive video games, so let's look at some less obvious ways that *Mass Effect* excels in providing replayability.

In my experiences playing the games, I experienced a certain level of attachment not only to non-player squad members, but to each iteration of Commander Shepard I created. Of course, a solid character customization system supports the feeling of 'knowing' each one, but what the games really do well in characterizing Shepard is accommodating different play styles. This is addressed in two ways: in player specialization, which pushes the skills of that particular Shepard in a particular direction, and in a morality system that helps define that Shepard's tendency toward 'good' or 'evil' behavior based on choices the player makes throughout the game. Combined, these systems afford the chance to create any number of different space heroes with varying outlooks and experiences in the context of the game – a rough-around-the-edges soldier with a heart of gold, a powerful biotic who walks the moral line, or perhaps a cold-hearted sniper with little regard for anyone or anything. Consequently, each Shepard of my creation had his or her own story throughout both games. The last Shepard I created was built in *Mass Effect 2*, without having played that character in the first game. While the experience was still of a very high quality, I felt that in some ways it was missing something, that it was like telling only half the story of "my Shepard," or that I'd missed the first movie in the series starring that character.

On that note, we can start to see how playing the games more than once is actually quite pleasurable. The player is given a lot of freedom to experiment with characters and choices in the game – the freedom of creating the same epic space

adventure story in any number of different molds, much as I did as a child using my imagination. At some point, I know I was playing more *Mass Effect* simply to take all the paths I hadn't yet wandered down, or to hear the numerous different responses my crew had in conversation. *Mass Effect 2* ratcheted this up by providing cinematic interrupts. These are choices that are only available for a few seconds, springing up during interactions with other characters. In a particularly memorable scene, Shepard and a crewmate interrogate a criminal on the Citadel. He's so irritating and full of himself, you wish you could just punch him – and up pops the Renegade action option. Shepard communicates his or her tested patience by squeezing a fist. Do you punch the guy in the face, or do you let his snide comments slide? The answer for me was, of course, both. On the other hand, the use of such an interrupt might affect the loyalty of a crew member. This is a great way to engage the player even further in the theater of *Mass Effect*.

Replayability is one way the series resembles my youthful absorption of the imaginary worlds of science fiction, but anticipation is another important aspect that *Mass Effect* does not neglect. Like all good epic stories, each game ends in an exciting cliffhanger, promising more adventures to come, but what sets the games apart – especially *Mass Effect 2* – is the regular release of high quality, downloadable updates. For players who had already completed the games, here was yet more *Mass Effect*, concentrated into episodic format. *Lair of the Shadow Broker* alone featured beautifully detailed environments (a massive ship stationed in a stormy atmosphere that stored lightning as its power source, the *Blade Runner*-esque immensity of the city of Illium) and resolved a long-standing plot thread. The little kid in me waited with bated breath as if expecting next week's episode of *Star Trek*. Of course, each additional adventure begged to be played from the perspective of each of my Shepards. Any ending reached is modifiable by more play.

On the other hand, one of the biggest issues with bringing epic science fiction stories to an end is that they have to do a lot of work to resolve narrative and character threads. In asking the audience to engage with an operatic, far-reaching story on that level of detail, the ideal ending is often created in their minds, and it's against that ending that the storytellers must compete. Not surprisingly, endings to complex science fiction tales often fall short of the expectations crafted by the fans, even if the fans themselves aren't sure of how the stories could end in a better way. Likewise, storytellers - under pressure - can stumble. Typically, when a story begins, there is an agreement between the storytellers and the fans that there is in fact an end to the story – but I feel that science fiction stories are not really meant to end. They are meant to live on, either in more installments or in our minds, inspiring us to think critically about human society and its future. In this way, video games are well-suited to the task of telling science fiction tales. There's a lot more time and space in which to create a consistent world and drive player engagement, and *Mass*

Effect uses this to put itself in an enviable position: the universe of the game exists outside of its main story. The reason my science fiction childhood still resonates with me is because the worlds in which I immersed myself continued outside of any one story. From John Carpenter's *Tripods* books to the vast and exotic galaxy of *Star Trek*, the science fiction worlds that stuck with me were the ones in which I could imagine any number of stories occurring (and of course, the ones in which I fervently hoped more stories would be told). What better anticipation than that of knowing that the door has not been closed on stories yet to come?

Certainly, my experience with the *Mass Effect* series won't directly map for others. It can't be presumed that someone without the same personal connection to the science fiction themes I valued so much as a child would experience the same level of absorption with the games. For those of us with that connection, the *Mass Effect* series takes perfect advantage of it, letting us know that it's okay to play with spaceships again. By providing a galactic playground, powerful story customization, and top-notch character interactions, the games accommodate the energetic story permutations that we once crafted as children. Whether it's an archetypal cautionary tale or musings on the future of technology and society, science fiction has always been about imagining the astounding – *Mass Effect* lets the young nerd inside of us participate in and ultimately take with us the best the genre has to offer.

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*This game makes for a
unique experience that
encourages something
positive in real life.*

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THERESA CHEN

THE WORLD ENDS WITH YOU

Everyone who considers themselves a gamer has heard of Square-Enix. With serial titles such as *Final Fantasy* and *Dragon Quest* taking a dominant stance in the market during each release (*Final Fantasy XIII* sold over 5.5 million copies within 3 months of its international release in 2010), it is no wonder they are often considered the masters of the J-RPG (Japanese Role-Playing Game). Their games, known for their vibrant graphics, storytelling, character designs, and battle systems, have earned them notoriety.

J-RPGs rely on creating captivating story and characters to draw in the player. Oftentimes, the J-RPGs that are most captivating are the ones that relate to something within the real world that is part of our lives, whether that means the game is set during a recent war, or has characters who are falling in love for the first time. This correlation to the real world is usually kept within the game, however. The blur between the real world and game world is usually dependent solely on our revelations and personal outreach.

J-RPGs are also generally solo-play games. One person becomes emotionally invested in a virtual world and with the virtual beings in it. The biggest outreach to the real world that a J-RPG has is the fan-base that forms around their games. Through the fans, the fanfics, fanart, cosplay, conventions, and merchandising, the general camaraderie around a game grows, but these are very dependent on the personal outreach in which the fans choose to take part, and are separate from the game experience itself.

Creating experiences where the community's interpersonal interactions are emphasized in the game has turned into a focus in today's social/casual gaming. This has become a major genre, incorporating gameplay across a person's social network that allows you to play a game and casually connect with your friends. While this has become a wide storm of tile-clicking, prize-collecting, friend-spamming, and microtransactions, before this Facebook gaming craze, Square Enix created a different kind of social game. *The World Ends With You*, a Nintendo DS title, created social connections in a more subtle and unique way. Unlike Facebook games, which utilize your social network to spread gaming, *The World Ends With You* utilized your gaming to spread socializing. It made reaching out to others the theme of its game.

The World Ends With You (WEWY), originally titled "Subarashiki Kono Sekai", is a Square-Enix J-RPG on the DS. Unlike Square-Enix's past trend of creating fantasy worlds, WEWY is set in Shibuya, the shopping district and popular meeting-location

of Tokyo. Because of its setting and the unique culture of its target audience, *WEWY* was originally intended as a Japan-only release in 2007, but, due to its success in their home country, Square-Enix decided to release it world-wide in 2008. *WEWY* has received a lot of attention for its dual-screen battle-system and its 2D anime/graffiti-cross art style. This, combined with its additional game mechanics, plot themes, and character development, enabled *WEWY* to create a uniquely subtle social gaming experience.

For its original demographic, socially reaching out was a very meaningful goal. In Japanese urban culture, reaching out and socializing with strangers is not as widely practiced as in the US. Often, if you sit on a train, it will be silent with passengers primarily on cell phones or mobile consoles playing games or texting. While this norm is a very mild form of isolation, in Japan, isolationism has been known to reach extremes among the youth culture, even causing the government to claim it as a social issue of their country. There is even a term for the extreme cases: hikikomori, which refers to people, often youths, who, for various reasons, completely isolate themselves from the world, refusing to leave their rooms for months or years. In addition to hikikomoris, there are also the otakus, who are notorious in Japan for preferring virtual companionship over real-life friends (otaku has a deeper connotation in Japan, whereas in the US it's more related to fandom in general). While these are the extreme cases of isolationist behavior, *WEWY* draws parallels to the sensation of being separated from the world to create an experience about trust and reaching out to others.

Starting with the plot, *WEWY* is set in real-world modern-day Shibuya, the shopping district and common hang-out location for Japanese youth, which already draws a parallel to the target audience. It centers around a main character named Neku, a 14-yr-old loner who is sick of the world, but still ventures out to Shibuya because of his interest in a particular street artist. It is during one of these ventures that Neku finds himself unwillingly pushed into a Reaper's game in the Underground (UG), a parallel world that co-exists with the real world, called the Realground (RG). Those in the UG know what is happening in the RG but those existing in the RG are unaware of the UG, much like a world of ghosts who live in another plane among us in the real world. The players in the Reaper's game are all youths that have died in the RG. The game is a 7-day competition for a 2nd chance at life, with the entry fee being the in-game player's most valued possession. Only one winner per game can regain their entry fee and return to the RG. The rest are "erased", or removed from the UG to whatever afterlife remains past the Reaper's Game. However, Neku, due to the circumstances of the plot, ends up repeating the Reaper's Game three times, each time giving up a new possession as the entry fee.

The user is meant to make a connection with Neku and follow him as he develops through the DS game. In order to play the Reaper's game, Neku must partner with another in-game player in order to battle and complete each day's quests, thus already drawing the first connection to the theme of creating social bonds. His first partner is Shiki, a stereotypical fashionista commonly seen roaming the streets in the shopping district of Shibuya. The second is Joshua, a boy of the RG who chose to enter the game despite not being dead, and is seemingly self-serving and arrogant with his own goals and interests. The third is Beat, a street-thug-like boy with a fiery temper who is more about action and less about thought. Each of these characters can fit into a parallel stereotype of Japanese youth, but each of them also shows Neku a side to themselves that reveals that there is more to them than meets the eye. Through his interactions with these three and other characters in the Reaper's games, Neku learns the value of people and how to trust others despite their flaws. This is shown most clearly in Neku's entry fee during each cycle of the Reaper's game. In the first cycle, when Neku is still very anti-social, Neku's entry fee is his memories, the only possession in which he could place value. In the second, it is Shiki, the one friend to whom he grew connected, which ends up having higher value in his heart than anything he had before. The third is all the players in the UG of Shibuya, meaning that what he cared about most was the lives of all the people around him.

In terms of the plot, the conclusion to the game was incomplete. To fully understand the plot, you had to replay the game and collect reports scattered in each of the cycles and get 100% completion. But in terms of the theme, the conclusion left Neku with the friends he made in the UG. Neku started the game as a loner who was tired of the world, but through his interactions with the people he met and the journey he took through each Reaper's game, he became someone who cared about others who also cared about him. The game's story teaches the user the values of reaching out to people and finding those with whom you can connect.

Considering the story, the in-game mechanics supported its theme well, especially the core battle system which required that the main character pair up with another in-game person in order to fight. In the Reaper's game, Neku could not move forward alone but always had to have someone join forces with him for the 7-day competition. When playing a battle, the player has to control both characters using the touchscreen and the d-pad of the Nintendo DS, making the two characters work together to pass a "light puck" that allowed for special items and stronger attacks. Successful chains of attacks allowed for dual-based specials. Finishing an attack in unison boosted the characters. In addition, there were specific enemies that required the player to pass attack responsibility between the two screens on the DS. The entire battle-system encompassed collaboration between virtual characters.

Through these mechanics, Neku was also obliged to pay attention to the everyday people around him. From the beginning of the game,, Neku had to scan minds in specific world maps, in order to see the Noise (enemies) and the thoughts of passing people in the UG and RG, which helped to solve puzzles, seek out battles, and find secrets. While the thoughts of the NPCs were pretty generic and mostly irrelevant to the gameplay, the concept of stopping to listen to the thoughts of those around you put focus on the idea of allowing people to show another side of themselves. Through Neku's partners, the major plot characters, and this listening-to-others mechanic, the game was able to emphasize the importance of seeing individuals through the stereotypical noise of crowds.

The rampant fashion trends and brand names was another gameplay factor that tied this game to the real world. Shibuya is the shopping district of Tokyo, and is littered with designer stores catering to multiple types of fashion interests. Many youth culture groups are represented in this game, from hip night-club fashions to sportswear and even to Lolita and gothic clothes. By selecting a fashion brand and battling Noise in specific regions of the UG's Shibuya while wearing that brand, you could influence the fashion trends of that town. NPCs in the RG will start following the "latest trend" and dress in that brand's style. Wearing the same brands of the area gave you bonus points for attacks, while wearing an opposite brand could have negative effects. Picking a fashion to represent you, and influencing an area was about creating a group around a common interest and feeding off of that group identity. Fast trend-setting and fashion-based group identification can be found in real-world Japan youth culture as well.

Further connecting *WEWY* to the real world were the game mechanics specific to being on a mobile platform. *WEWY* was designed for the DS and, thus, designed for mobility, utilizing a UI theme centered around cellphones and having Neku's main source of information be his phone. Using the Nintendo DS' mobile features, (and drawing connections to Japan's mobile phone culture) the designers incorporated some unique elements to coax players into social interaction with real people.

The entire game of *WEWY* is played within the DS, but in order to fight effectively and get the best weapons (which in *WEWY*, are pins that give special abilities), you had to use different tactics to level up, one of which was called Mingle Mode. Mingle Mode is an option accessed through Neku's cellphone that requires you to stop playing the DS game and physically move around public areas where you would be likely to encounter others who are playing on a DS and, especially, those who are also playing *WEWY*. You were given points for encountering others with an open connection enabled on their DS, and even more points for encountering someone who also had Mingle Mode for *WEWY* turned on. Like Neku playing the Reaper's game with other in-game players in the UG, which is unknown to the people of the RG, in this mechanic, you are a *WEWY* player walking around real-world Shibuya,

playing a game unknown to the majority of the people around you with only the other players of *WEWY* knowing what is really going on. This interaction creates the strongest connection between the game's message and the user's real life.

Users also had to turn off the DS in Shutdown Mode in order to level up pins. In this mode, the game literally asks you to shut down the game for up to 7 days and come back later to collect points. A game that asks you to turn off your DS is asking you to do something else besides play video games, so what *WEWY* is asking the user to do is to close the DS, look up from its dual screens, and interact with the world around them. Given the portable design of the console and the frequency that players in Japan's demographic play games in public areas (such as in transit on trains), this meant taking time to look away from their devices and notice their social surroundings.

In addition, within *WEWY* is a minigame called Tin Pin Slammer, in which the user would slide pins across a board to knock the opponent's pin off a platform. Pins were items used in battle by Neku and gave him special abilities to fight Noise. They were designed to be collected in sets and to get special pins, you had to play this game. There were a few NPCs to play against, but this mini-game was designed to be played with other *WEWY* players. Playing with others also gave you Mingle Points, a coveted and difficult-to-collect category of points. This was a direct interaction with others that *WEWY* offered. Combined with the more subtle means of connectivity *WEWY* provided through Mingle Points and taking advantage of the DS' portability, Tin Pin Slammer offered a more direct outlet for social connectivity.

Individually these elements may seem insignificant, but the layered way they were brought together in this game makes for a unique experience that encourages something positive in real life. Assume you are someone who is shy, or grew up in a culture where keeping to yourself is customary. Imagine being in a train in Tokyo, playing this game on your DS as so many people in trains often do. You've switched your game to Mingle Mode and suddenly you get a ping on your DS saying another person is nearby. Someone on that train is also playing *WEWY* too. You look (and that person may be looking too since they will have received an identical ping) and see another person with a DS in their hands. From here you could be bold and ask to play Tin Pin Slammer with this person (which would require you to speak to them in person), but if not, you've at least become aware of another who is sharing an experience as you.

The social connection in *The World Ends With You* is subtle. The indirect approach creates a more affective experience for the shyer, more isolated solo-playing audience, common to the Japanese otaku and hikikomori stereotype. It weaves the real world with the game world through interconnectivity between the in-game protagonist with his social surroundings and the player with his parallel city, creating

a meaningful experience that teaches through indirect reinforcement. *WEWY* blends its story and in-game mechanics to impart its theme to the players. Even the original title hints at the game's goal. The Japanese title, "Subarashiki Kono Sekai" translates to "How Wonderful, This World Is" or "It's A Wonderful World". *The World Ends With You* teaches you to try and trust people, to look past the noise of the crowd and see the individual, and asks you to connect and find people in your world as well.

“

*This is already looking
awesome and we
haven't even gotten
to the good part.*

”

FRANCISCO SOUKI

ANYTHING YOU CAN DO, CHRONO TRIGGER CAN DO BETTER

Back when I was 9 years old I would go with my mom, once in a long while, to the video rental store to rent VHS tapes. I had very little interest in movies back then, so I would head straight to the SNES rental section and stare at their limited selection. I have no idea why I chose that game the first time - I guess the cover art, as it used to be back in the day, caught my attention. Whatever it was, from that moment on and until someone else was smart enough to rent it and not return it (should have been me!) every time I went to the video rental store I would come out holding the same SNES cartridge: *Chrono Trigger*.

Chrono Trigger was, back when I didn't really know what an RPG was, my first JRPG (Japanese role-playing video game). I had played other, more primitive RPGs. I had played adventure games with RPG elements. I had all the pieces of the RPG puzzle lying somewhere in my head, but no game had yet put them all together. Lucky for me, *Chrono Trigger* made them fit together like instruments in a symphony.

Now, there's a catch about the video rental scenario: I would only get to play the game for a couple days at a time which meant that my save file would invariably be erased next time I rented the game. In short, I must have played through the beginning of the game dozens of times: that panning shot over Chrono's house, with the fair in the distance and the sound of seagulls, the view of the continent, the sound of Lynne's Bells - all together are stimuli that my senses associate with my childhood. Well, not only with my childhood, as I've played through *Chrono Trigger* many times.

Let's recount those quickly. Ahead is my full disclosure, it's sort of boring.

I played a lot of *Chrono Trigger* in and around 1995, when it first came out - of course I never finished it back then, as between the fact that I only had it for a couple of days at a time and my parents' emphasis on me not spending entire weekends gaming, I never got too far into the story (farther than you'd think, though...). Then later, around 2000 I finally played through it for the first time on the ZSNES emulator for the PC. Some time after that, and having skipped the PS console, I bought a PS2 and with it a copy of *Final Fantasy* Chronicles. I played through *Chrono Trigger* again, PS version this time, somewhere around 2004. That time I finished the game and found all the possible endings. I played the game again, sparingly, until 2008

when I bought a Nintendo DS just so I could play *Chrono Trigger* (though I ended up falling in love with the system, this was what pushed me to buy it). I played through the game again then, thoroughly, walkthrough in hand. I'm currently making my way through all of the endings again for the DS version.

Here's the thing about my particular experience with *Chrono Trigger*, though: give this game today to any gamer and, in the highly improbable case that they haven't heard of it yet, they will quickly recognize strong elements in it and realize how strong the design is. But present it to a nine-year-old in 1995, living in Caracas, Venezuela; have him take it by chance from a random selection of games - and you know what? Even he will identify those strong elements.

In this day and age, we very rarely have the chance anymore to discover anything for ourselves. When was the last time that you picked up a book, saw a movie or played a game that you had heard absolutely nothing about prior? Doesn't happen too often, does it? And what are the chances that you will fall madly in love with it? And then, even better, what are the chances that after falling in love with it, you start realizing that thousands of people all over the globe are also falling in love with it? It is rare for someone at this point to discover a classic before it becomes a classic, or to even discover a classic before we realize it is one. But that 9-year-old in that video rental store who just happened to like the cover and decided to give that game a shot: he had that chance and he took it.

And I'll tell you the exact moment when I knew that the game I was playing was extraordinary - I can pinpoint it because I can remember how baffled I was when it happened. At the very beginning of *Chrono Trigger* you start the game playing as Crono. There's a town fair happening not far from your house and a friend of yours is going to unveil an experiment there so you decide to check it out. You are encouraged to explore the fair for a while - with the free-roaming fair serving as a tutorial level - and as you do, you accidentally crash into a girl. You both fall to the floor, and so does a pendant she was wearing. You get the pendant, help her up, and give the pendant back. She thanks you profusely since that pendant is a family heirloom and she asks if she can tag along with you for a bit. You explore the fair together and perform simple tutorial-like tasks: she gets candy at a store (takes her a while, too), you find a girl's missing cat, you can take a guy's lunch from a table and eat it, you can buy items from a merchant that even tries to get you to convince the girl to sell him her pendant, and so on - regular RPG stuff. After a while, your friend is ready to unveil her experiment so you take the girl along to that.

Then the action begins. The girl disappears through a fluke with the experiment, and so you - a hero and a gentleman - volunteer to go find her. The game goes on for a couple hours, which have the player going through a forest and a dungeon to find the missing girl. Eventually, you rescue her and before you bring her back

home you realize that she's actually a princess. As you bring her back to her castle you get arrested: you're being charged with kidnapping her. Wait, what?! But I just saved her! - you yell at the screen. Sure you did, but the Chancellor has it in for you and so he calls a trial to determine if you're innocent or guilty. Stop right there. Think about this, now. A trial. To determine your innocence. This is already looking awesome and we haven't even gotten to the good part.

Cue establishing shot of the gorgeous courtroom and so the trial starts. At this point, my 9-years-old self is wondering what the hell is going to happen in this trial. Is this going to play out as a cutscene or what? And let's be fair, even now, more than 15 years after the game was released, one would expect no more than a cutscene to deal with this situation. Well, be it now or then, one would expect wrong.

The trial starts. Forget about the cutscene, they're asking YOU, right now, if you're after the Princess's money. Ridiculous! Of course not! you answer. Well guess what, the Chancellor calls in a witness that explains how when you and the girl crashed into each other at the fair you went to pick up her pendant instead of checking to see if she was all right. And then, as if it weren't enough already, they show a video replay of you doing exactly that. All you want to do is get up from chair and start shouting at them - Imbeciles! This is a video game! You're supposed to get the shiny things first!!! But it's helpless. Luckily, your lawyer is not a moron and he calls the little girl whose cat you rescued to testify, she agrees that you're a good person and the trial goes on. Same thing happens with four or five other actions that you took while at the fair: if you ate the guy's lunch they'll show that as proof of your bad behavior and if you asked the girl if she wanted to sell her pendant then they'll bring a witness to imply that you're after the girl's money. By the end of this sequence you're wondering what sort of twisted mind designed this. You feel confused, your concept of what a video game is is crumbling before your very eyes and in your very hands. You sit up in the couch, and get ready for whatever the game has in store for you next. You are engaged.

That is when I fell in love with *Chrono Trigger*.

But what I didn't realize at the time was the most important part: that the game was training me. See, *Chrono Trigger* is a time travel game and as such, it has you jumping from one time period to another, messing with history. The most important concept for a player to grasp in order to understand the story and flow of the game is that actions have consequences: whatever you do or change in the past will in turn change something in the future. It is important then that players become more aware of their actions so that they are not caught off guard by the consequences. The trial scene is just a reinforcement of this concept, an opportunity for the player to directly face this paradigm. It's a sort of warning of things to come. It is also a love arrow shot straight at the gamer's heart.

Now let's go back to that part where I mentioned in passing that *Chrono Trigger* is a time travel game. I am assuming that you, as a reader of this piece, have encountered and consumed some sort of time travel-themed media before - whether it's *Back to the Future*, *The Terminator*, *Heroes*, *Harry Potter and the Prisoner of Azkaban*, *Donnie Darko*, *Chrono Trigger* or *The Lake House*, starring Keanu Reeves. If you have, then you know that time travel can get messy: it's hard to explain, hard to grasp, overused as a storytelling device and often unconvincing. You will also be happy to hear that this is not the case with *Chrono Trigger's* time traveling. Here's why:

1. First of all, the pacing in *Chrono Trigger* is well designed, and its story is well-written. The characters are not expecting most of this time traveling to happen, so they are discovering this situation along with us - they are as surprised and confused as we are.
2. The time periods through which the characters travel are spaced really far apart. The party visits ancient times, the middle ages, the future - the minimum temporal gap between ages that are visited is 400 years (or 300, if you want to get really technical). This mostly eliminates the problem of the possibility of running into oneself (always confusing) and also plot points such as having to seduce your own mom.
3. Few characters have the ability to transcend time in the game, and those who do can also recognize the heroes as time travelers, so they very rarely have to explain that they are traveling through time or have to confront people that they have met in other ages.
4. Each time period that the players visit is distinctive, yet absolutely familiar. The geographical map retains most of its topology across time, so mountains, islands, forests, etc. are mostly on the same spots across the ages, making the terrain recognizable. However, each era has a very distinctive look, and they are absolutely impossible to mix up with one another. Different characters, color palettes, music, weather effects and overall style ensure this.

These are only some of the design aspects that keep the time traveling manageable, the player more often than not can easily keep track of what is going on. The effect this has on the game is that it manages to benefit from all the cleverness that a time travel-based plot usually allows for while keeping the story manageable and digestible.

Another very nice touch is that the different characters that act as party members in the game come from varied eras, as the player sort of picks them up along the way of their travels. This is extremely helpful in keeping the story close to the party,

thus helping the player relate to it through the characters he is controlling. This may sound ridiculous, as the characters in any game should most definitely be deeply involved with the story in order for it to feel important at all, but the truth is that many games have a hard time getting the player to care about the story itself rather than about the action of advancing it.

Chrono Trigger manages to do this by making the story relevant to the characters in both an overall manner (the world could end, which affects all characters) and a personal manner by involving the fate and importance of their specific time periods into the story. More often than not the story is driven not only by an overarching goal but also, and more prominently, by at least one of the characters' personal goals. And this, in the case of *Chrono Trigger*, works.

But why does it work?

The answer is simple and somewhat broad. Ok, it's very broad: because the characters are awesome. In fact, let me put it this way: the characters are so awesome that it can get confusing to analyze what makes them so awesome. Let's still give it a shot.

It starts visually. The characters were designed by Akira Toriyama (the guy who created Dragon Ball), and he did an excellent job of giving all of them a distinct look. The main part of this distinctiveness is that not only do they, when put side by side, clearly belong to different eras - they also are each aesthetically consistent with their own era. Second is that the gear they wear, their body features and their color palette, are all very reflective of their personalities.

Add to that the fact that if there's one thing that these characters do not lack is a strong personality. And by "strong" I don't mean that they are fighting for your attention, all trying to shine within the group, but rather that a lot of work clearly went into these guys' and gals' backstories and how they fit within the main storyline and around each other - and it shows. The way in which each future party member is met by the active party and ultimately ends up joining is, without exception, deeply integrated into the story. No party member feels tacked on without necessity, and there is also never the feeling that one must do specific side quests to add party members: all of them join because it makes perfect sense within the story for them to do so. This is a luxury the designers could afford since there are only 7 available party members throughout the whole game, which also allows for each party member to voice their opinions during story sequences.

Furthermore, as the game advances the player realizes that *Chrono Trigger* also made the most of their limited party size by tying the optional side quests to party members. This works brilliantly for them since it creates a decent number of relatively lengthy side quests that have the added bonus of revealing a significant backstory

element relevant to each character - an element that would otherwise have been left untold. Players are then encouraged to take on the side quests to gain extra experience, obtain new and powerful items and to get to know their party members a whole lot better. The player feels compelled to go on the different side quests almost as a favor to the characters, since most of them tackle an unresolved issue in the character's present or past that, given the party's time traveling abilities, can be dealt with now or at any time.

Ah, "at any time". This reminds me...

See, side quests are not the only part of the story that can be dealt with at any time. This might get you thinking that *Chrono Trigger* is an open story game where parts of the story can be played in any order the player wishes - but you should immediately stop that train of thought. *Chrono Trigger's* main story is absolutely linear, don't doubt this for even a millisecond. But there's a fine print to that: since the goal of the game is to defeat a being that is going to destroy the world in a specific year, you can just travel to that year, defeat it and end the game right there - at any time. From a logical point of view it makes perfect sense. And from a gaming point of view, what implications does it have? The implication of different endings, of course.

The magic of these different endings lies in the fact that they are not all parallel, alternate endings but rather (although, not quite) sequential, different endings. Imagine the course of the main storyline of a game as a straight line, with all the major plot points represented sequentially as a little marker that intersects the line. Now imagine that from each of those markers you could jump straight to the ending of the game, except that by doing so you bypass everything that would have happened in between that marker and the ending - it means that you still save the world, but you didn't do a bunch of other stuff along the way, like pick up some party members or fix specific things in long-gone eras. On top of that it also allows the player to replay the game and, at specific spots, save the progress and head straight to the final boss to experiment with the ending. It is a rare occurrence that even gives meaning to the "New Game +" feature.

The music of the game is what rounds up an incredibly solid infrastructure on top of which the main systems were built. The beautiful soundtrack that makes you forget that what you are listening to was composed for the Super Nintendo does a great job of evolving (and devolving) as the player cruises through the different eras while always remembering to hint at the epic proportions of the party's task. The soundtrack, together with the strong characters, the well-implemented time-traveling theme and a strong story told in a compelling way are what make up the foundations of this game. But what about the stuff that was built on top of it?

Perfect segue for us to get down and dirty with the battle system. *Chrono Trigger's* battles are turn-based, built upon the same foundations as most JRPGs out there. Players can choose at the beginning of the game whether they want it to be strictly

turn-based (enemies act, then you act) or somewhat real-time (enemies go again if you take too long deciding what actions to take) - but other than that there is nothing too innovative about the pacing of the battles. *Chrono Trigger's* battle system does excel at four things however: combat positions, context-sensitive battles, Team Techs and cleverness of encounter design. Let's go over those.

First up is combat positions. We should start by saying that the camera angle for the exploration areas of *Chrono Trigger* is isometric, somewhere between a top-down camera and a 3/4 one. In these exploration areas, players can initiate combat by colliding directly with roaming monsters; when combat is initiated, the three active players from the player's party take their positions in a section of the screen and all enemies present in the screen take their respective combat positions. Both enemy and player positions are of extreme importance during battles since some specific special moves (called Techs) are area-based. For example, one Tech called Slash will prompt the player to choose an enemy and hit all other enemies on a straight line between the player and the chosen enemy while a different Tech called Cyclone will hit all enemies within a specified radius. It is important to note that players cannot move the characters on the combat field, so they must adapt to the position conditions imposed by the game in order to make the most of their Techs. This is an element that, even though it's extremely common in tabletop RPGs such as Dungeons and Dragons, doesn't make an appearance in video games often enough.

Next up is what I like to call context-sensitive battles, or rather context-sensitive events. The important point to convey here is that environments in *Chrono Trigger* are often active or reactive, which can have a direct impact in specific battles. Switches in the environment can prompt a battle or directly reduce the character's Hit Points - even outside of battle. On top of that, environments are designed such that surprise battles are never left unexplained. In the future era, enemies might fly in via conveyor belts while in the Middle Ages they could jump from behind bushes or from a small cliff. In a Boss's lair a suspicious switch could cause a monster to appear as easily as it could cause a hole to open on the floor, causing the player to fall into a secret treasure chamber, and waiting for the rain in the hunting grounds will increase the chance of a special type of enemy appearing. In short, environments are not just paintings that serve as backdrop for the story, but rather living elements of the story itself.

I mentioned before that in *Chrono Trigger* the special combat abilities (like spells and such) are called Techs - and Team Techs are no more than Techs that are performed by two or three team members at the same time. I find it incredibly hard to believe that every RPG since *Chrono Trigger* has not copied this design, since in my opinion it serves the game so well. The idea is that almost every two-character combination in the game has a Double Tech that combines one Tech from each character into an extra-powerful "super" Tech. This has a positive impact on the

game in many levels. It encourages the player to level up all characters and play around with party formations to discover the different Double Techs. It also adds a new layer to the combat, since both characters need to be active at the same time to perform the Double Tech - and the time that one character has to “wait” for the other to be ready as well is essentially lost time. Furthermore, it enhances the level of camaraderie perceived by the player between the two characters, as they are acting together against their foes, rather than on their own. And last, but certainly not least, it is pretty darn cool. Emphasis on the cool for the Triple Techs, which occasionally require the player to find a special item to enable them, and which represent one of the ultimate achievements in the game: to have a band of enemies wiped out by an incredibly cool-looking move in which all party members contribute the best of their skill.

Lastly, it is imperative to mention the cleverness of the encounter design. The designers truly did a great job of identifying all of the elements they could play with to create exciting encounters and executing endless variations on them. Enemies that are immune to attacks, sets of enemies that must be defeated in a specific order, multi-part bosses that heal themselves in predictable patterns, foes that change vulnerabilities mid-battle or that get stronger as the battle goes on, enemies that counter-attack automatically, that attack with specific area-effects or that affect party status, enemies that change position during battles or that call reinforcements - all of these types, and many more, are combined to create battle after battle after battle that feel challenging but never unfair, and that require the player to equip the appropriate items as well as to think fast and strategize on their feet.

The virtues explained above have the happy consequence of making the combat in *Chrono Trigger* feel extremely organic. Turn-based RPGs have the unfortunate tendency of presenting a deep customization tree for characters but shallow encounter design, resulting in battles that are often filled with flare but rarely with excitement. *Chrono Trigger*'s combat is designed to keep the player on their toes: it is exciting, fun, clever and allows for exploration. I'm not saying that the combat is without repetition (it is a 20+ hour-long game, after all) but players will find themselves constantly challenged by boss designs, enemy immunity to specific attacks and variable enemy positions on the board. This, coupled with a Tech tree that feels rewarding, make up for a battle system as solid and exciting as I have ever seen.

At this point it should become clear that a lot of love was put into this game's complete development process. If we look at it from an exclusively design-oriented point of view we will see that the game both innovates and emulates within its genre with great success - for example it introduces new storytelling devices and perfects the turn-based combat system while at the same time keeping a traditional equipment and party system. This is taken to the next step of perfection when dressed up in a

charming and appealing way by adding great art, unforgettable music, and overall tasteful flavor to the already solid base. *Chrono Trigger* is solid from start to finish and from low to high level, looked at from afar or with a microscope almost to a fractal perfection - where uncovering further and further layers just reveals deeper levels of great design.

Somewhere within these paragraphs lies the secret of this game, the reason why I can't listen to the main theme without getting goosebumps or why I can't play through the beginning sequence without getting pumped. Or should I say that it doesn't lie up there among those paragraphs but rather down here, at the bottom, as the sum of all that has been said. The true genius of this game, the thing that sets it apart from so many other JRPGs, is the perfection with which the fine thread that binds all its elements together was woven. It's the fact that, as with a complicated sailor knot, pulling hard at one end of the game tightens the whole experience rather than bringing it apart. Battle system, grinding mechanisms, exploration, character design and development, inventory system, soundtrack, story, storytelling devices - all interwoven to create an experience that becomes more and more solid as the player tugs harder at the controller cord.

We can find examples of this all over the game. The environment design helps us get oriented in the midst of all the time traveling while also contributing to the combat design and providing player-triggered events. Character development affects the story and combat alike, opening the possibility of Team Techs and fueling the player's desire to complete the different side quests. Some special, equippable items are tied to the story and have both meaning to specific characters and special abilities when equipped. Time traveling is not only used as a storytelling device but also reinforced by (and at the same time used to reinforce) character style, player relationships and ending variations.

What it comes down to in the end is that the elements of the game seem to all have grown together as siblings in a family, affecting one another and developing a synergy that has deep roots in the design process. And just as one can see a group of brothers playing together and understand that they share a bond that is both indescribable and undeniable, one can play *Chrono Trigger* and immediately identify a similar sort of magic at play. The icing on the cake is that the last necessary element is the player himself - giving meaning to the game via interaction and connecting the live wires of the game's guts in order to get the machine going. The result is more than a game, but rather an experience that the player feels privileged to experience. Because everything that *Chrono Trigger* does, it does exactly right.

“

I'm pissed off, I don't understand what I'm doing wrong, and I'm done.

”

JASON VANDENBERGHE

THE OPPOSITE OF ACCESSIBLE: STREET FIGHTER IV

Mortal Kombat was the last fighting game that I loved.

You heard me. The first one. *Mortal Kombat One*.

The *first* fighting game that I loved, though... that was *Karate Champ*. Way back in 1984, that was.

Karate Champ was an upright arcade game - 25¢ a pop, back when games cost *blood*. It was a simple game – two joysticks for input, with different combinations of up-and-left (or right-and-right) triggering attacks. The first player to land a blow scored either ½ or 1 point per hit (depending on how *awesome* it was), and getting two points won the round. It was (as literally any fighting game that is in fact about fighting will be) all about the distance between the opponent, reaction time, and choice.

Flash forward: we are in 2008. That, dear friends, is a *long goddamn way* from 1984, especially when one is contemplating silicon-based entertainment. The fighting game genre has become the Fighting Game Genre – a legendary competitive world all its own that has spawned amazing events, championships, hundreds (thousands?) of splintered versions of dozens of different brands, and a wide array of culture, skills, experience, history, language, and design that make it a world unto itself.

In a word: *balkanized*.

Now, just so as that you all know: I have a particular audience in mind for this article. I am, in fact, writing *to* someone. Or, I suppose, someones, plural.

This article is being written to everyone in the games industry who is making fighting games. Artists, animators, designers, programmers, producers, marketers, sound peeps, anyone. If you are listening, this article is being written directly *to you*. In fact, if any of you actually receive this forlorn message in a bottle, I welcome a response (jason.vandenberghe@gmail.com).

Because I'm not fucking around. I want things to change. Here is my message:

I want to play fighting games. Yet, I cannot. I want this to end.

How can this be? Surely he is mad! Or, perhaps he is of The N00b Clan, they who can only try, complain, fail, and then blame others?

Perhaps!

Or, perhaps there is something that has been lost in the development of the Fighting Game Genre. Something that, perhaps, could serve a currently under-served segment of the market. (See what I did there? By using the ancient keyword 'market', I just got the business guys' attention, thus increasing the chances of this article reaching the desk of its intended audience. I'm clever, as a sledgehammer is subtle.)

There are many ways I could exorcise these demons. I could, for example, simply rail against the machine. Whine, complain. Better, I could make a fighting game of my very own that demonstrates my argument! Instead, I am going to write an article for publication in which I describe (in some detail) my experience as a "new user" to the fighting game genre.

(Voila, this article.)

The Word On The Street

See, one of these them thar fighting games recently got my attention. The early development of *Street Fighter IV* had some interesting hallmarks to it:

- The marketing was gorgeous. Someone thought they had a hit on their hands, and were spending nicely for the marketing campaign.
- Word on the street (oh, ye glorious games industry grapevine) was that the Street Fighter team was "trying to reach the mass market" with this one. There were two versions of this:
 - "They're gonna try to make it more accessible, yay!"
 - "They're going to ruin everything by watering it down, boo!"

Intriguing! And lo, when the game came out, there was, indeed, much bru-ha-ha about this.

"We love 2D and we love *Street Fighter III*, but the implementation of the new visual style and more accessible gameplay in *SFIV* is close to flawless.

Now, normally 'accessible' is seen a danger word in the world of videogames. Most people assume it's a synonym of 'dumbed down'. If something is accessible it can surely only be enjoyed by noobs or 'casual' players, whoever *they* are. In *Street Fighter IV*, however, accessibility is not at the expense of depth – far from it. This is a game to be played and mastered over months or years, not hours. What it *does* mean is that the game doesn't get too bogged down in technical play and precision input that only the top players will be able to enjoy. “

-- Cam Shea, IGN AU

<http://uk.xbox360.ign.com/articles/954/954036p1.html>

Awesome! That's for me!

“The decisive difference in accessibility of *SFIV* to other fighters then lies in its challenging tutorials of its new Trial Mode that goes beyond the plain teaching of move lists. For every of the 25 playable characters there are six challenges, each with a different difficulty, from easy to hard. “

-- Leonard McCoy, GamersGlobal

<http://www.gamersglobal.com/news/1590>

Sweet!

“It's a matter of balance and simplicity. The one on one fighter genre had become bloated and impenetrable to anyone beyond the most dedicated of players; those willing to learn the huge, esoteric button combinations to play the games with any great success. *Street Fighter IV* strips the genre back to its essentials, with a only few, instantly recognizable button combinations (down, down-forward, forward, punch) needed to get stuck in. Every character and their moves each has their own risk and reward, a perfect balance of timing, tactics and reactions. Input timing for special moves is generously calibrated, allowing newcomers to be able to pull off many of the moves relatively easily (17 years later, I can finally pull off Zangief's spinning piledriver consistently). It's the most accessible fighter in years, yet also remains the most skillful, with the more experienced and dextrous types still able to hone their skills to an almost superhuman level. The advanced arts are still there, with canceling combos and the new focus attack offering that great depth for the dedicated to gleefully wallow in.”

-- Tom Hoggins, The Daily Telegraph

<http://www.telegraph.co.uk/technology/video-games/4680192/Street-Fighter-IV-review.html>

Yes! Perfect! I'll take it!

Okay, here is what I propose to do: I really, actually, truly, haven't played this game – and I'm going to be a one-man-focus-test. I will record what happens to my brain and my feelers as I break the seal on this game. Right here, in this very article. In fact, right after *the next paragraph*.

Now this isn't a scientifically valid process – I have a point I'm driving towards, and that is going to affect my experience, and furthermore, everything about this idea reeks of self-important chest-pounding (which is my usual gig). However, I take the position that such trivialities aren't really relevant in light of what will (I fear) become abundantly clear to any game designer as we travel our course together. We shall see!

Let's Get This Party Started

So, let us embark on our journey. I took the liberty of buying the guide as well – even I know that if you're going to get into something like a fighter, you'd better at least bring along a guide.

After flipping through the guide quickly, I decide to jump in – I mean, we are in the year 2010, right? Right. So! Bravado in hand, and prepared to re-enter the genre that I once loved with a stalwart conviction, I shift into present tense, put in the disc, and boot the PS3.

Entering The Game

The opening sequence is *spectacular*. It's fluid, amazing. The legendary characters of the brand grapple and pound each other in what looks like a moving painting. The piece was part of the marketing for the game (if I recall), and it's certainly one of the best in class for this kind of thing.

It's worth noting, too, that CAPCOM went as far as using a song by a band named Exile as the theme to the opening – and that song is clearly a *pop* song.

They are reaching out. I feel reached out to.

Moments later, we hit the start screen. This pops on quite abruptly, with a single voice announcement: "STREET... FIGHTER... FOUR!" in a... well, I suppose one would have to call that a cheesy announcer voice. Grey metal background and the logo front and center. "Press START" lures me seductively from the bottom of the screen.

Hmmm. Well, that's okay – I've seen worse. Even so... there wasn't even a *fade up*. But what the hell - you can't judge a book by its cover, man.

Stalwart! I press [START]. I am eager to learn how to play.

The Main Menu

Ryu glares out at me from the background, eager to fight. Over that, I can see four text boxes. The text is small, almost illegible on my non-HD screen – but all that really does is cause a twinge of guilt that I haven't upgraded my TV yet.

One text box seems to offer settings of various kinds. One holds explanation text. Button instructions linger near the bottom in their traditional place.

“MAIN MENU”, one box declares, and offers me the following choices:

- Arcade mode
- Versus mode
- Network battle
- Challenge mode
- Training mode
- Player data
- Gallery
- Options

Okay. *WoW*.

...

I scroll up and down on this list, trying to make sense of the choices and their help text.

Now, I design games and direct teams for a living, and have been doing that for quite a while now. I have enough information in there to figure out what the distinctions between these choices most likely are.

However, the UI design-review-meeting-brain that I have cultivated over the years is screaming at me right now. “How in the world would a mass-market consumer with little-to-no experience with your genre ever hope to make sense of such a menu?!?” it is shouting.

I mean, the last three I can figure out. ‘Options’, ‘Gallery’, and ‘Player Data’? Sure. But let’s just say I want to *play the game*. I can choose between “Arcade”, “Versus”, “Network”, “Challenge”, and “Training” modes.

What do I pick?

Basic Training

Okay, okay, whatever. I’ll start with the basics. I’m going to try Training mode. Figure I’m not ready for Arcade mode yet – my dusty fingers haven’t fought in a real fighter in ten years.

I am presented with the character selection screen.

My guy on the right, the opponent on the left, and a big list of face icons in the middle. There is no text save the name of the currently selected characters. It’s sexy.

Hmm. I’m being asked to pick between... let’s see... sixteen different characters. Another 10 await to be unlocked, it seems.

Now, I know how to play *none* of these characters. What little I do know about the characters in the franchise I know from watching friends play, and from goofing around with the original Street Fighter in arcades (I played about five bucks worth of games, maybe, before deciding I would lose money slower at another machine).

So the really weird thing about this screen is that there is literally *nothing* here to help me with my choice. I like the looks of Chun-Li, though. I’ll try her.

For my effort, I am rewarded with a popup box, with two selections I can make. The first is “Color”. I think I can figure out what that does. The second selection, however, says “Personal action” and is set to “01”.

I have *no idea* what that means. I mean, none. Even now, editing this article, I don’t know what it means.

Okay, WHATEVER! Let’s play!

I then select my... opponent? Strange. And then a loading screen...

And then I’m in!

The announcer voice pops up: “Are you ready? FIGHT!”

...

I am standing in a white box. The walls are marked with grids – clearly the classic “whitebox” of game development. A red line splits the room into two halves. Meters decorate the screen frame.

We are both playing our idle animations.

...

I wait. Ryu (my opponent) stands on the other side of the red line. We stare at each other.

...

No one moves.

After a minute, I creep forward.

He doesn't react. Surely, this is a test of some kind. I verify that X and O will cause attacks to happen, at least. So I run forward and WHACK HIM!

Save for playing a hit reaction and taking some damage, Ryu doesn't respond *at all*. Even more amazingly, almost immediately his *health regenerates*.

I step back, and take a moment to reflect.

See, I was hoping for some kind of *training*. So far, I have a blank practice room and a Ryu-shaped punching dummy. Eventually, I understand the full scope of my mistake – training mode is literally a mode for you to train *yourself*, not a mode where *you are trained*.

This is not explained - even though it is counter to most other games I have played. Further, this information is not even *available to be discovered* – it must either be deduced or explained by an outside source.

Okay, fine. Whatever, I got it. Stalwart! I am here to train myself!

So...

...how do I train myself?

I have seen no assistance so far. None. Literally no instruction of any kind. There are no objectives, no prompts, no explanations of the mechanics. No popups have pointed me towards suggested actions, no arrows have drawn my attention to features that I might be interested to learn more about.

In fact, as far as I can tell (and with this paragraph, here, I am writing *from the future*, after having dug around a lot more, finished the article, and then come back through with an editing pass) there seems to be *nothing in this entire game that explains how the game itself functions*.

But I will not be thwarted! I am here to FIGHT, dammit! I begin to press buttons.

Here is what I learn:

[X], [O] and (bizarrely) [R2] will kick. [SQUARE] and [TRIANGLE] and [R1] will punch. (I assume that this “two rows of three” is a hold-over from the Sega days? Or just fight-genre standard? Probably both.)

Either way, these moves are so fast that I literally cannot tell the difference between the punches. [R2] appears to be a high-kick – it’s a roundhouse, so I figure that’s slow and hard. [X] seems like the fast one, and [O] is somewhere in the middle. Okay. Light, medium, hard, punches and kicks. That’s what I was expecting.

[L1] and [L2] are mirrors of [R1] and [R2] – literally duplicates.

Okay. Got it.

I’m somewhat surprised to discover that there is no way to block.

(Later, and again, here I am writing after-the-fact, the depth of this misunderstanding will sink in, and my ire at the game designers will raise a good two notches – you block by pulling *away* on the left stick – but only when an attack is incoming. This would have been nice to know. Somewhere before my fifteenth loss would have been great.)

I continue to be amazed that in this “training mode”, there is *literally no training*. In fact, Ryu does *nothing at all*. Except constantly regenerate his health, of course, which is something that I will come to learn *never happens in the game*.

I discover that Chun-Li has a few more fun attacks if you repeatedly press the buttons. Pressing [X] several times will produce the famous “many kicks” that is her signature move. Cool!

Pressing up on the left stick jumps. I was ready for that. No problem.

Something else I learn: There are *three* gauges on the screen. The top one is health, sure, clear, no problem, got that. Bottom, though – there is an ‘EX’ gauge and an ‘ULTRA’ gauge. After some quick experiments, I develop a general theory that one fills when I land hits (EX), and one fills when I *am* hit (ULTRA), but that’s not 100% true (after punching Ryu a few times, his ULTRA is full, but he has one bar of EX?).

I experiment some more.

In fact, I learn, you don't even have to kick. It appears any action will fill the EX gauge – and once it's full, it becomes a 'SUPER' gauge! Cool!

...

How do I use this stored power?

...

I try pushing every button combination I can think of. Nothing. I have no idea what to do with this full SUPER gauge. Nor is there, as far as I can tell, any way to learn what to do with it.

Okay. There HAS to be a way to figure this out. I dig further.

I hit the menu for help. In there I find an entry for "COMMAND LIST" (and, for the record, this menu is probably the least friendly menu *of all time*. It literally *punched me in the face*. ...No, I made that up, but *WoW*, is it hard to comprehend).

"COMMAND LIST" sounds promising! I want to learn how to attack and do cool moves! Those are "commands"! I choose that, select my character on the next popup (Chun-Li)...

And the screen fills with a two-column chart.

The sections are marked: "Normal Attacks", "Unique Attacks", "Target Combo", "Special Move"... looking good! Names of moves, followed by chains of symbols! Boots, fists, arrows – those look like control instructions! It is clean, it is well-designed, it has lots of colors. I am filled with hope! Yes! This is it!

...

As I look deeper at Chun-Li's command chart and start to actually try to apply the information I extract from it into practice against my Ryu Dummy, all the quotes in the press about "accessibility" come rolling back to me. They start to seem more and more like irony. They begin to have that sulfuric stench that comes from being written by malevolent hands.

There are a few things I would like to point out here:

- Although it clearly is useful to someone who knows how to read it, after several minutes of study, I have actually learned very little from it. I may be dumb, but I'm not *that* dumb. It's a list of moves, and nothing more.

- Decoding the screen itself is an act of deduction and interpretation. I deduce, for example, that the 'boot' icon is kick and the 'fist' icon is punch, and that L, M, and H probably stand for 'light', 'medium', and 'hard'. The red circles with arrows in them are probably the sticks. But, honestly, I am *uncertain* about my interpretation... and I'm surprised by that! After all, there is a clever invention of chart-and-table communication that has been used by humans for some time that would immediately make all of my uncertainty vanish: it is called a *key*. There is no *key* to be found.
- In order to access this screen (which is, remember, in the *training mode*), I have to press three buttons, and navigate several menus. That is, to quote an old friend of mine, "sub-optimal". If I forget an attack, or am unsure of a particular combo, or just want to confirm it, the process is a bit of a walk. One button would be better, methinks.
- I truth, I *cannot read* a good chunk of the text on my screen. I figure this is because my screen is non-HD.

(Later in my explorations, I learn (from the BUTTON CONFIG menu) that, sure enough, the three types of kicks and punches are called "LIGHT", "MEDIUM", and "HEAVY". I was expecting that, but it's strange to me that those three words appear *nowhere else in the game*.)

But WHATEVER!! I am twiddling nits here!! I am having sour grapes! I am making a mountain out of a molehill! I FOUND MY ATTACKS!! I can TRAIN!!

/highfives self

Filled with enthusiasm, I explore further into the training menu.

I stumble upon this *incredible* screen! It has all kinds of neat looking options and settings... and when I turn on "INPUT DATA" and "ATTACK DATA", what shows up on my screen but a vertical scrolling list of the commands I have input to trigger attacks! COOL!! That is very useful stuff.

I suppress the urge to remind myself that I had to go looking for these settings while completely blind to what I was looking for, and I didn't know what it would do when I activated it, etc, etc. That's crybaby stuff! I can TRAIN now!

So, I geek around in this white room with these settings and the COMMAND LIST for a while. Maybe this game will actually prove to be accessible! If that's true, then...

...well, you won't be reading this article, that's for sure. So, if you are reading it, that's a kind of spoiler, I guess. SPOILERS! Fighting games aren't accessible!

Anyway, where was I? Oh yeah! PRACTICING!

My aim is to imprint some of these new moves I've found into my hands. I know that I will forget most of them when I enter battle, but that's okay - you gotta start somewhere.

I make progress... but...

...I'm actually fairly unsettled.

So, I'm about 20-30 minutes in to *Street Fighter IV* so far, and I still have no defined goals in mind besides just getting into a fight someday.

The game has utterly failed to guide or invite me into the experience. It's been a remarkably quiet experience, full of menus and white rooms, and very little actual in-game achievement.

At least I can now see the expected cycle clearly: I am to navigate to the COMMAND LIST screen, pick a move, memorize it, and then return to the white room and practice it until it becomes instinct. I am expected to do this without guidance, reward, or, in fact, *any clear feedback* about whether or not I am succeeding. When I pull off a combo, I see it... but I only have my own personal faith to assure me that the move I have done is, in fact, the move I wanted to do. Was that the correct animation? I *think* so, but I have no way of knowing for sure. Worse, if I am having trouble deducing what some of these stick movements mean, or exactly what kinds of timing are required to execute the moves, I am entirely on my own to figure out what I'm doing wrong.

Which is a long way of saying that training without strong guidance and support sucks. Not a world-shattering conclusion, maybe, but *every other genre in the games industry* has found a way to alleviate the pain of training. Why not fighters?

Minutes pass... and I'm getting bored. Screw training mode! I'm ready. (Also, nothing in the game is telling me I'm *not* ready.) I want to FIGHT SOME DUDES.

Let's go play the game!

I don't want to rat-hole on this mode any further in this article - I still haven't even managed to fight anyone successfully. However, I cannot leave this section of this article without at least saying one more thing:

Gentlemen, ladies, designers, developers: there is a wide gulf between *training* and merely *providing information*. What I have experienced so far was being given information. What I wanted was training.

THE MAIN EVENT

I head back to the main menu, and select the mode that previously intimidated me: ARCADE MODE. I know now about how to attack, move, jump – I suppose, in that way, training mode has succeeded – so I'm willing to dive into deeper waters.

Not quite ready to leave the kiddie pool, though. The next screen is the difficulty selection. I pause.

Look: I know for a fact that I'm not good at these games. So, because of that, and because I'm feeling fragile at this point, I decide to back off on the difficulty. It starts on MEDIUM, so I back it off to EASY. I want to WIN, man. At least a few times.

I note, while I'm here, that there is also a VERY EASY and EASIEST setting. Suddenly, I'm wondering – *just how bad am I?*

Hmm. I have no way to know that right now.

Never mind. Easy it is! At the character select screen, I stick with Chun-Li. I get a bizarre cinematic, anime style, with Chun kicking ass on... bank robbers? And then some dude named Guile shows up (who is that?)...

Rufus

Okay, I'm matched with some dude named Rufus. GO!

...

NICE! I kicked the shit out of him, using just basic kicks and stuff.

Guile

Onward! Guile is up next – he's got a flat-top from HELL, I can tell you.

I push forward, all kicks and punches. Guile throws spinning things at me, and I learn that I can jump over them pretty easily. He's faster than Rufus, but I can still just overwhelm him. I win, easily! NICE! Again, the match is 2-and-0... although that one was a lot closer. I'm feeling like I picked the right difficulty.

El Fuerte

He's quick. He jumps around the screen a lot, including a cool attack where he literally uses the edge of the screen.

I discover how to do throws! If you press [X] and [SQUARE] together, you can throw a guy! Cool!

I kick the shit out of El Fuerte. I trounce him, 2-0.

A Quick Aside

Now, for the record, I'm *only* attacking. So far, I have encountered literally nothing to tell me how the game works, or to even encourage me to block. I assume you have to block in this game, right? And, I've manage to fill my EX bars every time.

Still have no idea what they do.

Blanka

Okay, Blanka! He's the green dude with the lightning! I know this guy. Go go go!

Hmm. He drops me. He's not so stunnable as the other guys. I lose the match, 0-2.

Hmm. Not sure what went wrong there. Let's try that again.

(Bizarrely, I can change characters when I lose?!?? WTF? I'll stick with Chun-Li.)

Still no luck – but I discover that a low spinning punch (left stick down + [TRIANGLE]) seems to hit him at long range, and his AI has no response to this. I discover this through button mashing – it's not something I practiced. He takes me at first, but I come back – and I win the match, 2-1. My spamming of the low punch is my saving grace.

I'm feeling like I cheated, exploiting the AI in that way, but whatever. I've done plenty of that in the past, no reason to suddenly discover a conscience.

Ken

Nice! My new 'low spinning punch' trick works pretty good on him too.

I'm starting to get a feel for Chun-Li. I can jump around pretty well, and let fly with a series of attacks. Almost having fun! I drop Ken like a bad habit, 2-0.

This is when I notice that there is a score screen between matches. I have no concept of what the numbers mean, and the existence of a score had escaped my notice for five matches. Interesting.

E. Honda

E. Honda takes me out. Okay, that's fair – I'm feeling like my skill level is about right here, but I'm just not getting his moves yet. During the first round (which I lose, for the record) I accidentally execute something Chun-Li calls a "spinning bird kick!" that looks pretty rad. Can't repeat it, though. I lose, 0-2.

I try again. The re-match is a repeat of the previous one: I lose, 0-2.

I try again. And again, soundly defeated.

Huh. I'm down again. This guy has a series of grabs and stuff that I can't seem to match. I'll try again.

No go. 0-2. He's using this head-spinning attack, and a grab that does a huge amount of damage. I don't seem to have anything like the kind of power he has, at least not in my arsenal of "light" "medium" and "heavy" punches and kicks. He's also blocking, I think – quite a lot.

(Note that at this point, I still have literally *no idea* how to block. I might be doing it for all I know. If I hadn't played fighting games before, I might not even be aware that the concept exists.)

So.... Five 0-2 losses in a row: I'm pretty stymied at this point. I decide to hang it up for a day, and come back.

No Progress

Being an experienced achievement whore, back in the menus I take a quick look at my stats.

I have made *literally* no progress.

Nothing that I did was recorded, or mattered at all, apparently. Personally, I'm pretty proud of my five victories, given that they came from a complete noob, but apparently my gains are not worthy of measure. The game records only complete games, not individual bouts.

That sucks.

I turn off the game.

Not in a good mood. Not by a long shot.

Round Two: FIGHT!

Days later, I return.

Remember, I'm a "normal" player – I have a life and stuff, so I'm coming back to the game after having had a few regular days filled with working and surfing Facebook and stuff.

Did you know that most people who buy a game will only ever boot & play that game an average of 4-6 times? Like, *ever*? As in, they play the game 4 times, it goes on the shelf forever, and they feel like they got their money's worth.

This is the kind of player I believe people mean when they talk about a game being "accessible".

This time, I skip all the foreplay, and dive right into a match. I know what I'm doing now.

I'm still playing on Easy. Here's how it goes:

Match 1: Blanka. I lose, badly, 0-2, but a quick look at my notes reminds me about my long-range low punch AI exploit trick. This works just fine the second match, and I clean his clock (2-0).

Match 2: El Fuerte. Owned. I literally spend the entire match spamming CIRCLE, kicking him in the face. He hits me twice during the entire match. 2-0, Chun Li.

Match 3: Rufus. Having much more trouble with Rufus this time. How in the hell do I block?? 0-2. I try again, and gradually learn that the trick seems to be to keep him at range with my kicks – if he gets in close, I'm fucked. I take him in the second match, 2-0.

Match 4: Dhalism. *WoW* – first round is a nightmare, but I quickly learn that if I just keep moving (like, all the time) he can't land his attacks. I'm feeling pretty accomplished now. I'm enjoying this! I win, 2-1.

Match 5: Balrog. F33R my kick spamming! 2-0, Chun Li.

Match 6: Sagat. Ow. 0-2. Ow. 0-2. I take a step back, and discover that I can stun lock him with a low heavy kick (left stick down + [R2]). It's looking good, but at the end of the third round, he opens up some whoop-ass on me, and wins with 10% health. I was at 90%. 0-2, but I can smell victory. It's a cheesy, exploit-laden victory, but that's a step forward, man! Next try, I take him – but I'm at 40% health both rounds. 2-0. Whew.

Match 7: Rival fight! C. Viper. First match goes to Viper, 1–2. My low kick technique combined with a lot of motion seems to be working. I learn to dodge her super... thing (can I do those??!), and the second try I take her out, 2-0.

Match 8: Seth

This is the big one, I know – the boss fight. He's the big new character, I guess, and I'm expecting a tough fight. I settle in for a rough ride.

First try: round 1 is a walkthrough... but round two – is that even the same character?!?!? His moves *completely* change, he utterly destroys me, and I'm down. 1-2. Cool, though – I was sort of expecting that. Wouldn't it have been ironic if I had gone through all this trouble only to kick his ass the first time through?

Second try: 0-2. **Third try:** 0-2. Low heavy kicks work sometimes, but not always. He's a beast. **Fourth try:** 0-2. I'm learning to land my kicks – the timing is key, and I'm getting better at it. **Fifth try:** 0-2. **Sixth try:** I beat him the first round – but again, the second round I'm fighting a completely new foe. I'm destroyed, and the match ends at 1-2. **Seventh try:** holy shit, that second round dude is impossible. 1-2. **Eighth try:** 0-2. I'm not improving, not at all. The result seems to be completely random.

I'm starting to become demoralized. **Ninth try:** I do the Spinning Bird Kick again (no idea how), but flipping him the bird does no good. 0-2. **Tenth try:** 0-2.

You know what? I was going to try this at least 15 times just to show strong effort, but this son of a bitch has destroyed me so soundly in each of these rounds that I just can't go on any further.

I'm pissed off, I don't understand what I'm doing wrong, and I'm done.

Still No Progress

I go back to the main menu...

...and I'm deeply depressed to learn that apparently *nothing that I have done counts*. I have no Battle Points, none of my records show that any of that was recorded in any way (again).

To be honest, if I didn't have the extra motivation that comes from writing this article, I'd be done with this game.

Very Easy Is Still Too Hard

Several days later, I return to the game for another session.

This time, I swallow my pride, and I set it to "Very Easy".

I feel horrible about this decision. Look, I am not bad at games. In fact, there are many games that I am quite good at! I struggle to consistently score in the top 3 in Call of Duty, but I'm rarely last, and I get a *lot* of assists. I finish most shooters I play on 'hard'. My League of Legends post-match scores are generally quite good, thank you very much. In the old arcades, I was a monster at Raiden, used to peg the highscore boards for the vector-graphics Star Wars game, and was a Joust master. I have 100%'ed every major Mario and Zelda game ever made... and, perhaps more to the point, I beat the holy crap out of the SNES version of Mortal Kombat.

I may be getting old. But I'll take any of you whippersnappers on in a fair fight.

You know what? After downshifting my pride to "You Suck At Street Fighter", I experience almost *exactly the same thing*.

Yes, ladies and gentlemen, you read that right: after over four hours of play, yours truly can't even beat *Street Fighter IV* on 'Very Easy'. Seth destroys me, every time.

And In Conclusion

Guys, I've already made too much of a big deal about what is really a small point, so let's wrap this up.

Hopefully by now you have glanced once or twice over at the point I'm making here. I reached the end of this walkthrough of gameplay without ever learning *how to block*. There are no tutorials of any describable type in this game, and several hours into the experience, it is clear that if I want to learn how to play, I need to learn from

the community - the game will not reveal its secrets to me. Each step of my journey was greeted by silent, hostile guardians of secrets that once discovered could not be confirmed. And, the font is unreadable in NTSC.

...Even so, let me (as is my want) go ahead and be explicit. After all, I am writing to *someone(s)*, so let's not concern ourselves with this whole "fourth wall" business.

Here we go.

The fighting game genre generally uses interface, training, and pacing designs that are completely out of date. This genre is one of the last genres where this is considered 'okay'. This belief is holding the genre back from being experienced by a wider audience.

To better invite new or low-intensity players into your games, please do some or all of the following:

- Improve your 'first hour of play' flow to include introduction modes for new players. 'Quick Start', 'Tutorial', or 'Basic Training' modes are popular and simple - better would be to integrate (optional) training right into a new player's first few matches, but let's not get too far ahead of ourselves.
- Explain all of the basic moves to the player.
- Give the player the space and time to practice *just these moves* until they feel they have mastered them.
- Add an option while in training that communicates to new players the name of the move they have executed, so that they can confirm that they are doing what they intend to do.
- Introduce the more complex mechanics (EX, SUPER, combos, etc) with a clear demonstration or tutorial.
- Include an on-screen method that demonstrates and/or makes clear any mechanic that requires timing or spacial triggers. These mechanics remain hidden to more casual players unless they are explained.
- If a player is playing on Easy (or less), and fails against any character more than a reasonable number of times, ask them if they want help. If they ask for help, give them help. Explain the mystery secret trick to them. Let them win.
- In your scoring and achievement systems, celebrate the small progress the player makes as well as the big victories.

...

Okay, those are the low-hanging fruit. There's one more big fruit that's just a tad out of reach...

Here it is:

- Allow players to play the game with *just punches, kicks, and jumps*. Call it 'basic mode', call it 'kiddie mode', whatever, but give me a fighting game where I can beat the crap out of my friends (and have them kick the crap out of me) without having to learn your secret arcane knowledge.

Let me have fun with your genre again. Please do this. Please, so that I can return to this genre that I once loved. I'm terrible at fighting, but I still want to give you money so I can pretend like I'm not.

And, since you made it this far:

ACHIEVEMENT UNLOCKED!

- "VandenBerghe Sucks At *Street Fighter IV* - 30g - Read the entire article."

Congratulations, and thank you for your time.

“

In many ways, Tingle functions as a Dorian Gray picture for the player, the character of Link, and the Zelda series as a whole.

”

SCOTT JUSTER

MAJORA'S MASK

The Legend of Zelda: Majora's Mask is often thought of as “the mutt” of the Zelda series³⁵. It is an understandable sentiment, as it diverges from many of the standard Zelda tropes: it is not set in Hyrule, the villainous Gannon is nowhere to be found, and Princess Zelda's only contribution to the adventure is lending her name to the title. While Link and many of his familiar tools are present, they are applied in a unique world governed by a constantly ticking doomsday clock, full of dark characters with intractable problems. It is a game that seems in conflict with itself: it simultaneously follows the conventions of its predecessors while also including themes and game mechanics that criticize tradition.

Unsettling the Player

The Legend of Zelda series is not known for its strict narrative continuity. While some of the Zelda games theoretically take place in the same universe, a player would have little trouble jumping into most titles without knowledge of the previous games.

As the sequel to one of the most critically-acclaimed and widely-played games of its era, *Majora's Mask* assumes and utilizes the player's familiarity with *Ocarina of Time* as both a ludic and narrative tool in order to evoke feelings of uneasiness, anxiety, and strangeness. The game opens with a familiar character: Young Link from *Ocarina of Time*. Young Link embodies specific plot and gameplay implications: Seeing him in his usual green garb, riding Epona suggests that the game is picking up where *Ocarina* left off in terms of story. When the player is given control of Link, it becomes clear that he follows the same control scheme, environmental rules, and interaction system from the previous game. *Majora's Mask* greets the large audience of people who played *Ocarina of Time* with a familiar setup.

However, as soon as these recognizable feelings are evoked, the game's antagonist, the Skull Kid, transforms Link into a Deku Scrub. This sudden shift dramatically alters the character that players have come to expect. Link's mechanics are severely impacted: suddenly, swimming, long jumps, and swordplay are impossible. The standard Zelda plot is also thrown into question: the most pressing concern is not finding the Triforce, looking for a Princess, or vanquishing a great evil, but rather trying desperately not to be trapped in a monster's body. Because the game has already deviated from the familiar coming-of-age tale told in most Zelda games, there is no narrative clue as to when, or if, the story or the gameplay will return to the "normalcy" of *Ocarina of Time*. *Majora's Mask* boldly exploits the popularity and consistency of its own franchise to throw players off balance.

Eventually, the player is able to transform Link back into his normal form, but *Majora's Mask's* emphasis on creating anxiety by subverting familiar symbols and systems remains. Because of the game's unusually short development cycle³⁶, many of the character models from *Ocarina of Time* are found in *Majora's Mask*. The game utilizes this constraint as a strength by fashioning what is essentially a Star Trek-style "mirror universe" in which people look the same but act differently. For example, Koume and Kotake, both fearsome enemies that guarded one of the final temples in *Ocarina of Time* are characterized as harmless old witches that ask for Link's help and offer to aid him in his quest. *Majora's Mask* is full of examples of characters whose *Ocarina of Time* characterizations are changed to challenge the player's associations: An honest fisherman is recast as a pawn broker who knowingly sells stolen merchandise, a jealous ranch-hand becomes a sympathetic talent agent, and even the helpful fairy companion Navi becomes the curt, sarcastic Tatl. After having spent so much time building relationships with these characters in Hyrule, encountering familiar faces and having to treat them as strangers works to make Termina foreign in both a geographic and a social sense.

An Open World with Consequences

Majora's Mask pairs these unique mechanical and thematic changes with an overall game structure that diverges sharply from *Ocarina of Time*. With Termina, *Majora's Mask* presents the player with a rare situation: the game world, along with its NPCs and quests, changes without the player's prompting. Although *Majora's Mask* came out before it was popular to describe games as having an "open world," it remains one of the most intricate examples of a functional virtual world. Because of the Skull Kid's mischief, the moon's inexorable descent towards Termina is a real and constant reminder that matters in the game.

Even the most photorealistic, majestic game environments like New Austin in *Red Dead Redemption* or Liberty City in *Grand Theft Auto 4* allow the player to dictate the pace at which most events in the world occur. A player can start quests whenever

they want, and in many cases, can take long breaks in between objectives without suffering any mechanical or narrative consequences. A person waiting on you to deliver a certain item will wait until eternity, and will say nothing of the time it took you to get there. In *Majora's Mask*, the game systems make it clear that Link and the player are agents, not masters, of the world. Miss an opportunity and it disappears; mistakes are only corrected by sacrificing time and progress by rewinding to the first day.

The game makes concessions by allowing the player to protect key items and abilities from the three-day erasure cycle, but the social progress Link makes with the townspeople and their problems is reset. Relationships are erased and solved problems crop up again with every rewind. The player has a lot of time to think about the world and to see old patterns play out. Link and the player become very familiar with Termina's denizens, their struggles, and their stories. Such repetition can lead to monotony and existential pondering, and it soon becomes clear that certain people in the story bear a disproportionate burden when it comes to fixing the world and dealing with life's hardships. Link and the player can only cling to childish wonder for so long before fusing it with pragmatism. Because Link never talks, this transition is difficult to witness. However, other children in the world face the same battles as Link, and their stories expand on the themes stifled by Link's silence.

Childhood Responsibility and the Burden of Leadership

Legend of Zelda games traditionally focus on Link and Zelda, two youthful characters tasked with assuming a level of responsibility incommensurate with their age. *Majora's Mask* examines this concept in depth by including many characters that, despite their youth, must grapple with questions of duty, social expectations and altruism.

When Link travels to the Southern Swamp, he finds the Deku Kingdom in the midst of a witch-hunt precipitated by the Deku Princess' disappearance. A monkey last seen with the Princess is captured and the King becomes focused on revenge, vowing to boil him alive and "prolong his suffering" as punishment for the Princess' disappearance. This all takes place in the context of a much larger threat to the Deku Kingdom that transcends the kidnapping of a single individual: their swamp has been poisoned and the environment is slowly dying. Despite this, the King's thirst for revenge overpowers his duties as a leader.

In actuality, the young Princess was the only one who saw the large threat clearly, and her kidnapping was a result of her attempts to save the kingdom. After Link frees her, she learns of her father's actions during her absence and comments:

“Father does such rash things when he’s worried about me.” Upon returning, she chastises her father for his single-mindedness and orders the monkey freed. The King admits that “Hasty decision making is my weakness...This time, more than ever, it has become clear to me.” The Deku Princess is shown to be the most clear-sighted leader in the Kingdom, despite her status as a child. Because of this, she is compelled to put herself in danger and teach her father lessons that normally parents teach children. Her story mirrors that of Link’s: both must assume responsibility for society at large, and act in a capacity that often exceeds the abilities of their elders.

The Deku society is not the only one in which young members assume premature maturity. When the Goron tribe’s best warrior disappears and a supernatural blizzard threatens their village, the Goron elder leaves his citizens and his family in an attempt to rectify the situation. Although he realizes his son is distraught without him, he resolves to push on, saying “Forgive me, my child! Your father has work to do!” Even after Link offers to help solve the problems concerning the village’s dwindling supplies and the disastrous effects of the cold snap on the people, the Elder displays an insular, stubborn attitude reminiscent of the Deku King. He states that the fate of the village “is our problem!” and “We shall not rely on the strength of strangers.”

Like *Ocarina of Time* (and most other Zelda games), *Majora’s Mask* is partly a story about isolation: in both ludic and narrative terms, Link is alone in overcoming the challenges he faces. Just as Link (and the player) must accept the ethos of self-sufficiency and stoicism in the face of an uncertain outcome, so too must the Goron Elder’s Son. After Link helps the village, the Elder’s son says “Even if my daddy isn’t right beside me, I won’t be selfish and cry.” The natural desire for fatherly attention is instead framed as selfish. The selflessness Link is forced to assume is also present in the lives of other youths in Termina. The Elder’s Son must accept that he has a responsibility to his people that transcends his own desires.

We are given a preview of what may await the Elder’s son upon meeting the Zora kingdom’s young matriarch, Lulu. Although the Zoras’ political structure is nebulous, Lulu’s family heritage and cultural influence make her a de facto leader of her society, which makes her transition from child to adult all the more important. While young, Lulu differs from the previously mentioned characters in that she has recently made a crucial transition in life: she will soon be a mother. As an added, painful component to this transition, she must also deal with the process of losing her children after her eggs are stolen.

Compared with the aforementioned youthful leaders, Lulu’s concerns are arguably the broadest and most personal: instead of theoretical notions of justice and independence, she must deal with the prospect of shaping the next generation of her society. Furthermore, it is subtly implied that Mikau, the Zora who went out in

search of her eggs and who dies in Link's arms, is Lulu's mate and the father of her children. Not only must Lulu grow from being a child into being a leader and a parent, she must do it without a partner.

Lulu's arduous transition out of childhood illustrates the challenges that Link's story usually glosses over or leaves open to player interpretation. In *Ocarina of Time*, Link's aging is done in a split second and stems from magic rather than hard-earned experience. Because of his silent demeanor and vague family structure, Link is cast as a figure fighting to preserve a world in which he is a perpetual outsider. His endless devotion to saving the world is consistent to the point of becoming a cliché, but Lulu's story serves as a reminder of the real consequences of failure: there is no future without taking the responsibility to create one and safeguard those who will live in it.

Responsibility towards the larger good isn't exclusive to Termina's young ruling elite. Link's obscure origins are echoed in the many other heroic youths across Termina who are quietly engaged in personal struggles. Romani, a young ranch hand, tries to warn her older sister about a mysterious force, known as "Them" bent on stealing their cows and ruining their business. Her warnings go unheeded, and only Link takes any interest in helping save the farm. Another child, Pamela, is thrown into the role of caretaker after her father is turned into a monster. Because of his condition, Pamela hides her father and adopts an understandable anxiety towards the magical and the supernatural. Even after Link helps her, she asks him to keep his distance in order to prevent future trouble: "Your strange power...if father sees that, he'll surely want to research it. That's why... I don't really want...you to meet my father... I'm sorry to say such a thing..." This paranoia demonstrates a reversal of traditional roles: Pamela, the child, is protecting her father from potential danger and his own naiveté.

The Bombers are the epitome of this youthful wisdom. In both a narrative and ludic sense, they provide the means to solving Termina's salvation. The notebooks the children carry keep track of the various townspeople and serve to map their relationships and their problems. By giving Link and the player a tool with which to structure quests and prioritize challenges, the Bombers demonstrate a holistic view of Termina that goes beyond the obsession with immediate problems other townsfolk fail to see past. As characters, their selflessness and sense of adventure is matched only by Link's: even the moon's imminent fall and the town's evacuation fail to drive them into hiding. As the end draws near, only the children and the soldiers remain in the town. The difference between the two groups is that the children elected to stay without be ordered to do so.

The Nature of Aging

While most depictions of youthfulness in *Majora's Mask* are sympathetic and heroic, Nintendo complicates things with the introduction of Tingle. The character, an impish 35-year-old who harbors a fascination with fairies, wryly undercuts the solemnity with which other earnest adventurers in the game are treated. Despite his similar stature, clothing choices, and interest in magic, Tingle enjoys none of the respect afforded to Link. Instead, Tingle is used within the story to demonstrate the dangers of grandiose dreams. At the same time, Nintendo employs Tingle as a joke about the growth of the Zelda franchise and its players.

While the other youths in Termina face complex and often dangerous decisions, Tingle stays removed from adult responsibility. The time he spends attached to his balloon, hovering high above the ground is a metaphor for Tingle's relationship with society. While he observes and documents the world, he is removed from having to deal with its intricacies. For Link and the other children in the game, having to face challenges and make difficult decisions augments the simple passage of time, turning the concept of simply aging into the concept of maturing. Despite being 35 years old, Tingle's life plan is to "stand here waiting for a fairy of my own," instead of pursuing any specific goals. Tingle's own father laments this, and complains "That spoiled child is off playin' hooky again! A child his age has no business searching for fairies...!" Instead of engaging with the world and its realities, he seems to seek refuge in escapism.

This specific type of character also functions on a meta-level in regards to the Zelda series and certain perceptions of the medium. The stereotype of a delusional man-child in a state of retarded adolescence is a familiar one, especially in the realm of video games. Tingle's clothing and his interest in magical adventures ape Link's identity without ever realistically approaching his abilities. Viewed cynically, the player can be seen to acting as a Tingle-esque character simply by playing the game. The player dons a virtual costume in order to fantasize about being a hero. When *Majora's Mask* was released, long-time players of Zelda had been acting out the same basic role for over a decade. While Link functions as an avatar with a relatively static age, it is quite conceivable that people who started their Zelda adventure as children had grown into adults by the time *Majora's Mask* was released. *Majora's Mask* contains a subtle tease from Nintendo: perhaps Tingle, with his delusions of grandeur and obsession with childhood, is more realistic than any other character in the game?

Of course, this joke can just as easily be applied to the developer or Link as a character. Nintendo's approach regarding the design of Zelda games is conservative: with the possible exception of *Zelda II*, the games utilize the same basic dynamics, reuse

the same basic abilities and items, and consistently structure the plot as a traditional hero's tale in a battle of good and evil. Until *Majora's Mask*, the series itself was still preoccupied with the same things it had focused on since its "childhood" years.

In many ways, Tingle functions as a Dorian Gray picture for the player, the character of Link, and the Zelda series as a whole. As an avatar, Link can provide an escapist fantasy for those who seek one. The player, Nintendo, and the internal fiction of the Zelda universe collude to turn a blind eye to the problems of perpetual youthfulness; and instead, the darker side of these traits is bound up in an effigy. Tingle is used to mock and critique the obsession with childhood and fantasy that is pervasive throughout the Zelda series, even as the cycle is repeated once again while exploring Termina.

A Composition of Conflicting Parts

Tingle encapsulates the mysterious, unexpected, and sometimes-contradictory oddities that make *Majora's Mask* such an intriguing game. Its reused character models, control scheme, and graphical style may have been born from the economic realities of development, but such recognizable aspects are creatively used to foster the strangeness that permeates Termina. In possessing the outer veneer of familiarity, the inconsistencies and surprises in the world make it a more foreign place for experienced players. Suddenly, characters do not conform to their normal behavior, the passage of time itself is altered, and Link and the player are no longer the only active agents in the world.

Many of those additional agents are youths who illustrate the challenges that arise from social pressure and a responsibility for the greater good. Whether they are Deku royalty or simply children trying to look out for loved ones, their stories stand in for Link's shallow character development. In doing so, *Majora's Mask* joins in the tradition of casting Link as an essentially blank slate while reserving the luxury of exploring themes that require characters whose functions go beyond acting as ciphers to be molded by the player. It is a game that follows a long tradition even as it breaks from it.

With Tingle, Nintendo compresses various counterpoints to the game's central themes into a single character. Tingle acts as a foil to the game's heroic child figures. His existence pokes fun at those that would spend their time fantasizing about magical adventures. His apparent stagnation in terms of maturity and life accomplishments presents an alternate, pessimistic interpretation of Link's perpetual youth and never-ending quests. To self-conscious players, especially older ones, he functions as a mirror capable of reflecting an unpleasant image of childish escapism and irresponsibility.

“

This gives the player the opportunity to flex their gaming chops doing all the actions they have learned throughout the game thus far.

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MARK SIVAK

BLOCKS, PLANES, DRAIN, AND KAIN: WELL PLAYED FOR LEGACY OF KAIN: SOUL REAVER

Are you tired of juiced up, armored space marines fighting aliens? Do packs of zombies and post-apocalyptic landscapes no longer arouse your senses? Are you sick of little kids wearing green and women with boobs so big they shouldn't be able to stand up straight? Do you pine for a simpler time when a vampire-turned-wraith that harvests souls to keep himself (somewhat) alive. While also gliding through the material and spectral realms by using wings that his boss ripped the bones out of. All while killing dozens of vampires in classic (sunlight, water, fire, stake through the heart) and not so classic (glowing blade fused with his arm that can take on elemental powers) styles to quench his thirst for vengeance? If you answered yes to any of these questions (especially the last one) come join me on a trip down memory lane and into the land of Nosgoth to chat about *Legacy of Kain: Soul Reaver*.

Legacy of Kain Series Background and Overall Story

I will move as quickly as possible through this information as it is important for those unfamiliar with the series or who played any/all of the games long ago. Even though the *Legacy of Kain* series has a notoriously complex story it is sufficiently spoiled in this and subsequent sections. If you know about the *Legacy of Kain* series, don't know about it and don't want it spoiled, or are just impatient, feel free to skip ahead to the next section.

Before I jump in I want to let you know that I have not played completely through all of the games in the *Legacy of Kain* series, only *Legacy of Kain Soul Reaver* which is commonly referred to as *Soul Reaver* (note that the games in the *Legacy of Kain* series are commonly referred to their name minus "*Legacy of Kain*"), and *Legacy of Kain: Defiance* (Defiance). I have dabbled in the other games in the series but I am not an expert on them.

The first game in the *Legacy of Kain* series was *Blood Omen: Legacy of Kain*, which was released in November of 1996 for the Playstation and would later be released for the PC. It was developed by Silicon Knights and published by Crystal Dynamics. The gameplay is considered to be "hack-n-slash" (like the Diablo series) but it has

also been called both an Action-Adventure and an RPG. The story in *Blood Omen* follows Kain, a murdered nobleman-turned-vampire, on a quest through the land of Nosgoth to avenge his death and slay the corrupt guardians of the Pillars of Nosgoth, mystical pillars that protect the land. After several double-crosses and at least one travel back in time the game ends with Kain as the last vampire and the guardian of the Pillar of Balance, the final pillar. He has two choices: sacrifice himself and allow the land to heal or save himself and let the pillars fall to the detriment of all. The selfish bastard chooses (via cutscene, not a player choice) to let the pillars fall and dooms Nosgoth.

The second game in the series is the focus of this review, *Legacy of Kain: Soul Reaver*. It was released in August of 1999 for the Playstation and the PC and January of 2000 for the Dreamcast (the Dreamcast version is the one I played for this review). *Soul Reaver* was released again to the PlayStation Network in November of 2009. It was developed by Crystal Dynamics and published by Eidos Interactive. I will be discussing the mechanics and story in the next sections so I won't cover those here, I will just tell you that the vampire-turned-wraith is called Raziel and his boss is Kain. *Soul Reaver* is thought by many to be the best game in the series and has the highest Metacritic score out of the games in the series with a 91. It was also the best selling game in the series and found a place on the Sony Playstation's "Greatest Hits" list.

The last three games in the *Legacy of Kain* series are: *Soul Reaver 2*, *Blood Omen 2*, and *Defiance*. *Soul Reaver 2* was released in October of 2001 on the Playstation 2 and November of 2001 on the PC. *Blood Omen 2* was released in March 2002 on the Playstation 2 and PC and December 2002 on the Gamecube. *Defiance* was released in November of 2003 on the Playstation 2 and Xbox and then in December of 2003 it was released on the PC. All three games were developed by Crystal Dynamics and published by Eidos Interactive. *Soul Reaver 2* is a direct sequel to the first *Soul Reaver*, *Blood Omen 2* takes place between the events of the first *Blood Omen* and the first *Soul Reaver*, and *Defiance* follows *Soul Reaver 2* in the storyline and is the current end of the series. These games were not as popular or well received as *Soul Reaver*.

Story Introduction

Before I talk about some of the in-game systems and mechanics of *Soul Reaver* I want to bring everyone up to speed (or remind those who played it before) on the story of our hero in *Soul Reaver*. When the game begins a cutscene opens up and introduces the player to some of the stars of this blood-drinking soap opera. We learn that Raziel (the player's character) is Kain's first lieutenant (and they are both vampires) and that he has served Kain for a millennium. The player also learns

that the vampires evolve over time with Kain always being the first to receive the change. Raziel, however, grew wings before Kain and the rest of the vampires. Kain was not a big fan of being shown up and decided to rip the bones of Raziel's wings out and then have his other vampire minions (Raziel's brothers) toss Raziel into a swirling abyss which burns his flesh...

Raziel then awakens a thousand years later and he is alive (kinda) but purple, emaciated, and missing his lower jaw. He is in a room with octopus tentacles on the walls (a.k.a. The Elder God, keeper of the Wheel of Fate) and a booming voice and it talks to him about revenge and oblivion. More specifically, The Elder God tells Raziel that his body is broken and he is not really alive but that he can still exact his revenge on Kain and the other vampires by becoming the *Soul Reaver*. The Wheel of Fate is slowing because it is fueled by a cycle of souls and since the Vampires can live forever they are removed from the cycle. The Elder God raised Raziel to kill the vampire minions and their masters and devour their souls, thus allowing them to fulfill their destinies with the Wheel of Fate. So souls for The Elder God, revenge for Raziel, it is a win-win. No ulterior motive or twists, it's very straight forward, I promise...

Armed with this information Raziel is unleashed into the now dilapidated land of Nosgoth to kill some vampires and devour their souls.

The stuff that makes Soul Reaver worth playing

While there are aspects of *Soul Reaver* that have not aged well or were bad at any time (we will get to those later) there is plenty to still enjoy about this gothic, revenge soaked romp. In the following section we will take a closer look at these aspects of the game that distinctly fall into the "pro" category.

Besides the gameplay elements discussed here many players were drawn to the impressive graphics, sounds and theme of the game. The opening cinematic and vivid world design was certainly a plus on the game's scorecard. As was the dark and rich soundtrack and the creative sound effects. The overall "adult" nature of the theme, gameplay, and story was remarked by many players as a breath of fresh air in the stagnant fog of fairy tale heroes at the time.

Story and Setting

The *Legacy of Kain* story has been praised for its themes such as fate, destiny, revenge and time travel. The non-linearity of the storyline mixed with a healthy helping of double-crosses and revenge leads to a rich and interesting experience

throughout all the games in the series. The narration done by Raziel, The Elder God and Ariel in *Soul Reaver* is excellent and makes the story more personal while giving those characters more depth.

Nosgoth is a compelling setting any way you slice it. Besides the obvious, such as vampires and gothic or medieval technology and architecture, Nosgoth has a few other interesting components. The Pillars of Nosgoth tie the people and the land together while emphasizing the impact of corruption. The Elder God, hidden underneath it all serves well as a guide and headquarters for Raziel. The two realms, material and spectral, lead the player to always want to explore both to make sure there is no hidden treasure or secret entrance to an area.

Unlike our shiny vampires of today, the Vampires of Nosgoth are very bad-ass. They were not bitten by another vampire. Kain stole souls from the underworld and reanimated bodies to create them. They must drink blood to keep their bodies healthy. While they satiate their blood needs they will live forever and evolve over time. They are the top of the food chain and rule with an iron fist over the humans. Each vampire has his own region of Nosgoth where their minions have taken on special evolutions unique to their leader like the ability to swim, phase through gates and scale walls. They worship the dark gods and in return get all these gifts.

Humans in Nosgoth come in several flavors, if the player spares the first human vampire hunter he encounters the rest of the humans in the game will worship Raziel. This makes the subsequent human citadel level a breeze. However, most humans in Nosgoth have been domesticated. They have accepted their role as slave and food source. The humans that are feral and resist are fanatical to their gods and in constant war to resist the onslaught of the various vampire sects.

Kain is the constant throughout the entire series, hence the series being named after him. In several games he is the protagonist and in others he is the antagonist. Raziel faces him early in *Soul Reaver* to learn more about the story of both Kain and Nosgoth. During this meeting Raziel learns that The Elder God is not being entirely honest with him and that his destiny is entwined with the *Soul Reaver* blade (an actual sword wielded by Kain) and Kain. This early meeting of who will be the final boss is an interesting game design choice because in most games the final boss does not reveal himself until the last levels, they just mettle with the player from afar. Another interesting example of allowing the player to know the final boss is BioShock. In both of these games the player character has interactions with the final boss before the climax of the game. This gives their dynamic more depth and emotion. Also in a game with a story all about destiny and fate, the choice of having the player face and almost be defeated by the final boss in the second level just strengthens those themes.

Realm Transitioning

Raziel's ability to transition between the material and spectral planes is one of the cornerstones of this game and future games in the series. It is used as a plot device, death mechanic, and a platforming puzzle element. It gives a duality to the game world where Raziel can, and more often has to, explore both to continue.

The material realm is the real world. It is where the vampires and humans wage war. Where water has substance and gravity equally affects dirt, buildings and beings. The spectral realm on the other hand is Raziel's home court. He always has the spectral blade when inhabiting this realm (after he faces Kain the first time). Water has no substance, gates are passable (after defeating the first boss, Melchia) and more usually the world distorts in an advantageous way.

As a plot device, it is used as the personal domain of Raziel. Sure there are some lesser bad guys hanging around but really it's Raziel's dwelling. It is where he goes to regain strength and to explore. On the point of regaining strength, Raziel shifts back to the spectral plane if he runs out of health in the material plane, a way to explain his very fragile material existence. Once in the spectral realm he can dispatch the ape-like spectral realm enemies because he can only return to the material plane at full health and at a proper transition point.

The realm transitioning is most often used as an element of exploration or platforming. Because Raziel can go into the spectral realm at any time and the actual geometry of the world changes between realms it is a perfect addition to platforming puzzles. A great example of this is when Raziel is hunting Melchia to find out what has become of his clan. The smooth wall of a room juts out in the spectral realm, allowing Raziel to climb out. The sense of exploration and duality that the realm transition gives is a fun mechanic because the player gets to see behind the curtain of Nosgoth while in the spectral realm, allowing Raziel to explore and gain access to areas otherwise impassable.

Health Drain Mechanic

The constant draining of Raziel's health in the material realm (when he doesn't have the Reaver) is an interesting mechanic that fits in well with the setting, story and character in the game. It gives the player a sense of urgency while reminding them of Raziel's fragile material plane existence. The draining life mechanic is used in other games in the series to emphasize the thirst for blood that vampires in Nosgoth feel (balancing the need Raziel has for souls with that of his more alive brethren). At the time, the idea of constantly draining health was new and health bars were the norm. It has since been used in other games such as the Lost Planet series.

Health draining works in sprawling world of Nosgoth because nearly every enemy is potentially a source of health for Raziel so the player does not need to hunt around for health power-ups, just beat up some vampires and get back to full health. Also because there is not a huge consequence for Raziel losing all this health (he shifts back to the spectral plane) if the player's health does drain completely Raziel just regains strength in the spectral realm and returns to the material realm. In puzzle areas where there are few enemies and the potential for serious health drain Raziel usually needs to shift into the spectral realm to complete the puzzle anyway. Health draining adds a sense of urgency to any exploration or puzzle solving in the game, early in the game before Raziel gets the Reaver the drain mechanic is a much larger part of the game. It is a great design choice because it is during these early levels that the player learns simple combat and realm switching, lessening the consequences of the health drain.

Vampire Hack-n-Slash

Soul Reaver is a beat-em-up, meaning that a single button on the controller is used to attack over and over and over. Most of the enemies Raziel must face include Vampires that cannot be killed simply by beating them to death. These vampires must be dispatched using a finishing move based on a vampire cliché.

This makes fighting multiple vampires a mix of strategy and twitch gameplay, a great combination and a way to stave off the boredom of single-button attacking. The player must be aware of environmental objects like fires, sunlight, weapons (spears, tridents, etc.) and water as they can be used to finish off the vampires. One of the more interesting ways of impaling vampires is to use hooks or spikes attached to walls. Raziel can lift dazed vampires and throw them on these objects in a rather fun and crude manner. The vampires struggle like they are enduring a lethal wedgie, it is simple moments like this that make the case for good game design.

Once Raziel gets the *Soul Reaver* blade the combat changes slightly because the blade can be used to finish off a vampire, by impaling. However, since the *Soul Reaver* only manifests itself in the material plane if Raziel is at full health, many of the vampires later in the game are very adept at getting in a first strike and forcing Raziel to kill them without the use of the *Soul Reaver*.

Block and Switch Puzzles

Raziel has claws and his wiry, purple frame is actually quite strong. This combination leads to some interesting and challenging block and switch puzzles. Block and switch puzzles are nothing new, they can be found in games from Super Mario

World to Portal. They are littered throughout *Soul Reaver* and in conjunction with platforming puzzles make up a nice counter-point to the combat system. They also are compounded in difficulty by the health drain mechanic forcing players to solve them under a time constraint or die and return to the spectral plane.

The most notable block and switch puzzle occurs before Raziel battles Melchia. The player must find and move several blocks to complete a puzzle that uses tracks painted on the floor, torches, switches and blocks. This includes using an elevator that is activated from a different level and multiple blocks that need to be stacked to complete the puzzle. At this point in the game the player has not yet been given the Reaver so they are required to complete the puzzle while under the pressure of the drain mechanic.

Zeldaesque Boss Battles

The boss battles in *Soul Reaver* are a great part of the game because they contrast so nicely with the beat-em-up gameplay that is prevalent in most of the levels. I have used the term “Zeldaesque” because in many ways the boss battles of *Soul Reaver* closely resemble the boss battles of the 3D Legend of Zelda games.

Throughout the game Raziel faces Melchia, Kain, Zephon, Rahab, Dumah and Kain again. None of these battles use the hack-n-slash or beat-em-up mechanics of the lesser vampires, they all require a special mechanic that is the foil of the bosses special power. Once Raziel defeats these bosses he devours their souls and gains their special powers, not unlike Mega Man or Kirby. He then must use these powers throughout the rest of the game to defeat enemies and complete puzzles.

The best boss battle in the game is Dumah. Raziel battles into Dumah’s region only to find that humans have defeated all the vampires. If Raziel spared the first human then all the humans will worship him instead of attack. Raziel finds his way to Dumah who is impaled with spears in his throne room. After removing the spears Dumah comes back to life and Raziel must lead Dumah to a furnace and burn him. This boss fight is great because it requires many of Raziel’s special abilities and platforming to complete. This gives the player the opportunity to flex their gaming chops doing all the actions they have learned throughout the game thus far.

Exploration and “Leveling up” Items

In what seems like another nod to the Zelda series, Raziel finds items throughout the world that increase his power and abilities, much like the heart containers and myriad shields, weapons, and tunics that Link finds in his travels. These items

range from Warp Gates that allow for fast travel around Nosgoth to the ability to swim, climb, and items that increase Raziel's magic power. All these items give a sense of Raziel "leveling up" and becoming more powerful. It is an easy way for the player to have investment in their accomplishments and see the benefits of exploring every nook and cranny of Nosgoth.

The not-so-fantastic stuff in *Soul Reaver*

In the same way the material and spectral realm combine to make a complete world in *Soul Reaver*, this section details the "cons" of the same game elements discussed in the previous sections.

There are several other valid criticisms of *Soul Reaver*. Like many 3rd person games of its era the camera has weird angles that have a negative impact on gameplay. One blind turn later in the game can remove the Reaver and force the player to stop and beat the crap out of a several vampires before moving on. In a game where the bad guys respawn every time you leave the room this can become a serious annoyance. Another criticism is usually levied on the world design itself. Nosgoth is fairly massive but the vast majority of the encounters follow the same flow: kill all the vampires, use either boxes or realm transition to solve the puzzle and move into the next room. Rinse and repeat. Couple the previous two issues with a game that can take over 40 hours to complete, a lifetime by today's game standards and it was not every player's cup of tea.

Story and Setting

The story in *Soul Reaver* is deep and intertwining but also convoluted and truly doesn't have an ending (there is actually a "to be continued..." at the end of the game). Kain and Raziel with their accents and vocabulary seem pretentious, almost insulting at times, when they are explaining the story (e.g. thesis, here-to-for). While this makes Raziel seem like if was once part of high society it also can sometimes make him seem like a whiner, never a good trait for a hero.

Nosgoth has plenty of well used clichés (gothic architecture, fanatic humans, vampire killing methods), but the post-apocalyptic nature of the world and the weapons have all been seen before. The vampires are slightly tweaked versions seen in other media, but vampires have a long established history of gothic cliché. The vampires taking on specific special abilities along with themed areas, once again reeks of Legend of Zelda (there actually is a water temple in this game). While this can make players feel at ease in a slightly new setting it there are puzzles, encounters, and levels that give a sense of déjà vu.

Realm Transitioning

Realm transitioning is the backbone of the game but it becomes overused and predictable due to its necessity as plot device, puzzle solution, and death mechanic. The player does not usually need to actually figure out the solution to a platforming puzzle, if it is not a block and switch puzzle it will be a realm transition that is used to complete it. This leads to players simply moving into an area and transitioning without even encountering the puzzle, just seeing the solution. There is also the need to explore every area in the game twice to see everything and get every secret. As a death mechanic realm transitioning is not a serious consequence for most players as usually the player dispatches a few simple enemies and then returns to the material realm at full health very near the spot of their death. Later games in the series change up how Raziel can shift between planes (by being able to essentially possess dead bodies), but the negatives remain.

Health Drain Mechanic

The draining health mechanic loses much of its importance after Raziel gets the *Soul Reaver* because it keeps him at full health while active. Since Raziel gets the Reaver before many of the most challenging puzzles and encounters the sense of urgency that the drain mechanic causes is usually addressed by players by just shifting into the spectral realm and getting to full health then returning to complete the puzzle with the Reaver and no time constraint. Also because Raziel does have a need for souls enemies have to respawn in already conquered areas which when coupled with tons of realm transition points for puzzles can make the drain mechanic more of a chore than an interesting game mechanic.

Block and Switch Puzzles

Like the omnipresent barrel in first person shooters, it always seems that action-adventures have block and switch puzzles and this is not an automatic con for most games. However, they are boring and now very outdated and *Soul Reaver* relies very heavily (even too heavily) on them as a counter point to the combat mechanics. There is only so much that can be done with dragging blocks and hitting switches. One of the most cliché block and switch puzzles is early in the game when Raziel must figure out that he needs to stack 2 blocks on top of each other to reach an exit to the area. This puzzle has been rehashed in many games from *Ocarina of Time* to *Lego Star Wars*.

Zeldaesque Boss Battles

Once the player finds the weakness of the boss, the strategy for every boss fight is just to repeat that same action 2-3 more times, that's it. You can start to see the problem with the boss fights when more than one in the game actually requires Raziel to run like a coward from the boss so that they can get caught in some kind of trap (Melchia and Dumas). One of the worst offenders of the rinse and repeat boss killing method that Raizel usually employs is the fight against Rahab. Rahab has become immune to the detrimental effect of water and is swimming in his lair. To defeat him Raziel must jump from platform to platform breaking stained glass windows to let the sunlight into the room. How does Raziel concoct this strategy you ask? The Elder God tells him when he enters the abbey that Rahab and his brood are susceptible to the sun, so the solution to the boss fight is explicitly told to the player and even then it's not like it is a hard action to pull off. Raziel doesn't even attack Rahab directly, once all the windows are broken Rahab just dies. It is very anti-climactic for one of the later bosses in the game.

Exploration and “Leveling up” Items

While these items to give Raziel and the player a sense of empowerment they also have several issues. Several of the best items are rather well hidden (such as the elemental Reavers) which means that some players, probably the players that need it most, will miss them and not have access to them later in the game. Another issue is that movement around the world is accomplished by the Warp Gates which have cryptic symbols and seemingly random locations. This can force the player to double back and lose a lot of time to dealing with the trash enemies that constantly respawn.

Conclusions

Here rests the too long, didn't read version of this review mixed with some of my closing thoughts. *Soul Reaver* does have a deep albeit convoluted story without a real ending. The rich but cliché-laden world of Nosgoth is populated with interesting beings and architecture. The characters of Raziel and Kain are interesting and well-developed, but in many instances come off as pretentious and forced. The gameplay in *Soul Reaver* was a mix of old and new. Realm Transitioning and Health Draining were new and innovative, but also repetitive and overused. The block and switch puzzles as well as the boss fights were not new, but proven and executed nicely.

Overall *Soul Reaver* deserves its 91 Metacritic score and is worth playing. It is a solid game in any time frame, although I found upon playing it again for this review that it had aged more than I liked to admit. The cinematics with low poly characters, the warp gates, the constant need to explore and save, I am glad these kinds of mechanics are outdated. However, the story, characters, setting, and many of the other mechanics would work today with little updating. The strength of *Soul Reaver* lies in the story, world and theme but it is the execution of the games mechanics that make it a truly great game worth playing, even today.

“

While playing the game and failing again and again to defeat the various level bosses, a revelation hit me; my personal struggle with the level bosses WAS the story.

”

CHARLES PALMER

TOY SOLDIERS

Overview

What is it about playing war that captivates children? From the tin soldiers of the mid-1800s to the green army men of our childhoods, millions of children have answered the call and let their imaginations transport them to another time and place. Whether it was Cowboys versus Native Americans or raising an army of elite commandos to rescue Bazooka Jim from behind enemy lines, we spent hours upon hours engaged in epic battles across our bedrooms, basements, and backyards. There was something magical about the activity. No matter our economical status, race, gender or physical abilities, for a time we would retreat into our own fantasy. The experience provided us with a developmental need; to be strong even when we feel weak.

As an exercise in imagination and ingenuity, we learned to see the world differently. An old cigar box became an impenetrable concrete bunker; a bit of thread and a paperclip were a grapple hook and zip line; and anything that floated became an unsinkable battleship. Until it became waterlogged and sunk, at which point it turned into an elusive submarine on a top secret mission. And through all that play we learned the craft of storytelling. We pitted hero versus villain, bent tyranny to our will, and returned conquered lands to the natives punishing interlopers in the process. We were always right, always in the nick of time, and always the reason for happy endings. Simply put - it was magnificent.

Signal Studios' *Toy Soldiers* brings back some of those memories. At its heart it's a 'tower defense' game. But, since the term was trademarked by COM2US in 2007, you won't find the term "tower defense" included anywhere in the instructions or their website. In this game players are tasked with preventing waves of enemy soldiers from infiltrating your stronghold. As general and architect, your mission is to build fortifications and defensive units capable of repelling the overwhelming attacks of wave after wave of enemy combatants. But to stand apart from the crowd of tower defense style games, the developers from Signal Studios expanded their title with the addition of a few twists on the common theme.



Figure 1: Game environment

Twist 1: theme and setting

To start with, these epic battles are reminiscent of our childhood adventures because the combatants are toy versions of WWI era soldiers. Yes, World War I, the War to End all Wars, a welcome change from the gazillion WWII titles available in every genre. In this game tiny toy replicas of soldiers, tanks, planes, and artillery from 1914-18 battle for supremacy in stunningly modeled 3d dioramas. The graphics and musical score are on par with most of the pricier console titles and the levels are rich with diverse locations, seasons, and strategic challenges. Furthermore since the combatants are toys, there are no gruesome, gory battlefield death scenes. Instead their demise is visualized by the likes of exploding gears and springs, humorous plastic death rattles, and soldiers propelled hundreds of feet into the air by explosives (there is even a 'Highest Flying Soldier' stat for each level completed.)

The main Campaign mode has 12 levels of 9-26 waves of German infantry, cavalry, armored vehicles, and aircraft that make their way across the battlefield to invade your toy box. Strategic placement of defenses is essential to victory. The lose-state occurs if a set number of units succeed in entering the toy box, or the player fails to defeat the Boss units found at the end of some missions.

Completing Campaign mode will unlock Campaign+ mode. Not a very original title, but this mode puts the player in the role of a German General fighting through 12 reconstructed levels for an entirely new challenge from British troops.

Lastly, since these epic conflicts take place in miniature, the theater of battle is actually a table or desk in someone's room. Flying around the boundary will reveal desk lamps, shelves, posters, maps, radios, and even a frosted window.

Twist 2: units and their placement

In traditional tower defense games, players position static units on the field of play, in an effort to "defend" against mobile enemy units attempting to traverse the area of game play; left to right, top to bottom or mixed. There are generally a set number of enemy units who can reach the end point before the level is lost. *Toy Soldiers* follows this pattern of game play, but instead of free-form positioning environments like Kongregate's Desktop Tower Defense or PopCap's Plants vs Zombie, players can only build/place units on fortified positions. These predetermined areas are strategically placed across the playing field clustered together as they would be on a real world battle front. This allows for co-placement of units types to provide varied defensive and support for the Toy Box.

As an added challenge, in some instances these positions are occupied by enemy forces that must be destroyed before the player can acquire the site and build units capable of defending the captured position.

Twist 3: unit control

All tower defense games let the user purchase, upgrade, and sell units. The currency is usually a point system derived from the destruction of enemy units. *Toy Soldiers* uses money to purchase, upgrade and maintain units. Defeating entities (troops, buildings, and offensive targets) earns the user cash which is deposited into a defense fund. These funds are immediately available to construct new units, improve (upgrading to level 3) or maintain (repair all damage) the player's defenses. With most TD games, the strategy is in the placement and resource management of units. But Signal Corps has added a first-person shooter element giving players the ability to take control of fortified and mobile units. In this game you don't just place and oversee units, instead you can override the artificial intelligence and take over a machine gun nest to rip a Beutepanzer to shreds. Or man a Mark VI Howitzer and rain devastating destruction on your enemy units and fortifications.

The addition of a first-person "Use mode" greatly enhances the game play and is a nice counter-balance to limited unit types and placement. Personally I enjoy taking control of the sniper tower. Even though the zoom control is a bit wonky (zooming often continues after releasing the control), it is very satisfying picking off enemy units that creep past your primary defenses.

Twist 4: unit management

Beyond the general upgrade process of units, the nature of combat also requires the user to repair damaged or destroyed units. Enemy infantry use guns, grenades, and mortar shells to damage the player's fortified positions. This along with the damage issued by armored units requires constant observation and vigilance of the battle field. Beyond routine damage management, players must also be prepared for the devastating destruction done by the six mammoth bosses.

Toy Soldiers, like other TD titles, uses waves of units which vary in the attributes of mobility (speed and flight), vulnerability (light or heavy armor, high health, and clustering), and attack strength (damage inflicted per weapon per attack). But it's the Boss battles which set it apart. Each Boss's appearance is preceded by its own period-inspired menacing theme music. This audio cue instantly changes the mood and atmosphere of the conflict. These end-of-level battles are spectacular as they require the player to switch from a defensive position to an all out tactical assault. The units themselves are ginormous, dwarfing everything in its path. The Tzar Tank is easily 10x the size of infantry units; making it an impressive and ominous behemoth as it lumbers across the battle field obliterating everything in its wake



Figure 2: Toy Soldiers game play example

Playing the Game

In *Toy Soldiers*, the player must defend their position and prevent 20³⁷ enemy units from entering their stronghold; a large red structure meant to represent the player's Toy Box. The game blends the real-time strategy of a tower defense game with the combat of a first person shooter. Both modes of play are modified to intermingled their strengths and create unique and challenging experiences. An example of this is at the core of the title's game play. Playing in "Use" mode let's the player be in command of a single unit. Instead of being controlled by the AI, this unit becomes an extension of the player; aiming and firing only on command. But the player must still manage the entire battlefield in third-person. Meaning, while taking control of a defiladed machine gun position may provide a short-term tactical advantage against infantry units, the player must be alert for other units sneaking through choke points or flying high over head toward their objective. With a single click the player can toggle through first person perspectives of every unit or exit back into third person mode.

| Difficulty Settings | | | |
|---------------------|------------|-----------------|---|
| Setting | Lose-state | Base soldier \$ | Setting notes (in game insructions) |
| Casual | 30 | \$35 | Enemies have less hit points and more cash is awarded for destroy |
| Normal | 20 | \$25 | For those with too much dignity to choose casual |
| Hard | 20 | \$25 | Enemies are stronger and have more hit points |
| Elite ³⁸ | 40 | \$35 | You're on your own. Only units you use directly will fire. |

Table 1: Difficulty settings

A WW1 themed loading screen starts the game displaying the status of the war's progression to the sounds of a scratchy gramophone playing two popular period pieces from the late 19th century **Goodbye, Dolly Gray** and **She May Have Seen Better Days**, or the original compositions of **The Sailor's Life for Me** or **There's a Candle Burning Bright** both by veteran game composer Stan LePard³⁹. These elements set the mood and establish the base storyline. Slides of retro-style box packaging further add to the mood and establish game play characteristics and control hints. Level load times seem long at 30 seconds, but once loaded a mission statement identifies the player's primary goals via a brief historical statement about the battles significance. Most missions are modeled after real skirmishes and battles so names might be familiar to history buffs. But extensive knowledge of the forces, terrain,

historical outcomes, and overall significance of individual battles is unnecessary to the novice player, making the game approachable for players with limited knowledge of the war..

Primary missions range in complexity; from holding the line to timed invasions to destroying strategic targets. They also vary in time from short skirmishes to a staggering 24 minute finale which ends with a hellish end boss battle against a Rail gun behemoth. Likewise starting funds also fluctuate, providing another challenge as placement of the first few defenses often determines a level's outcome and limits the ability to upgrade quickly. Additionally, missions also have secondary objectives which unlock in-game achievements and Xbox Live avatar swag.

The first conflict begins with a battle in the Belgium village of Langemarck⁴⁰, on a miniaturized battle field between toy replicas of German and British troops. Table 2 outlines mission objectives (primary and secondary) for the first three levels.

| Starting missions | | | | | | |
|--------------------------|----------------------------|--|--|--------------|--------------------------|------------------------------|
| Title | Date | Primary | Secondary | Waves | Time⁴¹ | Notes |
| Langemarck (1914) | Oct 24, 1914 | Defend Langemarck Village Northeast of Ypres | Score a 10x combo using a level 1 or 2 anti-infantry gun | 9 | 09:30 | No playable mobile Units |
| Gheluvelt Chateau | Oct 31, 1914 | Protect the chateau at Gheluvelt from enemy reserves at Polygon Wood | Use howitzer to destroy three enemy barracks | 10 | 11:50 | No playable mobile Units |
| Nonne Booschen Wood | Nov 11, 1914 ⁴² | Defend the lines along Menin Road outside of Nun's Wood | Destroy 50 enemy infantry with gas | 14 | 16:05 | No mobile units, Boss battle |

Table 2: Sample mission objectives

Art style

Missions open with a sweeping pan of the battle field and the first thing to note is the gorgeous scenery. Tiny villages rich with details represent life in the early decades of the 20th century; snow covered trees decorate rolling countryside; dirt and cobbled roads lead to quaint wooden bridges; and neatly dug trenches lined with sandbags are all rendered in stunning detail. The first few missions are well balanced to help the player get acquainted to the controls as well as the advantages and disadvantages of various units. But I found myself zooming around the battle field inspecting the detailed surroundings and testing the limits of the destructive environment; which is extensive by the way.



Figure 3: Soldiers mill about preparing for the first attack wave.

This art style is rich with textures bringing everything to life including animations which are ideal for the 'toy' like setting. Infantry troops, advancing across the field often stop to fire off a shot or lob a grenade at your fortifications. Sometime bumbling riflemen stumble and fall over small unseen obstacles or perform an end-zone style victory dance as they achieve their goal of sneaking into your toy box. Likewise, cavalry troops, which can leap over most fortifications, will stop to rear up before charging ahead into the fray. Even the 'Big Willie', the rhomboid shaped tank which

ushered in a new era of warfare, has a toy-like windup keys that spin constantly as is moves across the battlefield.

Unit types


Player units, ranging from chlorine gas and flamethrowers to anti-aircraft and mortar shells, offer a wide range of offensive/defensive strategies (see Table 3: Stationary Units). Placement of these units is the key to surviving advancing enemy waves. Levels have three types of fortified positions; small, medium, and large and units can only be built in these locations. Anti-infantry units can be built on any position, but the heavier anti-tank and anti-aircraft guns require the larger platforms. The medium platforms are actually two small fortifications linked side-by-side, providing even more defensive diversity.

These location restrictions provide strategic challenges for dealing with varying enemy troops. Frontline weapons like the **Vickers Machine Gun** are perfect against foot soldiers, but are quickly destroyed by the German A7V if you're not careful. Upgrades and repairs are the key to keeping your defenses.

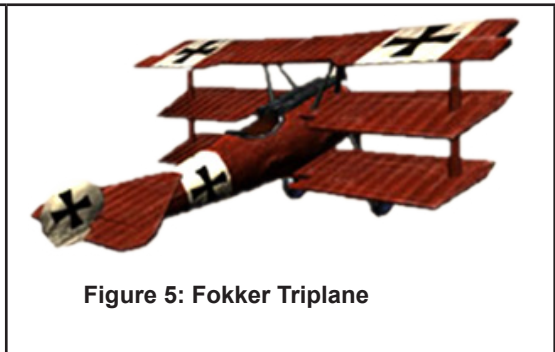
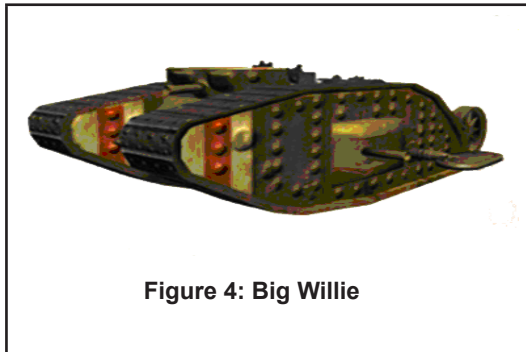
| Stationary Units⁴³ | | | | |
|--|--|--|---|-------------|
| Type | Level 1 | Level 2 1st Upgrade | Level 3 2nd Upgrade | Size |
| <i>Anti-infantry (Machine gun)</i> | Vickers Machine Gun Vital anti- infantry weapon. Ineffective against armor. | 37MM MLE Infantry Gun Faster firing with bigger bullets. Effective against cavalry. | Mark II Explosive crowd control. Light vehicle damage. | Small |
| <i>Anti-infantry (Chemical)</i> | Red StarSchilt Best used against large groups of infantry. Limited health. | Flamethrower Fire. Greater damage. | Livens Projector Gas and fire with the range of a mortar. | Small |
| <i>Anti-infantry (Mortar)</i> | The Stokes Use against infantry and tanks. Limited range. | Newton Increased range and vehicle damage. | Flying Pig Decisive power and health. Long firing arc. | Small |
| <i>Anti-tank (Howitzer)</i> | 18 Pounder Long range and high damage. Ineffective at close range. | Mark VI Greater range and more power. | Mother BOOM! Longer reload times. | Large |
| <i>Anti-aircraft</i> | Pom-Pom Effective against enemy air units. | The Seventy-Five Greater range and damage. | Old Quick Flak Flak. Impenetrable skies. | Large |

Table 3: Stationary units


As mentioned previously, players can also enter “Use” mode on any stationary unit. This first person orientation puts you in control of the action, firing on targets of your choice strategically taking out individual combatants who make it deep inside your defenses. It is also a useful method for firing on a cluster of soldiers to rack up combo bonus points which are only awarded when the player is controlling the unit. While in Use mode your other stationary units continue to be controlled by the game’s

artificial intelligence attacking random enemy troops. As great as this mode is, it does require the player to be aware of the overall battle field and mastering control of the targeting system of each unit type. Small projectile weapons (rifles and machine guns) use a familiar crosshair targeting symbol, while shell firing weapons (mortar and Howitzers) use an arc overlay for identifying the point of impact. This interface takes a little getting used to but is still quick to master. Additionally, these weapons have a “Shell Cam” view. Clicking the  (the “A” button) after firing changes the point of view to just behind the fired projectile. While in this perspective, the player can tweak the shell’s trajectory guiding it to the target.

Aside from stationary units, mobile vehicles are also available on many missions providing the ability to take the fight directly to the enemy. Two types of aircraft and armored vehicles are available for both campaigns (British and German), but not all vehicles are available on every mission.



These versatile mobile vehicles deliver a ton of damage on enemy troops and installations. But while piloting a vehicle in first-person the player can not manage their other forces. There is no method for building, repairing, or selling from the driver’s seat and the point of view is locked to that of the particular vehicle being piloted. To manage other units the player must exit the vehicle and take direct action.

When exiting ground units, the player has only 10 seconds to work, as indicated by a count down timer hovering over the vehicle. After the time elapses the unit is destroyed. So use this time wisely. Exit the vehicle with , take whatever measures are necessary, and hop back in before the timer reaches 0. If this can be accomplished, the player can continue mowing down the enemy. If not the ground vehicle will crumble and vanish, dumping the player back into third-person mode.

When exiting from a plane, the vehicle responds as if the pilot ejected. It continues to fly out of control eventually crashing in a spectacular fireball. Both units, the tanks and planes, will re-spawn at their starting location in 30 seconds. But this can seem like an eternity if you’re strategy depends on those units.

Navigation

As the battle continues in length and intensity, navigation around the battlefield becomes increasingly important. The camera controls are very simple and intuitive, but one of the greatest tools for navigating the battle is the overhead camera view. Tap down on the right analog stick to zoom high above the combat zone. This is the best tool for following battlefield action and repairing damaged defenses. From this overhead view, and surrounded by the sounds of high winds, the player can manage resources throughout the game field and zoom-in to a specific position.

Boss Battles

Most of the game's enjoyment comes from adventure and exploration. From level to level, new objects, tactics, and unit obstacles keep the play from becoming a stale incarnation of a typical tower defense game. But the essential components of accomplishment and achievement, needed to maintain player engagement, are derived from the end of level battles.

Boss battles appear at the end of every third level and truly take on the title of 'epic conflicts'. These levels proceed as normal with waves storming across the battle field to the player's Toy Box. But as the final wave of troops is destroyed a chilling stillness creeps across the battlefield, seconds later the silence is broken by an eerie tune which seems to emanate from everywhere.

The music of course is a cue for the Boss entry. Each boss is oversized and defiant on destroying nearby unit encampments before plowing into the Toy Box. Each boss is unique with its own cohort of diversionary units who focus on specific seek and destroy missions. For example the Zeppelin, which flies high above the battle field, will destroys any player controlled aircraft that attempts a frontal assault. But its modus operandi is to slowly meander toward the Toy Box protecting itself with massive air guns while deploying explosive kamikaze-style hang gliders to assail encampments; normally destroying the player's unit with one or two direct hits. Likewise, the fast moving Ubertank, rips through the no-mans-land between the player's forces and the enemy camp in a figure eight pattern. When facing the Toy Box it fires non-stop on the player's forces, but as its pattern sweeps away from the allied side, a rear door opens and a squad of mini-Beutepanzers rolls out making a beeline for the Toy box.

I'm not sure it's possible to defeat a Boss on its first appearance. Each boss requires a different strategy that can only be gleaned after seeing the beast in battle. To some players this can be very frustrating. Boss levels last 20-30 minutes and losing means the Toy Box is destroyed and the level must be restarted. But I think this

setup is what makes the game enjoyable. Accomplishing tough, and sometime gruesome, challenges gives the player a greater sense of accomplishment and a desire to see what the game has in store for them next.

Additional Modes of Play

Aside from the campaigns, *Toy Soldiers* provides three additional modes of play. **Survival mode** puts the player in the hot seat as wave after wave of enemy troops and bosses rain down upon the Toy box. The goal is to survive as long as possible racking up a high score for the community leader boards. **Multiplayer modes** (both local and online) pits human against human. In this mode both players set up their defenses on opposite sides of the battlefield to defend waves of troops sent by the opposing player. Just as in the single player mode, each player is rewarded cash for destroying enemy units, and these funds are used to upgrade and repair defenses.

And finally there is the addition of Downloadable Content. To date, two add-ons have been created; The Kaiser's Battle and Invasion. These DLC packages extend the playability of the title by adding new scenarios, maps, units, objectives, avatar achievements, and bosses. The Kaiser's Battle allows players to take the role of the French Army in the 'Spring Offensive' against a cunning German opponent. The five new units don't change much of the game play, but the new boss is amazing. Invasion adds more than just a few skins to the current set of units. In this title the player battles under the German flag against the British army and a menagerie of their secret weapons. Playing off of the toy box theme, the player must now defend against waves of toy fire trucks, space tanks, mounted knights, flying saucers, and fish tank helmeted space men.

Well Played

Great video games provide constant challenges as we struggle to learn, adapt, and overcome the game's objectives and revel in its reward system. These exceptional games artfully create an engaging experience which straddles the boundary of rigorous challenges and infectious enjoyment. Too complex or lengthy and players get frustrated, leaving the game unfinished; too easy and players are bored and unfulfilled with the experience. Designers of great games harness and mold that balance seeking a sense of equilibrium; creating rich, engaging, virtual environments where players become engrossed in the setting, the strategy, and the story.

I have to admit that while analyzing *Toy Soldiers*, I wrestled with whether a game of this nature should be included in this academic journal. My hesitation had nothing to do with the quality of the game. Instead, it was the type of game play and the limited narrative scope presented by the title.

To date, most of the games reviewed in the *Well Played* series have strong cohesive over-arching storylines. The articles and case studies dive into protagonist motivation, value systems, and plot advancement; areas seminally important in the discussion of game theory, character development, and the evolution of computerized fiction. And during my first play through of *Toy Soldiers*, I failed to see how this incarnation of a tower defense game could add to the conversation. But after further consideration I decided to include this analysis because I found a few similarities to some of the journal's story-heavy counterparts.

When evaluating entertainment devices (movies, games, books,...) we often look at the genre, world-based systems (i.e., environments, resources, objectives, and rewards), character place/role in the world, story arc and conflicts presented to the player. And my assessment of *Toy Soldiers* was no different. The first three attributes were simple, but after the second play through I was struck by the game's lack of a strong story. Yes, there are mission objectives and in-game goal descriptions, but these are far from ideal methods of crafting a tale. They don't even chronicle the war let alone create an engaging narrative for the player. There's no hero taking on the establishment, no ex-mercenary with amnesia trying to clear his name, and no romantic subplot like so many games.

While playing the game and failing again and again to defeat the various level bosses, a revelation hit me; my *personal* struggle with the level bosses WAS the story. More specifically, it was *MY* story built from my specific experiences and approaches to completing each level. As architect of the battle field, my role became that of the protagonist, tackling obstacle after obstacle growing in skill (strategy) and weaponry (units and upgrades). These mounting challenges follow a pattern of ebb and flow as the player progresses to equally spaced boss battles which serve as a constant creeping threat. They present new and varied challenges beyond the terrain and unit combination of the other levels, letting the player utilize the new skills they've mastered. But, as I played further, I began to realize the true reason I continued to play. It wasn't the missions or the combat scenario that kept me playing. Nor was it the "playful" dioramic setting and charming toy animations that captivated my attention. Instead, it was the sense of exploration (things like *how does this combination work*, or *can I get a 20x combo...*) an accomplishment for both me *the character* and me *the player*. This was the game play I wanted. It was what motivated me to continue the struggle, switching tactics and testing defenses.

I found myself playing through the game one more time, looking with fresh eyes at the reward system and my motivations. And there it was, unfolding like a miniseries of four three-act stories. I was also crafting my own narrative based on the varied struggles of my forces. It was a unique storyline running parallel to the war theme where I imagined unseen opponents, enemy commanders and generals, furious as I defeated their troops or laughing manically at my pitiful attempts to hold them

back. And I wondered even further; *was my reaction what the designer's intended?* Did they expect players to fill the storyline void by internalizing the combatant's struggle? Or is this part of our conditioning, dating back to our childhood need to control and feel comfort?

Most psychologist agree that imaginative play is an important part of helping children build social, emotional, and cognitive skills which last through to adulthood. Is it possible that the time we spent letting our imaginations run free, building creative and imaginative muscles, also created a basis for how we rationalize and approach non-story experiences. As I continue to consider this final thought, I think back to other experiences that created an emotional imprint on who I am. Everything from movies to comic books to games we played in the street helped to develop the storytelling skills I use in everyday life. *WoW*, this review took a turn I never would have expected. Thank for listening, now go play Toy Soldier and have fun.

Toy Soldier has all the components of a great game. Although the game play is short (~20 hours to play completely through Campaign and Campaign+ modes); it is an exceptionally well polished departure from the typical tower defense genre. Taking control of various mobile units and fortified encampments in first and third person glory adds a unique perspective and challenge to each battle. That, combined with the animations and environments, rivals the rest of the tower defense market. Fans of this genre will delight in the presentation and exceptional challenges of this fast paced action strategy title.

Final word of warning...

Beware the German K-Wagen!

Appendix A: Additional Tables

| Mobile Units⁴⁴ | | |
|----------------------------------|--|--|
| <i>Aircraft</i> | Sopwith Camel Hit Points: 300 Value: 200. | Vickers Vimy Hit Points: 700 Value: 400 |
| <i>Armor</i> | Red StarSchilt Best used against large groups of infantry. Limited health. | Flamethrower Fire. Greater damage. |

Table 4: Mobile units

| End Level Stats | | |
|-----------------------------------|------------------------------|--------------------------------|
| Total Units Reached Goal | Mortar Shells Fired | Mortars Destroyed |
| Infantry Units Reached Goal | Heavy Artillery Shells Fired | Soldiers Lost |
| Mechanized Units Reached Goal | Highest Flying Soldier | Time Spent Using Sniper Tower |
| Total Money | Used Shell Cam | Time Spent Using Anti-Infantry |
| Units Bought | Money Earned From Kills | 3x Bullet Combos |
| Units Upgraded | Money Earned From Combos | 5x Bullet Combos |
| Total Enemy Kills | Money Spent On Units | 10x Bullet Combos |
| Total Time Using Units | Anti-Infantry Bought | |
| Highest Bullet Combo | Howitzer Bought | 3x Blast Combos |
| Highest Blast Combo | Chemical Units Bought | 5x Blast Combos |
| Most Kills With One Sniper Bullet | Units Killed | 10x Blast Combos |
| Soldiers Sniped | Soldiers Killed | 40x Blast Combos |
| Bullets Fired | Tanks Destroyed | |
| | | |

Table 5: Recorded statistics for each level

“

*A “horror affordance”
is something that
affords horror; that is,
it is some element that
makes it easier for you
to become scared.*

”

CHRIS PRUETT

SIREN IS THE SCARIEST GAME EVER MADE

In 2003 I decided to become an expert on horror games. At the end of the previous year my wife and I had moved from icy Albany, New York, where I was employed as a game programmer, to sunny Stanford, California. My employers were nice enough to let me continue writing games for them from our new apartment (a tiny cinderblock one-bedroom on the Stanford campus), and my daily routine involved logging in at 7 am, coding in my underwear for several hours, taking a break before lunch to shower, and then going back to the code until supper time. At the time I was the lead engineer on a forgettable Game Boy Advance game based on a forgettable animated movie, and for the first several months my productivity was very high because I had no reason to leave the apartment.

But after a while the routine started to get to me. Physical isolation was part of it; I didn't know anybody in California, and the only people I talked to were my game team via the Internet. Despite the warm weather I almost never went outside, and I'm sure some form of advanced Vitamin D deficiency contributed to the malaise I found myself in. One day I spent several hours seriously weighing the merits of taking a baseball bat downstairs and trying to locate the one car in the lot that randomly sounded its alarm every few hours. It was time for a change.

So I decided to become an expert on horror games. I started by making a list of titles that I knew about. The first version was an Excel spreadsheet that I printed out and stuck on my bulletin board. It was little more than a glorified shopping list, and it had about seven games on it. As I began to research the genre, I found that there were hundreds of games that could be classified as horror, many on old PC platforms that could no longer be run. Even limiting myself to console games, I quickly uncovered a large number of titles. In typical programmer fashion, I ditched the Excel document and instead wrote a bunch of code to track my growing list of horror games in a real database. The goal, I decided, was to play every game on this list to completion, write up a short review of each title along the way, and hopefully, after sampling a large range of horror games, draw some conclusions about the genre as a whole.

The result was a web site called *Chris' Survival Horror Quest*. I put the first versions online in early 2003, and by August of that year it had turned into a sort of blog (although at the time, the word 'blog' hadn't yet entered the vernacular).

One of the very first posts I made was about a new horror game from Sony Computer Entertainment called *Siren* (*Forbidden Siren* in Europe). There was no information in the post, just two creepy screenshots of misty locales and kids with bleeding eyes. The game was released in Japan that November, and then in the States in early 2004. I picked it up, played it for a while, and then put it down. The game was frustrating and difficult. I wrote an angry, complaint-filled rant about the game for the blog and then set it aside. A few months later I picked it up again, and this time it clicked. All of a sudden I was hooked.

Completing *Siren* was hard. It took me months, even with the aid of a hint book full of maps. When I finally finished after half a year of play, I posted to my blog that *Siren* was the scariest game that I'd played thus far. It's been six years since then, and I've played a whole lot of horror games, but none come close to matching *Siren* in terms of scariness. At this point I'm willing to call it the Scariest Video Game Ever Made.

I'm not trying to be hyperbolic here. Since I began my quest to understand horror games in 2003, I've made it my business to finish every single horror game I can get my hands on. As of this writing I've played about fifty horror games through, and there are another fifty sitting on my shelf in various states of completion. If my calculations are correct, this means that, within the genre limitations I've set for myself, I've tried almost every single game ever produced in the horror genre. I do not mean to brag; actually, my horror game collection and borderline obsessive interest in the genre is a bit embarrassing. But I do feel confident that I have sufficient experience to select the Scariest Video Game Ever Made, and that game is clearly *Siren*.

Siren is a third-person horror game. It looks a whole lot like *Silent Hill*: it takes place in old, dilapidated places, which are often shrouded in darkness or mist, and characters must frequently use a flashlight to navigate. The game even shares some of the original *Silent Hill* team's staff. The plot, which is told in out-of-order segments and focuses on a diverse group of playable characters, involves a remote Japanese village in which many of the residents seem to have changed into murderous zombie-like *shibito*. The central mechanic in *Siren* is "sight jacking," the ability to see through the eyes of shibito who are close by, and to survive the player must use it constantly. The graphics are nice and the sound is particularly key to the overall experience. Described this way, as just the sum of its various parts, *Siren* sounds like a pretty good horror game.

But it's not a pretty good horror game; it's not even a great horror game. It's the Scariest Video Game Ever Made. And to understand why it is the Scariest Game Ever Made, we need to look at how *Siren* works at a much more fundamental level.

Off the Beaten Path

I have a very clear memory of playing *Siren* one evening in my concrete apartment, after my wife had gone to bed. I had progressed through a long, complicated level set in an abandoned hospital (a popular locale for horror game designers), and to complete it I needed to cross an open courtyard to some sort of monument placed in the center. The courtyard was unfortunately inhabited by a lone shibito, and low on health and lacking any means to defend myself, I knew that I wouldn't survive an outright dash for the end. Instead, I searched the outlying area for some sort of weapon or health item. I found a bunch of junk: a burned-out light bulb, a broken TV, and a laundry shoot embedded in the side of a wall.

After some thinking a plan began to form in my mind. I made my way to the second floor and found the top of the laundry shoot. When the roaming shibito was near enough, I dropped the bulb down the shoot. The monster heard the sound of the bulb breaking and changed course to investigate. I waited until he stuck his head into the bottom of the shoot before dropping the TV down the hole. There was a crash as it crushed the shibito's head in, and, feeling extremely pleased with myself for having figured the sequence out, I leisurely progressed to the end of the level. It was one of those moments where I was more surprised as a player that the puzzle had worked so naturally--though it was clearly a carefully designed encounter, the whole thing felt thrillingly organic. The sweat on my palms was proof enough of that.

Siren is a deeply innovative game. It's an absolute treasure trove of interesting game mechanics and ideas. Not every idea is successful, but the sheer amount of design experimentation found in the title is astounding. In fact, *Siren* is such a departure from regular gameplay norms that it's challenging to decide which of its many innovations are the most important.

The key to understanding *Siren* is that it is, at its core, a stealth game. The stealth genre, defined by designs in which the primary mode of play is sneaking, is dominated by games about ninjas and spies; horror and stealth is not a common combination. In fact, I don't think that there are any other true horror stealth games outside of the *Siren* series. *Clock Tower* and its brethren (including *Haunting Ground*) are based around running and hiding, but not so much sneaking. *Deadly Premonition* has a sneaking mode in which the player can hold his breath to hide from enemies, but it is more of an ancillary move than a core game mechanic. In *Silent Hill* and many

other games, it's possible to avoid combat by turning off your flashlight and moving quietly, but these games rarely reward this behavior; instead, being able to sneak passed an unsuspecting enemy is often used as a way to make the game slightly easier. The only other real sneaking game in the horror genre is *Manhunt*, and that title is so different than the rest of the genre that it is its own class altogether (though it does share a few key traits with *Siren*, which we'll get to).

As a stealth horror game, *Siren* is pretty unique. The stealth design works by throwing the player into large, sometimes open-ended levels, which are populated by various shibito. *Siren's* shibito are zombie-like, but unlike traditional zombies they retain some higher-order skills, like shooting guns, using flashlights, and even locking and unlocking doors. Most of them seem to be acting as they did when alive, perhaps out of habit: until they notice you, they'll tend the fields, or clean the house, or patrol an area (or, later in the game, spend their time building disturbing structures). As in many stealth games, the core game mechanic involves learning the patterns of the enemy and then deftly sneaking passed them when their backs are turned. Since *Siren* has no mini-map (nor any other sort of on-screen HUD), the only way to actually learn the shibito's patterns is by using sight-jacking to peer through their eyes. By closely examining what the shibito see, the player can identify blind spots in the map and carefully sneak by.

The key here is that it's never quite clear what the shibito can hear and see. The range of their perception is fuzzy, and in fact certain shibito have much better senses than others. This is quite a departure from the stealth precedent; most sneaking games follow the *Metal Gear Solid* approach of explicitly rendering each enemy's range of vision on the map, and many implement increasing levels of alertness (as defined by *Tenchu: Stealth Assassins*) in order to give the player a way to retreat if they are about to be discovered. *Siren*, on the other hand, offers the player neither affordance: it purposefully obfuscates the exact boundaries of shibito perception and its enemies respond aggressively to the slightest motion or sound. In this respect it is similar to *Manhunt*.

Couple this fuzzy perception model with an extremely unforgiving combat system and you have a highly stress-inducing stealth mechanic. If the player is found by an enemy, it is unlikely that he'll survive the encounter, and even if he does, the sound made by combat will likely draw other shibito. So the player is forced to move quietly, and slowly, and hide in areas that may or may not be safe. Many times a successful sneak will require the player to cower just a few feet away from a roving shibito, and since it's never quite clear whether or not a given hiding spot is truly safe, these moments are heart-stopping.

It is normal for game designers to try to limit player stress and frustration by giving them ways to adjust the difficulty: think checkpoints and power-ups. *Siren* selects the opposite direction and makes its core stealth mechanic extremely high-stakes.

It then doubles-down on this approach by layering puzzles on top of the basic sneaking system. The design ensures that the player never has a chance to fall into a comfortable routine, and must constantly be thinking on his toes.

The puzzles in *Siren* are varied and, occasionally, ingenious. While the rest of the horror genre seems to be mired in fetch quests involving locked doors and key cards, *Siren* invents whole new classes of puzzles. Many involve distracting shibito from their regular patrol so that the player can pass; in one early puzzle, the player must make a pay phone beep incessantly by inserting an expired phone card so that a nearby shibito leaves his post to investigate the noise. Others involve using the actual environment; late in the game, the player must break through a locked door by timing his strikes against the lock with a thunderclap, thus masking the sound from nearby shibito. Some puzzles involve the level progression itself: a door unlocked by one character may allow another to pass through that same door at a later time.

There are all kinds of other interesting ideas here, and as far as I know, many of them are unique to *Siren*. The level progression system is presented as a dependency graph-spreadsheet-thing, with time on one axis and characters on the other, so that levels completed at certain times by certain characters unlock other levels at other times with other characters. Many levels have multiple end conditions, and must be played several times to unlock the entire graph. Almost all of the game's huge cast of characters are playable at some point, but by the end very few survive. *Siren* represents a huge departure from the norms of both the horror genre and the stealth genre as well.

Culture Shock and Horror Affordances

But just being a highly innovative game probably wouldn't be enough to name *Siren* the Scariest Video Game Ever Made. Even the stressful core sneaking mechanic, while quite traumatic on its own, is not sufficient to warrant the Scariest Game title. No, there's more to *Siren* than just interesting core mechanics. There's another aspect to the game that makes it much scarier than other horror games, even games that employ similar design patterns, like *Manhunt*. I'm going to call that aspect *Siren*'s "horror affordances."

In user interface design schools, an "affordance" is something that suggests its use just by the way it looks. The handle on a teapot is designed to look like it would be easy to grip, and thereby saves you from scalding your hand by trying to pick the pot up by its base. The handle "affords" gripping, the UI designers would say. Its design suggests its intended use.

I'm going to use the word in a similar way. A "horror affordance" is something that affords horror; that is, it is some element that makes it easier for you to become scared, or even suggests that the appropriate reaction to the element is fear. *Siren* is scary because it has several different horror affording elements, and not all of them are obvious.

Siren's first horror affordance is the stressful sneaking mechanic I discussed above. That's one element of its assault on your emotional state.

Another horror affordance is the game content itself: the monsters, the characters, the level design, the dialog, the camera work, all of the things that make up the narrative events of the game. The sound design is particularly noteworthy here; hearing the shibito sob and laugh while looking through their eyes is more than a little bit unsettling. To the casual observer, it might seem like the game content is the central horror affordance: it stands to reason that the monsters are scary and the locations are scary and therefore the game is scary. But I think that the scary content is just one more piece of the *Siren* formula, and not the most important piece at that. Though many games have great content, very few are successfully scary, so content alone cannot explain how *Siren* works.

I think *Siren* deftly employs a much lower-level horror affordance: culture shock.

As a sophomore in college I spent a year in Japan on a study abroad program. I ended up getting a degree in Japanese (along with one in Computer Science, though I had to cram my CS classes into three years since my excursion to Japan put programming on hiatus), and as I write this I am sitting in an apartment in Yokohama. But looking back, I realize that my first year in Japan was spent mostly trying not to lose my grip on reality; I was caught in the throes of culture shock.

Culture shock, at least for me, is like trying to stand up on a boat. The floor of the boat itself appears flat, and sometimes the motion of the waves is so subtle that I can't really even feel it when sitting down. But when standing up or (god forbid) trying to walk, I'm suddenly off-balance. The random, pattern-less rocking of the boat clashes with my brain's assumption that flat ground is fundamentally stationary, and consequently I am surprised by even the smallest motion. It's a weird, stressful sensation that I have lost control; I do not fully grasp the forces acting upon me.

That's how it felt when I first came to Japan. The juxtaposition of Japanese sensibilities with familiar Western symbols made me feel like the world had gone crazy. Parts of Japan look a lot like an American city (there are tall buildings and nice cars and people wearing suits), but (I eventually realized) the motivations of the people living in Japan are often quite different than those of my culture of origin. Even minor incongruences made me feel uneasy; there were so many new things to absorb, my definition of "common sense" suddenly seemed unreliable. I felt like a fish out of water--the sensation of lost control was very strong.

This feeling of being out of control is a powerful horror affordance. I might go as far as to say that loss of control is a central element in almost all forms of horror; media that sets out to scare is often fundamentally about making its audience feel vulnerable by removing all connections to comfortable routine. Consider horror films such as *The Shining*, *The Birds*, and *Alien*. These films throw their characters into confusing, conflicting, incomprehensible situations, and never really stop to let the viewer catch up. This keeps us off-guard, constantly second-guessing our assumptions. It puts us in a very vulnerable state, and lets the filmmakers pipe their scary content directly into our brains.

Siren achieves this same effect through culture shock. It does this in two distinct ways.

First, it presents to us a weird, disjointed, out-of-order story, in which characters are not clearly good or evil. The effect is amplified for Western players because the story content is rooted in Japanese culture, and the motifs and clichés it employs are decidedly unconventional to our eyes. *Siren's* narrative isn't the first to benefit from its foreignness; I suspect that the recent Asian horror film boom in the United States has more to do with culture shock than filmmaking. But, as with other horror films and games that are distinctly Japanese, *Siren's* ability to scare is improved because it seems unpredictable to us; it doesn't follow the standard, comforting format that we're used to.

It's also important to mention that *Siren* is stock-full of references to Japanese mythology and urban legends. The eventual antagonist, Hisako Yao, is based on a character from Japanese folklore called Yaobikuni, a woman who ate the flesh of a mermaid and became immortal. This folklore is not commonly known in the West, and thus it is a vector for culture shock, a strong horror affordance.

The second form of culture shock that *Siren* employs is entirely unrelated to its country of origin. Rather, the core mechanics of the game, the sneaking and innovative puzzles, are so far from the norm that they represent a horror affordance themselves. The culture here is modern game design precedent--a set of rules that are so universal that players recognize them as systems rather than game content. When you find a key with a symbol on it in *Resident Evil*, you know it's just a matter of time before you also find a locked door with the same symbol engraved above the lock. When you collect an item that has no immediate function, you can usually assume that it'll end up being combined with other items or used in a specific spot. And any time a tentacle monster appears, its tentacles will have bright glowing bulbous spots which also happen to be particularly weak to gunfire.

This is the Chekhov's Gun principle applied to game design. Players understand a mechanic and, once they have identified it as a common routine, are comforted that they understand how to play. In fact, rule transparency and predictability is

generally seen as a strength by game designers--those games where there's never really any question about how to play are usually the most fun. Mario's floating question mark block affords head-butting; if you weren't supposed to smash it, it wouldn't be there in the first place.

But *Siren* presents the player with a different scenario. Chekhov's gun is hung on the wall in the first scene but revealed to be empty in the second. The puzzles do not follow common patterns, and because individual levels are usually traversed several times by different characters, there's often no single obvious path to the exit. By refusing to align to the game design precedent, *Siren* forces its players to think on their feet. Once the player starts to realize that the rule book has been thrown away, anything seems possible. In fact, as in most other games there is usually only a small set of correct solutions to any given problem. But because those solutions are so non-standard, the problem space appears to be extremely wide to the player. Suddenly all of our assumptions about how games are supposed to work seem unreliable and we find ourselves at sea: culture shock.

Siren's ability to scare us rests primarily on these four horror affordances: tense game mechanics, scary game content, unfamiliar narrative themes, and unconventional puzzles. These elements in combination create an extremely stressful form of play. They also contribute to *Siren's* high level of difficulty; since so many elements of the game are intentionally vague or obfuscated, it takes quite a long time for the player to get a handle on how even the most basic mechanics work. I didn't even really realize that *Siren* was a sneaking game until I was several hours in, and I think many quit in frustration before they ever really got to the good stuff.

But, as it turns out, that intense level of difficulty is part of *Siren's* success, too.

False Emotions and Difficulty Stress

In subsequent *Siren* games (*Siren 2* is a sequel and *Siren Blood Curse* is a remake), the difficulty level was toned down a bit in response to user complaints. And, for the most part, that change was successful; the game retained much of its scare power without forcing the player to continuously fail in order to learn the basic game mechanics. But, at least to me, the experience wasn't quite the same. The games were fun and certain sections were still extremely stressful, but I felt that the later games never reached the same intense level of fear as the original. They felt a bit defanged, and looking back, I think that might have something to do with the unforgiving difficulty of the first *Siren*.

A few years ago I read about an idea from the world of psychology called the Two Factor Theory of Emotion⁴⁵. The theory, at least the part I am interested in, states that your body takes its emotional cues from two sources: your physiological state

and your mental label for that state. Many types of emotions can trigger similar physiological states: both fear and arousal, for example, can cause your heart rate to go up and adrenaline to be released. To accurately identify a physical response your body therefore looks to contextual cues for help.

Psychologists have shown that by causing a particular physiological reaction and then introducing unrelated context, false emotions can be generated in test subjects. The brain, when confronted with some contextual stimuli, misreads the body's physical reaction and synthesizes an emotion. It appears that if you can cause a specific physical reaction in the body with one form of stimuli and then juxtapose some other stimuli to provide the brain with a label, you can get a person to believe that they are physically and emotionally reacting to the second input rather than the first.

What does this have to do with *Siren*? I think that the high-stakes game play and crushing difficulty are vectors for physical stress in the player. Even absent any horror content, the game play mechanics are enough to elevate the player's physiological state. Not because the mechanics are intrinsically *scary*, but because the high cost of failure makes them *intense*. In fact, I think many other non-horror sneaking games provide a similar level of intensity; the sneak-and-wait game mechanic is a pretty stressful interface for the player. And once the player is stressed and their physiological state elevated, all the game developers have to do is introduce scary content. If the Two Factor Theory of Emotion is correct, some players will misinterpret their body's state as a result of the horror content rather than the game mechanics, and will believe themselves to be scared of the bleeding eye shibito.

Of course, *Siren* also employs its other horror affordances to increase stress and deepen the effect of its scary content. It knocks down our defenses with unconventional mechanics and content, and keeps its game rules fuzzy and flexible. Many games have zombies, and bleeding eyes or not, *Siren's* shibito are not all that unique on their own. They work, I think, because the player is forced into a state in which he's extremely susceptible to stress, and perhaps is even ready to believe that such stress is a direct result of the mostly-dead villager trying to cut his character's neck with a scythe. *Siren's* horror game content is directly empowered by its difficulty, mechanics, and core game design.

But is it any Fun?

Siren is far from a perfect game. Though sometimes improving its ability to scare, the game's poorly-communicated mechanics and a couple of major UI blunders (the rotating map and investigate key come to mind) turned many players off. *Siren* asks quite a lot of its players; seeing the game through to the end is no small feat.

But as interactive horror, I think that it is significantly more successful than most other games in the genre. Its combination of mechanics, narrative, and difficulty, as delivered to the player in obscure and unconventional ways, make it the best example I've seen of fear-inducing game design.

Sitting in my little apartment, trying to keep my heart from jumping up into my throat, I played *Siren* to completion. Though it was one of the first titles I finished in my quest to play all horror games, it set a bar which has yet to be surpassed. It is the game to which all subsequent games are compared. While a few have come close to *Siren's* brilliance, the vast majority of horror games can't hold a candle in a haunted mansion to it. And that is why I feel absolutely confident in my selection of *Siren* as The Scariest Video Game Ever Made.

“

*The player is never told
what to do in The Way
of the Samurai 3.*

”

ARTHUR PROTASIO

NARRATIVE REINCARNATION IN THE WAY OF THE SAMURAI 3

Becoming a Ronin

The metal clash of blades roars in the background as a (stale) narrator explains the setting of the game world you are about to inhabit, which mainly comprises the troubles of the Sengoku “Warring States” period of Japanese History.

You are one of the few survivors of a recent confrontation between rival clans. However, having lost the battle, you have now become a masterless samurai, a ronin, that faintly hangs onto a bit of life and treads the blood stained battlefield. As you limp, soaked by the rain in a Kurosawa-esque fashion, two merchants notice your presence.

The men approach, offer help, and you are prompted for a response. Four options present themselves. The first three are dialogue lines split between a slightly humorous response, a dramatic death-like statement, or an angry bark. However, being a samurai means you also have your sword at your disposal and as your fourth option you may draw it and manifest violence (or the threatening of it) as your reaction.

The previous paragraphs describe the first few minutes of *The Way of the Samurai 3*. Though the game may always start in the same manner, the decisions made by the player at this point represent the first step in one of many different lives that exist based on a narrative structure filled with varied ramifications and branches. In other words, the concept of narrative reincarnation.

Beyond Technicalities

By genre definition, *The Way of the Samurai 3* is an action-adventure game with role-playing elements. In technical terms, the player controls a customizable samurai avatar through the eyes of a third person camera and traverses scenarios that are filled with NPCs representing either shopkeepers, “quest-givers” or “save spots”.

When not talking to people, players are usually cutting their way through them with one of many weapons (some odd) that are available in the game, and hoping to survive the rigid combat mechanics (especially if one is playing on hard difficulty).

Apart from generic descriptions, the “Way of the Samurai” series, developed by Acquire, has always been known in the west as a niche game mainly composed by a few key characteristics such as drab (english) voice acting, subpar graphics, and lackluster swordplay.

Though it is not untrue to say these elements have plagued the series ever since its first release in 2002, in reality they are eclipsed by the strong storytelling structure present in the games. To simplify the whole in such manner is a disservice to the immersive experience that arises from making divergent decisions, such as aligning yourself with a clan, and treading different paths which may eventually decide the fate of other characters as well, such as allowing the death of the only remaining heir of that specific clan.

It is because of this focus on branching narratives that *The Way of the Samurai* series stands out. Even if among other murky elements, the storytelling pillar is still strong and the experience, as a whole, reveals itself as a rough, yet well played, gem. It is for this same reason that, to me, Way of the Samurai is a series I eagerly await for future versions, hoping for improvement in the flawed areas, but also desiring to revisit the game narrative cycle and feeling present in the same branching plot structure.

The Narrative Life Cycle

The Way of the Samurai (series) provides, through its story, an insightful journey into the experience of living many different lives that explore the “what ifs” of an Akira Kurosawa samurai film. Through the mix of a structure that lies somewhere in between an adventure game and a “Choose Your Own Adventure” (CYOA) book, the player is given the freedom to play a versatile role. He may choose to affect the outcome of the game world or take a neutral stand and merely watch events take place without your interference.

Despite of what one chooses to do throughout the journey, the individual stories in *The Way of the Samurai* series always begins in the same manner. The prologues and initial scenes are always the same, as the premise of the story does not change, unlike the RPG *Dragon Age: Origins*, in which each character race has its own introduction. Specifically in *The Way of the Samurai 3*, the player finds himself in the region of Amana, amidst an imminent conflict between two clans, the oppression of a helpless village, and the impending invasion of Nobunaga, an external shogun

ving for control of the country. Though he may wander aimlessly through villages and clan headquarters, story advancement is triggered by specific events (including the option to abandon the region at any time).

Describing the game in this manner triggers memories of the *Groundhog Day* film. In it, Bill Murray's character is found hostage to a mysterious time loop. After living through February second, instead of going to bed and waking up on the third, he finds himself continuously reliving that same specific day. Both scenarios from *The Way of the Samurai 3* and *Groundhog Day* share many evident similarities. Characters relive the same scenario, but each time create alternative events by taking different actions. Therefore, at each subsequent scenario they relive, they are aware of information they previously did not know and may use that knowledge to alter the course of other events.

However, while Murray's character explores many different strategies, such as learning peoples' secrets, seducing women, and even kidnapping the memorial groundhog, he does so in order to end the time loop. The character feels trapped and wants out, unlike the player in *The Way of the Samurai 3*. In the game, the player character exercises freedom and pursues different avenues mainly because of a narrative curiosity. Exploration emerges as an enticing feature, rather than a punishing condition. The possibility of living different lives and each time discovering new things, while simultaneously accumulating a wealth of intelligence, motivates the player to actually put together these jigsaw pieces from a world mosaic and learn more about characters, scenarios, and history.

The player is never told what to do in *The Way of the Samurai 3*. The closest there is to a tutorial is a woman who is being harassed by two bandits. After (and if) one decides to save her she will give the player a few pointers as to how to play, but interestingly enough, if he chooses to say he already knows her, she then acknowledges that it isn't the player's first time in that world. This line of dialog not only breaks the fourth wall, but also establishes how natural the narrative cycles are to the game world. Each cycle (or playthrough) lasts an average of 2 hours and means that instead of living a novel, the player is actually taking part in various different short stories. All of them start the same way, but change according to the decisions made. The player might want to drop the controller after pursuing a couple of narrative paths and will still have "finished" the game, but won't have completed the whole "short story collection". What essentially drives the player to do so is the liberty to choose any path and see the results in a relatively short time span, when compared to other games.

Regarding this topic, the major difference identified between *The Way of the Samurai 3* and other video games is the amount of time it takes to complete the game. Instead of spending between 6 and 30 hours living one specific story, as is

the case for most first person shooter (FPS) games or role playing (RPG) games, the player may spend 20 hours witnessing many different endings. For example, in my personal adventures, after having played 35 hours exploring the world and playing with its possibilities, I still have not attained all 21 endings. However, this isn't Grand Theft Samurai. There is no gigantic sandbox structure at the player's disposal, but the game welcomes anyone to experiment with whatever is available and check out the narrative results.

In fact, *The Way of the Samurai 3* is so resolute on the idea that the player is living one of many different stories, that direct elements from the game, such as save spots, illustrate this aspect. The player saves game progress by talking to specific NPCs scattered throughout the world. The surprise is that these "Save Spot NPCs" are actually biwa minstrels spread throughout Amana. The biwa is a short-necked fretted Japanese lute very important to the Japanese history and culture. Japan's indigenous spirituality, the Shinto, portrays the biwa as the instrument of choice of Benzaiten, the goddess of music, eloquence, poetry, and education; and during the Sengoku "Warring States" Period, samurai from the Satsuma Domain used the biwa for moral and mental training. Apart from these specific references, the biwa has always been a typical tool of Japanese narrative storytelling (similarly to the lute used by western bards), and this becomes evident when each of the minstrels seem to save progress by actually "learning about the player's story". It is not clear how they learn it or why, but the game implies they will later compose a song about the player's wondrous tales. This feature works marvelously because regardless of how the audience is addressed, the suspension of disbelief maintains itself by reinforcing the idea that this current story is but one of many others the player has yet to live.

This structure clearly identifies the mechanics of the game in which players are encouraged to enact freedom by playing (and replaying) several times and pursuing a different narrative trajectory on each occasion. A certain character in the game even has a line that addresses this aspect (and indirectly refers to the audience). Setsuen says the player character has an interesting future ahead of him and "It's almost as if you could become everything and nothing all at once. If I were to use a metaphor, I might say your future is like that of a cloud." In other words, Setsuen is making both the character and the player aware of their narrative freedom.

The Samurai of a Thousand Lives

In *The Way of the Samurai 3*, the reliance of this branching narrative structure on the player's exploration of varied paths through many different playthroughs is evident. Without the player's participation in at least two different narrative branches,

the game's experience becomes identical to one of a game with a single linear story. Nevertheless, once the player begins participating, the gradual discovery of narrative elements transforms into both temptation and reward.

Each of these playthroughs can be interpreted as the creation of parallel universes in which each of the characters live their unique lives. However, one may disagree since these stories do not take place simultaneously, but rather in succession depending on the player's choices. Based on this piece of information, one can conclude that the relationship between the player and the game is one of experience and learning (derived from these experiences). The condition is that the knowledge gained from one narrative cycle, be it combat or relationship wise, can only be applied in the next playthrough. Therefore emerges the concept of narrative reincarnation.

It is worth noting in this regard *The Way of the Samurai* acts as mixture between Shinto and Buddhist ideals. The Shinto does not embrace reincarnation *per se* in the same way Buddhism does. However, because of its syncretism with Buddhism, explanations became necessary to settle the apparent differences between native Japanese beliefs and Buddhist teachings. One of these versions is that the Shinto Kami (like Okami's Amaterasu for example) are actually supernatural beings caught in the cycle of birth and rebirth. For this reason, they are born, live, die, and are reborn, therefore taking part in the karmic cycle.

The analogy between reincarnation and the game's narrative journeys does not surface by accident. An immediate first reference is in the book *Trigger Happy* in which author Steven Poole compares the general game experience to an ethically inverted form of Buddhism. He states that while Buddhism's final aim is to end the continuous process of living anew through committing good deeds, life in a video game is always a good thing, and killing is the morally praiseworthy action required to resurrect it.

Though that may be the case in many games, it is not in *The Way of the Samurai 3*. You may kill, but it is not the act of killing *per se* that will trigger narrative advancement. In fact, the game penalizes (through a point system) villainous acts, such as attacking and killing innocent people, and deducts points after a playthrough. The consequence is that in order to regain those points, the player needs to play again and, in a way, witnesses the manifestation of a growing karmic debt. Hopefully, during the next playthrough, the player will have learnt from past experiences and use the acquired knowledge to follow narrative (and perhaps non-lethal) paths which were before left untouched. If the player refuses to explore different strategies much of the game's content will never be discovered, especially the endings, and the karmic debt concept will be reinforced by the condition of "not progressing as a consequence of not becoming better".

Another issue that arises from this connection to Poole's idea in which killing is revered as a positive action, is that players in *The Way of the Samurai 3* have the option of wielding the blunt side of any of their weapons. This means the player can act in the same manner as Samurai X's atonement seeking Himura Kenshin and not kill anyone throughout the whole game. By beating foes, instead of slashing them, defeated characters may return later on and other narrative branches may be unlocked, but most importantly, the player can minimize the amount of bad deeds committed. Once again, the idea of an ethically inverted form of Buddhism is opposed because killing is not necessarily encouraged.

The second reason to compare the game's journey with the reincarnation trajectory is grounded on the fact that Buddhism and reincarnation are elements directly referenced in the game's context. Buddhist monks are occasionally seen in the game, as well as items such as Buddhist beads, and an old lady goes as far as to say that the player character must be her late husband's reincarnation. The slight oddity here is that the old lady only makes this comment if the player does a good job hitting a huge temple bell. However, in order to perform well and accurately hit the bell (via a mini game), the player needs some practice. Practice that could have been obtained in another playthrough, or in other words, another life.

By now it should be clear that the game offers a variety of narrative paths to be chosen. Some befriending certain characters, others befriending none of them, and some defeating many of them. As an example, by choosing to align yourself with the recently empowered Fujimori clan (among many other decisions), instead of trying to rebuild the betrayed Sakurai clan, the game encourages the player to ponder about their lives and the way in which they make decisions. In *The Way of the Samurai 3*, the chance to relive "small lives" and analyze how each decision leads to a different path helps people understand how the inverse logic applies to real life. Very rarely do people get the chance to calmly reflect and analyze the divergent paths that present themselves in real life. Not only does the game make you think about the topic, but it also helps you realize that, in life, once you choose a certain path, you are inherently choosing to not live many others. Thankfully, in *The Way of the Samurai 3* you can live all of them through the entertaining process of narrative reincarnation.

A Samurai's Soul

If the player is able to live many lives through this process, it is also because the game keeps track of all those lives. Aside from usual game stats identifying which items have been unlocked and what endings have been attained, the player's weapons acquire experience every time they are used. The only thing the player character's profile accumulates are samurai points, but what essentially goes into play and is carried from one life to the other are the weapons and items.

The sword is the player character's soul because only weapons get better with use and accumulate experience points to go up levels. Though the player might apply the knowledge from a previous story in the next one, when it comes to combat, only the weapons retain a record of specific combat techniques. It is as if the experiences lived in previous playthroughs were channelled into the weapons, therefore functioning as a memento of past battles. The more a sword is used, the better it becomes and the easier the player's next lives will be. Thus, in turn, reinforcing the bond between a samurai and his weapon. Intriguingly, this directly affected my self-esteem, as a player, when I brandished my fifteen-life-old sword to fearful villagers and overconfident samurai. Because the player draws attention and causes scares when drawing a weapon, unlike in other games in which the avatar can walk around with a machine gun in hand unnoticed, *The Way of the Samurai 3* made me think before doing so. Since then, I've initiated the healthy habit of holstering my guns in other games when they aren't needed.

In the first game of the "Way of the Samurai" series, the save system would automatically delete the game file once it was loaded. Then, once the story reached an ending, the game would save a new file with the updated information. The problems with this system were that firstly, if for any reason the game console were turned off (perhaps due to a power shortage) all progress would be lost. Secondly, if the player died during the game, all items and weapons being carried by the avatar at the moment of death would be lost as well, therefore resulting in a very similar sensation to a permanent death. Without doubt, the result was a reminiscent sensation of roaming the perilous dungeons of the action role-playing game, *Demon's Souls*.

The glaring issue with this approach (aside from the obvious technical problems) is that it did not incorporate the idea of reincarnation in which the life experience (regardless of how it ended) was embedded with enough meaning and context to affect the next life. *Demon's Souls* had the objective of making players think and act carefully because every step could represent a fatal risk. In fact, in *Demon's Souls* second chances are a rarity and the probability of losing a significant amount of progress in the case of death is extremely high. *The Way of the Samurai* series is not bent on creating thoughtless and careless players, but the permanent death structure is one that directly contradicts the idea of reincarnation which is possibly the series greatest strength.

It was an expected relief to see this feature modified later on. Dying in *The Way of the Samurai 3* does not result in the loss of weapons and progress. Death merely represents the end of one of many stories. One that might have met a tragic end, but nonetheless contains worthwhile experiences that should be applied in future lives.

A Samurai's Context

It is no mystery that director Akira Kurosawa is a huge influence to the series. The plot is fictional, yet based on a historical setting, and accordingly illustrates various peculiar scenarios inspired by many of Kurosawa's samurai films.

The starting point is the Segoku Warring States historical period, also presented in films like *Kagemusha* and *Seven Samurai*. A ripe situation to depict the warlords' dispute for power and the helplessness of villagers found in the thick of bloody confrontations between loyal samurai. Naturally, villagers tend to either admire or hate samurai and mostly end up being treated as oppressed pawns by the current ruler. The opinions of villagers from Takatane clearly displays this issue, while the speeches from either Ouka or Fujimori clan are all about taking back, taking over or garnering more power.

Also present in the game's narrative is the convoluted relationship between two brothers and a father. Though the film *Ran* features a ruling father and three sons, the similarities make reference to brothers who each represent different clans and fight for power. In *The Way of the Samurai 3* these conflicted family values also involve betrayal, but they vary according to the player's choice. Munechika, the father, was chief vassal of the recently defeated Sakurai clan and has since then become head of the Takatane village. While he has opted to leave *The Way of the Samurai* behind him, his two sons, Shinnosuke and Yuma have each opted to defend rival clans and Yuma hates his brother for it. Because all of this information is only acquired by living, talking and inhabiting the game world, the player may end up triggering events that result in the confrontation and death of all three characters or none of them. In fact, the player only starts to understand the family relationship once he becomes aware of its existence by putting together pieces of information acquired through various "lives". One might finish the game without ever knowing the three characters were connected or the real reason behind Shinnosuke's betrayal, who once was a loyal member of the Sakurai clan.

The main storyline concept from Kurosawa's *Yojimbo* also plays out in the game, though it relies entirely on player action. The film featured a ronin who convinced rival clans to confront each other and consequently destroy one another. In the game, the player can choose to do that. Though he might also choose to eventually pick sides, both the Ouka and Fujimori clans will offer jobs to the player's samurai character up until the final events. Freedom is an option and that also includes the player's choice to leave Amana after deciding none of these factions are worthwhile.

Equally important to the narrative structure of the game are the moral decisions present in it. Instead of relying on traditional meters that quantify how "good" or "evil" a determined character is, the decisions in *The Way of the Samurai 3* derive directly

from the themes of its storyline. In this sense there is no “morality bar” (thankfully) because many of the decisions are tied to specific factions. By favoring one side, the player works against another. However, since every faction is constituted of characters with different personalities it is impossible to pinpoint if any of them represents an ideal that is good or evil. Traitors silently lurk through high ranks and at one time the player might think he is helping a faction, but rather accidentally favoring individual schemes. Alternatively, the player may also choose to take all matters into his own hands.

During a specific life, I chose to eliminate the Ouka clan. I did not agree with their ideals and thought they were a nuisance to regional stability. However, after killing all high ranked samurai and Genjuro himself, the leader of Ouka clan, the remaining low ranked soldiers declared me as the new leader. As time went by, having seized control of the Ouka clan, I realized I could try taking on Shuzen, leader of the Fujimori clan and Amana ruler. Even more unexpected to me, than becoming leader of the Ouka clan, was killing Shuzen and later learning, through the game’s epilogue, that my character was not an apt strategist warlord and succumbed to the external invasion of shogun Nobunaga.

Sadly, the game’s cover art directly contradicts the possibilities and freedom portrayed in the game itself. By exhibiting a dichotomic black and white image with words like loyalty, honor, greed, and deceit the player is led to believe that decisions are divided between these two categories. On the contrary, *The Way of the Samurai 3* allows the player to tread many branching paths that stray far com the simple black and white categories of morality. The consequences of certain actions are not necessarily motivated by such primal and distinguishable feelings.

Experience through Existence

The Way of the Samurai 3 is an excellent experience that intelligently combines both emergent and embedded narratives. It is only through the emergent narrative (or player action and decision) that each of the embedded narrative branches are discovered and lived. The result never feels too open or too linear.

Unknown to many western players, *The Way of the Samurai 3* is a Japanese action-adventure game that demands patience and understanding. As the players becomes more and more engaged with the narrative, it becomes easier to fit pieces together and complete the “world mosaic”. Exploring one path allows better understanding of characters and their motivations, which in turn enables the player to apply that information in order to explore other branches.

Not only does the game present an elaborate narrative structure, it also delivers it drenched in cultural influence, ranging from cinema, history, and religion. This defines the game as a work of expression capable of conveying powerful and meaningful messages, especially ones referring to the freedom of living many different stories. Choice and consequence serve as the structure of narrative and ethical testing grounds. In essence, it is an experience that allows the player to examine his own values by taking part in the process of narrative reincarnation.

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*Much like Winterbottom,
Limbo takes a core set of
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around them.*

”

ANDY JIH

LIMBO AND THE MISADVENTURES OF P.B. WINTERBOTTOM

Introduction

On paper, *Limbo* and *The Misadventures of P.B. Winterbottom* appear to be brothers in arms – both games are puzzle-platformers released on Xbox Live Arcade⁴⁶ within five months of each other. Both games are highly stylized as they are shown primarily in black and white, have no spoken dialogue, and have strong references to films and art styles from around the 1920s. They were also both well-received critically, though, to my best estimation, *Limbo* has been a greater financial success⁴⁷. Despite their similarities, their differences in approach regarding context and presentation as well as tone and style result in play experiences that could not be more divergent. In looking to Jesse Schell's lens of Essential Experience, games are artifacts and a means to creating experiences, and not only is how the game constructed important, but taking a holistic view of the game, its presentation, and how players play, are all key in how a player experiences the game.

The Misadventures of P.B. Winterbottom began as a student project by a team of students at the University of Southern California Interactive Media program. It soon made the rounds in various indie game competitions, and later resulted in the formation of the company, The Odd Gentlemen, and a publishing deal with 2K Games.

The game features P.B. Winterbottom as a sort of anti-hero; his primary goal being to eat as much pie as possible, and in the process, wreaking havoc everywhere he goes. Through the tutorial, he gets lured by a mystical pie into a portal that takes him to a parallel universe where clones of himself are running about. From here, the game's primary game mechanic is introduced - while holding down a button, the player is able to record all of Winterbottom's actions such as running, jumping, or swinging his umbrella. Once the player releases the button, a clone of Winterbottom is created that goes through the exact same motions that the player had just recorded in a repeated loop. The player-controlled Winterbottom can then interact with the clones, such as standing on top of them to reach higher

platforms, or swinging his umbrella to hit the clones to pies that might otherwise be out of reach. To complete each level, the player must collect all of the pies through the creative use of Winterbottom's clones. Each level has a limit to the number of clones that can be on-screen simultaneously. Using this game mechanic as a foundation, all of the levels and puzzles take this foundation and present various twists and variations throughout the course of the game.

While *The Misadventures of P.B. Winterbottom* began as a student project, *Limbo* was created by Playdead Studios, a small independent game studio located in Copenhagen, Denmark. Arnt Jensen had the initial idea behind *Limbo* beginning in 2004, but after beginning to work on it on his own, he realized that he required the assistance of a programmer. He created an art trailer in order to garner interest to recruit a programmer. Dino Patti signed on, and Playdead Studios was founded shortly thereafter in 2006. *Limbo* has been in development since then, has won a variety of indie game awards, and was released on Xbox Live Arcade in July, 2010.

Limbo has very little by way of exposition or overt narrative – the game begins in the woods with an unnamed boy shown in silhouette lying seemingly unconscious on the ground. After the player presses a button, the boy's eyes open and he stands up. The player is then in control, though the game has provided no overt instructions or tutorial to guide the player's actions. Through experimentation alone, the player is able to move the boy left and right, jump, and hold onto objects. With only those interactions, the player must then solve a variety of platforming puzzles to progress further in the game. The game is split up into chapters, though how those chapters are divided is only apparent from the chapter selection menu; no UI or menus ever appear during gameplay unless the player pauses the game. Much like *Winterbottom*, *Limbo* takes a core set of interactions and constructs myriad inventive puzzles around them.

What follows is an analysis of each of the games' various features and designs such as art style, gameplay, and narrative. In placing these two games side by side, their respective strengths and weaknesses are shown, and I contend that one game, despite its developers' best efforts, succumbs to ludonarrative dissonance while the other is able to succeed in creating a wholly cohesive and entertaining experience.

Art style

Limbo's art style borrows very heavily from film noir and by extension, German expressionism. German Expressionism was a style of film made in Germany in the 1920s and 1930s, and most films of the style were made on relatively low budgets compared to the films made in Hollywood. Given these budgetary constraints, the filmmakers often utilized stark, stylized, and surreal sets and designs in lieu of creating life-like and extravagant sets. Films made in that time period and style often used such aesthetics in order to represent dark and cerebral themes.

While film noir and German expressionistic films of that time were black and white due to technical limitations, *Limbo* is entirely black and white by choice. The character that the player controls is shown in silhouette, with his eyes being the only feature on his body that is white. While the gameplay is 2D, the layered backgrounds combined with the strong use of chiaroscuro lighting create a greater sense of depth; various assets in both the foreground and background are shown as fuzzy and out of focus in order to enhance the sense of depth, and parallax scrolling is used to enhance immersion. By placing objects and elements in the foreground in front of the protagonist, the player is often unable to see the boy; very rarely are characters hidden from the player's sight in games that show characters from third-person perspective. Other environments are entirely in the dark, requiring the player to push on and continue moving forward despite having no idea where he or she may be going. The sound design in *Limbo* is also quite effective at establishing unease in the player; there are myriad animal noises, whistling wind, and other ambient sounds that aren't tied to any visible assets. Nearly all of the sound found in the game is diegetic, though at certain points in the game, extradiegetic music plays. Generally, this music is a soft, low, sustained note, which introduces a somber tone; at other points in the game, a loud, ominous gong-like sound plays. Obscuring the boy from the player's sight and enveloping the character in complete darkness combined with the game's effective sound design creates a great sense of unease as well as foreboding not often found in action-platformers.

Like *Limbo*, *The Misadventures of P.B. Winterbottom* also borrows heavily from film noir and German expressionist films, though to different effect. The vast majority of *Winterbottom* is also black and white, with only the pies that P.B. Winterbottom collects and a handful of other game elements that are in color. Its character design and aesthetic combine elements of Edward Gorey's books with various references to Tim Burton films. P.B. Winterbottom is a humorous-looking character with an over-sized top hat and exaggerated mustache, looking like a caricatured and more mischievous version of Charlie Chaplin's famous silent film on-screen character The Tramp. Barring a few exceptions, nearly all of the levels don't scroll due to the use of a static camera for the majority of the game. By using a static camera, the developers create another parallel to silent films; due to the infancy of the medium and technical limitations, films of that time shot footage from a static camera and simulated motion through editing. When the player records Winterbottom's actions, the game changes its aesthetics and sound design, mimicking the filming or projection of a 8mm or 16mm film; the entire screen flickers as film projectors do, film perforations appear on the sides of the screen, and the sound of film rushing through a camera or projector is played. David Stanton, the composer for *The Misadventures of P.B. Winterbottom*, composed music that was a brilliant combination of styles that includes silent film music, Danny Elfman's film scores, and rag-time piano⁴⁸. All of these features in addition to its absurdist premise create a playful yet dark tone akin to a mash-up of Charlie Chaplin's silent films and Tim Burton.

Context and Presentation

Despite the saying that one shouldn't judge a book by its cover, it is necessary to account for how a book's cover affects and informs a reader's interpretation and expectations. A book cover with a scantily clad adonis with a woman would read as "romance novel" to anyone who's spent time in a bookstore or library, so if the book turned out to be an introspective stream-of-consciousness autobiography, such a difference would throw off just about any reader. Traditional video game boxes and cases functionally act as the book cover for the game to be experienced within. Marketing departments carefully craft movie posters and video game boxes in order to ensure that audiences will be enticed by what they see, as well as to give a glimpse into the kind of experience the viewer or player will have, be it a game or movie. With downloadable games, what constitutes a "cover" becomes blurrier – a game's art style in the Xbox Live Marketplace has to sell the fiction of the game quickly and succinctly. As computers and consoles added network capabilities, downloadable demos have become ubiquitous, though they often prove to be a double-edged sword; strong demos are capable of capturing players' interests, and through positive word-of-mouth, are able to spread like wildfire, while weak demos can be commercial poison.

Everything that a player encounters before gameplay begins, such as title sequences, main menu art, background music, etc., while not technically gameplay, is vital in establishing the tone of the game as well as setting the player's initial expectations. By and large the vast majority of games have a plethora of this kind of rhetoric and presentation that inherently states, "This is a game." Through *Limbo*'s rejection of such presentation and features, it affords itself a more immersive ambiance. The player only encounters a single menu before beginning the game, and once the game has started, there is no use of any user interface, menus, or words, with exceptions being the main menu, the pause menu, and the use of the word "HOTEL", found roughly in the middle of the game that I will address later. This sparseness in the use of "game language," that most gamers are familiar with parallels much avant-garde art cinema in its rejection of creating immediately accessible and readable statements, forcing the viewer or player to draw his or her own conclusions as to what is being presented or argued. There are no tutorials that teach the player how to play the game either.

P.B. Winterbottom, on the other hand, is clearly presented as a game right from the outset. It utilizes all of the traditional markings and language of a game; it has various menus and UI features and breaks down the game into clearly marked worlds and levels that can be chosen, skipped and repeated. Once a player begins playing the game, tutorials teach the player the game's various gameplay mechanics. During gameplay, there are also very clear UI elements that give the player information

on how many clones he or she can make (which I'll explain more later). After completing a number of levels, different modes are unlocked that include time trials or puzzles in which the player must use as few clones as possible. All of these features and designs define and frame *The Misadventures of P.B. Winterbottom* squarely as a video game.

Narrative analysis

Many films made during German Expressionism were silent films, utilizing intertitles that either presented dialogue in written word or allowed a narrator to explain context or actions that were occurring. Neither *Limbo* nor *The Misadventures of P.B. Winterbottom* utilized voice-over narration, but *P.B. Winterbottom* actually utilized intertitles to frame the context of its story.

Before each level in *The Misadventures of P.B. Winterbottom*, a series of intertitles is used to provide exposition and to put each of the levels that the player plays in context. The intertitles function almost as a children's book, as they are told in rhyme and include illustrations. The basic narrative in *The Misadventures of P.B. Winterbottom* consists of P.B. Winterbottom, the anti-hero, on a quest for all the pies in Bakersburg. After a mystical pie lures him through a portal, he suddenly has the power to manipulate time and create clones of himself. With this basic premise, the story is fairly simple; each chapter places Winterbottom in a different predicament, and each of the levels within each chapter provide some ancillary details to the conflict for the chapter. In chapter 2, "The Ticking Tarts", the Bakersburg clock tower is broken, and as a result, the townspeople are somewhat absurdly and humorously unable to tell time. Here are some of the intertitles from chapter 2:

*In Worthishman's Tavern,
last call never came.
And the singing that followed
put bagpipes to shame.*

*The dogs of the town,
who were walked on the hour,
Held their bladders in check
with enormous will power.*

While few of these intertitles really drive the narrative forward, they provide detail to the world while maintaining a humorous yet dark tone. The first chapter functions mostly as exposition, introducing the player to P.B. Winterbottom, while also being the gameplay tutorial. In the third chapter, “Dangerously Delicious”, a fire is ripping through Bakersburg and in Winterbottom’s quest for more pies, he manages to save the townspeople and put out the fire. Chapter four has Winterbottom running around in the sewers and underground areas of Bakersburg; this time, Bakersburg has run out of water. By the chapter five, the final chapter, Winterbottom begins to wear down the mystical pie, and the setting reveals that the Bakersburg in which Winterbottom has been running around is theater set. Throughout the course of this chapter, the mystical pie argues that by forcing Winterbottom to travel backwards in time, the pie was helping him to undo all of the damage he had done to Bakersburg. In one of the intertitles, Winterbottom is given pause and considers that perhaps he could lead a life of doing good, but he quickly returns to his one goal and concludes that he will continue to pursue pie. In the last level, Winterbottom finally succeeds in reaching the mystical pie and defeating it.

The narrative in *The Misadventures of P.B. Winterbottom* provides a simple framing for the puzzles, but it isn’t very strong on its own; Winterbottom doesn’t really evolve or learn anything as a character and no real resolution is provided regarding the fate of Bakersburg. The intertitles, however, go a long way in establishing the game’s playful and mischievous tone.

PlayDead Studios, the developers of *Limbo*, have refrained from giving any sort of official reading of the story outside of the simple tagline that was provided in marketing materials, “Unsure of his sister’s fate, a boy enters the unknown.” The narrative is then to be gleaned solely through the actions and events that occur in the game. The game begins with the boy waking up in the middle of the woods with forest creatures creating an eerie and disconcerting soundscape. From here, the boy then travels through various locales that begin very naturalistic and gradually become more and more technologically advanced. Almost immediately, the boy comes across a simple boat, suggesting that, at the very least, there is the existence of man, though it’s unclear how technologically sophisticated they may be. The next sign of technology in this mostly naturalistic world are animal traps that snap shut upon impact. After traversing a number of obstacles, the first living creature that the boy encounters is a monstrosity large spider, almost 5 times as tall as the boy. Utilizing the animal trap to pin and cripple the spiders’ legs, the boy then proceeds to the next area where the environment makes a striking change.

In this area, the scenery shifts from a wooded area to a forest with many of its tree chopped down. The next major creature that the boy encounters at first glance is the same monstrous spider from earlier, but is in fact a mechanized and man-made spider construct. As the boy continues, there are various tree houses and

suspended villages shown in the background until the boy finally encounters other human beings. When the boy first encounters them, the human beings run away. Their use of spears suggests that they might be a somewhat primitive civilization. The boy encounters various bodies impaled on spikes and hanging from trees, which suggests a savage situation reminiscent of *Lord of the Flies*. The next sign of technology is when the other human beings roll a burning wheel down a hill at the boy. Shortly thereafter, the boy reaches an area that is evocative of the industrial revolution; in a mine-like area, there are carts, rotating gears in the background, and various levers, pulleys, and other mechanical systems. The game then segues into the next section that is somewhat similar to a factory from the same era. Levers and pulleys are used to trigger platforms and hydraulic power pipes to lift water levels, but unlike the previous section that still had a naturalistic base terrain like grass, dirt, and rock, this section has solid ground that is clearly man-made.

After this factory-like section, the game's one and only in-game text is shown, in the form of a neon sign that says "HOTEL". The technological significance of the neon sign indicates that the game has shifted to an area in which electricity is now able to be harnessed by humans and widely used such as in light bulbs and signage. From here, the game proceeds to further technologically advanced areas – factories that feature gears, saws, light fixtures, and other such features. From here, the game starts to introduce game mechanics such as magnetism, flipping gravity, rotating gravity. These technological advances push towards present day and suggest a possible future where people will be able to manipulate gravity itself. The final scene in the game involves the boy flying from the technological world through a glass wall back into nature. Here he finds his sister kneeling in the grass, though it's not clear whether she's picking flowers or digging with her hands. Once the girl realizes that the boy is near, she sits up straight in a jolt, there is a pause of about a second, and the game ends.

Through the gradual progression and change in the environment and introduction of various technological advances, *Limbo* is largely an environmental allegory, with the boy representing the human civilization's time on Earth so far. In the boy's pursuit to continue forward, technology advances along with him, first simple tools and shelter, leading to more advances such as electricity and factories. Throughout the entire game, the world is almost always presented in a haze – the haze at the beginning of the game appears to be fog, but it turns into smoke when the boy encounters the primitive tribe. Once the boy reaches the industrial revolution areas in the game, the haze is most likely steam, and by the end of the game, the haze represents the pollution that has been inflicted upon the earth. The large spider that the boy encounters early in the game is overcome through the use of technological advancements, and shortly thereafter, the boy encounters the mechanized spider, representing humans emulating the awe and power of nature that they've observed. The word "HOTEL", the only text in the game that isn't a part of a menu, indicates

the temporary nature by which humans are inhabiting this planet. Humans are only temporary residents of this planet, especially if we continue to develop technological advancements at the detriment of the environment. One critical area has the player pushing a loose gear into a mechanism which then causes the entire world to rotate around the player. By literally pushing a gear into place for the sake of advancement, both in gameplay as well as symbolically, the world is quite literally turned over upon itself, showing that human progress is changing the world. Throughout the game, there are various locations where a slug or worm of some sort drops from above and lands on the boy's head, preventing the player from controlling the direction in which the boy will move. The boy is forced to proceed in one direction until he runs into light, which then turns him around and faces the other direction. Additionally, the only way to get rid of this brain worm is for a bird to eat it, perhaps showing that often humans have to rely on nature in order to solve their problems. Thinking about *Limbo*'s name, there are a number of definitions that one can look to – the theological definition states that *Limbo* is the outer border of Hell⁴⁹, ostensibly where people go after they have died, but haven't been sent to Hell. In following the environmental allegory, the name *Limbo* refers to the current state of humankind in relation to nature; humans are on the brink of entering Hell by harming the environment, and through the act of developing new technologies and destroying nature, humans are actively creating their own Hell. Ultimately, the narrative in *Limbo* is rife for interpretation due to its ambiguity, with its developers laying out clues in every design decision, asset, and, sound effect.

Gameplay analysis

In assessing *Limbo*'s gameplay, what is immediately evident is how unforgiving and difficult it is; as soon as the player learns how to move and to jump, he or she encounters a steep hillside that kills the boy if the player jumps or goes too far beyond the ledge. Shortly thereafter the player must jump over a pit of spikes, and so on. The game's difficulty harks back to older platformers such as *Prince of Persia* or *Another World*, where they taught the player through failure, and the slightest missteps result in death. *Limbo*, as with the rest of its features, doesn't utilize any sort of player-identifiable checkpoint system – the player must simply continue to proceed as far as they can to the best of their ability without knowing if halfway through a particularly treacherous level whether he or she will respawn all the way at the beginning of an obstacle.

The obstacles and puzzles that the player encounters throughout the course of the game vary in style and execution. The majority of the obstacles in the beginning of the game are somewhat simplistic in that they primarily require approaching a situation, realizing that some object kills you, and then avoiding that object after you

respawn. Some of these obstacles are easier to avoid than others, but by and large the majority of these obstacles are learned simply through trial-and-error. When the player first encounters the large spider, they must approach the spider until it stabs down into the ground with one of its legs causing an animal trap to fall out of a tree. The player must then push the animal trap to a similar location underneath the spider in order to trap its leg when it stabs down. After the player has done this two times though, the third time the spider behaves differently and stabs outwardly at the player instead of into the ground. While a particularly skilled player might notice the very subtle difference in behavior before the spider stabs at the boy this third time, it's more likely that the player would die and have to start the entire encounter from the beginning. Roughly one-third through the game, the game shifts from its learn-by-failure obstacles to more puzzle-driven platforming. While the outcome for failing to solve some of the puzzles still results in death, these puzzles require a more thoughtful approach compared to the obstacles from the beginning of the game. As an example, one puzzle has a pulley that, when the boy jumps onto a free-hanging rope on one side, lifts up a large barrier. Below the rope is an opening, though there are grinding gears that would kill the boy if the player jumps directly down. The player must pull the rope down as much as he or she can, jump off the rope and down a platform to get underneath the opening with the grinding gears and grab hold of the rope before the rope retracts above. Once the player does this, he or she can then swing to the next rope that's attached to a pulley in order to lift a barrier next to the first barrier. Once both barriers have been lifted enough such that the boy can fit, the player must jump off of the rope and run underneath the barriers. Though this is just one example of the puzzles (and a textual description doesn't really do the puzzle justice), all of the other puzzles in the game slowly ramp up in complexity and are all elegantly designed.

While *Limbo* is superbly made in its narrative, aesthetic, and game design, it doesn't combine these elements very well and is ultimately less than the sum of its parts. It has lofty goals with regards to its narrative, but *Limbo* lacks cohesion in tying the puzzle-platformer gameplay with the narrative that it presents. The actions of solving these various puzzles and overcoming these obstacles never really makes sense in the context of the narrative. One of the more frequent criticisms levied against *Limbo* is that it doesn't even appear to have a story. Greg Kasavin argues, "You become completely immersed in it due to the flawlessly executed art style, audio ambiance, and physics simulation, all delivered without interruption. At the same time, little story vignettes imply a greater meaning to the events that take place, a meaning you continue to search for until the game is over. [...] It ends up going who-knows-where. The theme of the game gives it an "out" from a narrative perspective, in that a game about the place between life and death doesn't need to make sense (and probably shouldn't), and it doesn't need to provide clear answers (and probably shouldn't). Even still, *Limbo's* narrative felt incomplete to me in a way that wasn't entirely satisfying. [...] I realized that what was pushing me forward was

my search for continuity.”⁵⁰ While I contend that there is a narrative, his assessment of the game is actually quite similar to my initial response, in that after the first playthrough, *Limbo* seems to simply be a sequence of puzzles in a set of incredibly immersive and stylistic environments, but nothing more. Kasavin later suggests that this lack of continuity in narrative is due to there being no good way to create continuity with the puzzles that the design team chose to include in the game. And while he argues that because the puzzles don’t have continuity, the game and its narrative have no continuity, I would rather present the scenario whereby the puzzles and the narrative both have continuity – it just so happens that they don’t share the same path. The puzzles stand alone in isolation from the rest of the game, resulting in a discordant play experience resulting from its ludonarrative dissonance.

Compared to the puzzles in *Limbo*, the puzzles in *The Misadventures of P.B. Winterbottom* are quite different, though they are just as carefully and elegantly designed. As an example in level 2-5, the player has made two clones, one on each of two see-saw platforms. In order to collect the pies, the player must jump onto the mechanized platform, which then starts a timer of a few seconds. In that time, Winterbottom and his clones must collect all of the pies on the screen – otherwise, the timer will reset and the player will need to jump on the mechanized platform again. In this particular level, the player must jump onto the mechanized platform and run onto the left-hand side of the see-saw. The clone on the lower level has been recorded to jump down on the right-hand side of the see-saw, sending the original Winterbottom up to the second see-saw. The clone on the lower level then runs to the right to collect the other two pies on that level. Once the original Winterbottom is sent to see-saw above, he lands sending the second clone to the pie above, and when the second clone lands, he sends the original Winterbottom upwards to collect the last pie.

As with *Limbo*, this puzzle is simply one example of the 50+ levels in the game. Once the tutorial is completed, the player then proceeds from one chapter to the next. Each chapter has variations on the mechanic – in chapter 3, “Dangerously Delicious!” only Winterbottom’s clones are able to collect the pies. In chapter 4, “Spelunking for Sweets”, the core mechanic changes again. Instead of holding down a button to record Winterbottom’s actions, the player must initiate a recording from a set location. The player has a limited amount of time in which to make the recording, and the clones are only able to manipulate other objects if the player is currently in the recording mode. Chapter 5’s mechanic requires Winterbottom or a clone to be in a spotlight in order to acquire pies. There is a set starting point for the spotlight, which is usually triggered by a switch. The player then has a limited amount of time to get Winterbottom from the spotlight to the pie. Winterbottom and his clones can also pass the spotlight from one to another and vice versa, allowing them to reach more areas. The penultimate and final levels in the Chapter 5 introduce new mechanics whereby the clones begin to have minds of their own

and follow the original Winterbottom wherever he goes. The developers have made all of the levels varied in their execution, preventing the puzzles from getting too repetitious.

Contrasted with *Limbo*, *The Misadventures of P.B. Winterbottom*, features very direct tutorials at the start of the game, and the first two or three levels of each chapter are designed to be exceptionally easy in order to teach the game mechanics that will be utilized in the rest of the levels of that chapter. Through the course of each chapter, the puzzles become more and more difficult, creating a solid interest curve that gradually ramps in difficulty as the player's skill level increases. There are a few puzzles that push on the boundaries of being overly difficult, breaking the flow of gameplay, and, at the very least, frustrating me to the point of having to walk away from the game for some time before returning and attempting to proceed. That said, by and large, the puzzles are all very well crafted, and by introducing new gameplay mechanics not simply every chapter, but every few levels, the developers keep the player on his or her toes, without letting the core mechanic get too stale. Unlike *Limbo's* intentionally vague narrative, *The Misadventures of P.B. Winterbottom's* narrative is humorous and playful, but also direct and easy to follow. By keeping the narrative simple, the intertitles provide stylistic support in establishing the tone of the game and its characters, which keeps the puzzles as the primary focus, as well as avoiding the pitfalls that *Limbo* suffered of a conflicting story and gameplay.

Comparative analysis

In analyzing and critiquing both of these games, how the player approaches and experiences these games is important to understanding their effectiveness. Barthes wrote in "the Death of the Author" that it is both difficult as well as, perhaps, unimportant to attempt to read into what the author's intent was with a piece of art. While this is largely true, what is presented in the work reflects the decisions that the author made, and by analyzing these decisions of what is and is not presented in the work, the author informs and directs how the player or reader experiences the work. In much the same way that many independent and art films change or play with what it means to be a film by attempting to change the standard narrative structure of a film, *Limbo* presents itself immediately in such a way as to suggest to the player that he or she is about to experience an avant-garde and "important" piece of art. *The Misadventures of P.B. Winterbottom*, on the other hand, follows many traditional game constructions by using menus, textual transitions and explication, UIs, and other standard video game conventions. By doing so, while this isn't to say that *The Misadventures of P.B. Winterbottom* presents itself as "just a game," it does actively set the expectation of the type of gameplay experience that the player

is going to have. By not presenting itself as a narrative-driven game, the focus remains squarely on the puzzles, with the art style, music, and sound design all in service of the puzzle design.

Limbo, through its sparseness in explication, has a conflicting duality between its gameplay and its style and presentation. While having a character that constantly dies and respawns could be linked to the notion of *Limbo*, where a person is stuck in an area between Heaven and Hell, the constant death and respawning of the character is such a standard “game” construction that it doesn’t fit with the narrative. Additionally, the underlying story is at odds with the gameplay constructions. While *Limbo* has lofty and admirable goals and aspirations in its attempts to push the medium, it falls short of the mark due to this lack of cohesion in gameplay and narrative. *The Misadventures of P.B. Winterbottom*, on the other hand, by focusing on gameplay first and using intertitles for narrative and stylistic support, ultimately succeeds in creating a more satisfying and enjoyable play experience.

“

*Okay, fair enough, but
still the game is about
something.*

”

HEATHER CHAPLIN

THE PATH

The hairs on my arms are standing up. I'm nauseous in my belly and full of contradictory emotions in my chest. I feel sad, afraid, and wistful all at once. (Did I mention afraid?)

I'm playing *The Path*, from Belgian independent studio Tale of Tales, and I don't think I've ever felt so scared and upset while playing a videogame in my life. In fact, I know I haven't. I would describe the feeling as horrible - except it's only horrible in the way that watching *The Shining* is horrible. It's horrible because it lays open the ugly, dangerous, sorrowful side of life, which is to say it's not really horrible at all, just incredibly scary.

How to begin? Jesus. *The Path* opens in a room of five girls ranging from quite young to nearly grown up. It's a retelling of the Red Riding Hood fairy tale, and each girl - dressed in red and black - must try and make her way to grandmother's house. "Stay on the Path!" the game warns as you start out with each new girl, but of course the whole point is not to stay on the path, but rather to wander through the forest that surrounds you on either side. You run into rusty playgrounds, old graveyards, creepy campsites, and a wisp of girl in a white slip who sometimes runs past you and sometimes stops to hold your hand, play patty cake, or even hug you. In fact, if you do stay on the path and make your way to grandma's without encountering that infamous wolf of the fairy tale, you "Fail" that round automatically. The obvious point here is, of course, the impish game design tactic of wanting your players to break the rules. But even more interesting is what this design tactic wants to tell us about life. The game is all about the necessity of facing what's hard - even ugly and brutal - in order to "Succeed."

"Sometimes you have to go through something very cruel to get somewhere very beautiful," said Michael Samyn, who co-designed the game with his work and life partner, Auriea Harvey.

Harvey and Samyn both were trained as fine artists and graphic designers before becoming videogame designers in the early 2000s. They were part of a mid-1990s Internet-based scene, wherein creating virtual worlds and playing in flash and designing interactive experiences was the cutting edge of the art world. Both Harvey and Samyn remember discovering videogames in 2001. "My god, what could be done with this!" Samyn recalls thinking.

The Path is hardly a videogame at all. It's more like some kind of futuristic adult toy. It's an environment wherein you wander, (full of plants whose blooms are actually replications of medieval ornaments,) picking things up if you choose, or simply wandering until you stumble upon something. For many gamers - judging from the games blogosphere and people I spoke with - this was incredibly annoying. I found it relaxing and pleasurable. My problem with a lot of videogames is I get stressed thinking about what I'm supposed to be doing and wondering if I'll be able to. When there's a clock ticking, forget about it - it's like my brain freezes. I get so overwhelmed with the pressure I can't enjoy the experience. But *The Path* allowed me to be fully immersed in a beautifully realized game world without worrying whether I was doing everything right let alone fast enough.

And it's hardly like nothing happens. In my first run through the forest, I climbed into a little boat I found on the edge of a lake - I think I was fleeing gasping sounds that seemed to echo through the forest, eerily indistinguishable between a gasp of pleasure and a gasp of pain. I hopped into the boat and next thing I knew the "the wolf" was upon me - the wolf is not always in the shape of a wolf - and there my young girl self was, whirled into the air in a burst of circulating white light. It seemed both annihilating and blissful at the same time. And then the screen went blank, opening again on my young girl self crumpled in a heap, in the rain, at the foot of grandma's house.

The next character I choose was the youngest girl, actually dressed in a red, hooded coat, with a cute, little-girl walk. And this is when I realized just how immersed in the game I was. I didn't want to take her into the forest. I knew I had to in order to experience the game, but down in some deep part of myself I felt I was betraying her by taking her off the well-lit path. "Don't do it, don't do," I whispered to myself, even as I did it. She entered a grove where she could pick flowers, and, with each flower picked, a white, mask-like face appeared on the screen. I'm not sure how to describe just how scary that was, but that's when the hair on my arms started standing up. And for the rest of the game, I couldn't bring myself to go back to that part.

We ran into the little girl in white and walked together hand in hand for a while. I didn't want to part with the girl in white. I felt the urge to protect her, and also that somehow her presence protected my little-girl avatar. I felt she represented all that could go wrong in the forest - all that inevitably goes wrong in life - and the courage it takes to survive and grow despite even the bitterest experiences. She seemed endlessly old and yet totally vulnerable at the same time. I let the two girls play for a while, hug each other. Then I took my girl back to the path, and just kind of hung out there for a while. I know I said this before, but I have to say it again. I did not want to go back into the woods. The sense of wanting to protect my girl was that strong. And I was scared - really scared, watching *The Shining* scared. When I did take her

back in, I found myself pleading for her - to whom, I don't know - under my breath. We came upon an old graveyard, and my heart literally jumped a beat when I saw the wolf, up on his hind legs, creeping around the edge of the screen. Up to the graveyard I marched my little girl, and then it was a montage of fangs and moans and bristly hair, and then images of my girl riding him, roughly, round and round the cemetery. Again, all faded to black. Again, my girl was dropped, in a crumbled, broken heap at the foot of her grandmother's door.

And so it goes. The next girl, a bit older, sits next to a young man on a bench next to a playground in the forest, he looks at her - and she looks so tiny in her slim girlhood next to his muscled manhood that my heart breaks with the yearning to save her - and all turns to black before her twisted body is found at grandma's.

After that, I brought out the oldest of the young women, and said, 'fuck that' and marched her straight up the path to grandma's house, walked right into the door, found grandma in bed with a funny look in her eye and "Failed" the round. Fine with me, I thought. At least I saved her.

The last girl I played was in some ways the most difficult. She's a teenager who walks lasciviously, swishing her hips from side to side, arching her back and batting her eyelashes. I let her play by the side of the path with the little girl in white for a long, long time. It was as if I knew I had to take her into the forest to meet the wolf, to facilitate some process that, inevitably, had to be, yet I kept thinking, 'a little longer, a little longer.' Maybe I'd just been playing too long at that point, but I swear that when it was time to go into the forest, my girl knew just what she was doing. This time she (I?) was looking for the wolf - not dawdling about gazing at foliage or collecting flowers, not hiding from him, but flat-out hunting him down. This girl wanted her fate as much as she feared it. When I came into a campsite with bloody Xs on the trees, a cooler of beer and a man with an ax chopping away at the surrounding trees, I knew we'd found him. Might as well let her sit down on top of that cooler and wait for him to come.

I asked Samyn and Harvey what *The Path* was about. They laughed and asked what it was about for *me*. "Confronting your own interpretation of things is what's frightening," Samyn said.

Okay, fair enough, but still the game *is* about something. Samyn spoke of the traditional coming-of-age stories for girls that always come with a warning implied - usually against men. He said they wanted to turn that on its head a bit. Maybe the wolf isn't really so evil. Maybe Little Red Riding Hood isn't so innocent.

"There's this tension between is this girl walking into a trap or is she actively seeking this experience no matter what the cost is," Samyn said. "If *The Path* is about anything, it's about the fact that things are not as clear as we might wish."

When he said this, I thought of the scene where the little girl is pulled up in a swirl of white light – both ecstatic and obliterating. I thought of the teenage girl, swinging her hips at the wolf. No, things aren't cut and dry in *The Path*.

But OK, Samyn and Harvey say the game is about my own reactions. So I'll say this: for me, *The Path* is about what a remarkably fine line it is that separates childhood from adulthood, innocence from cynicism, and how utterly not black or white most things in life are. It's about the fact that, as much as we might like to believe otherwise, sometimes the places that should be the safest – childhood, grandma's house - are actually the most dangerous; that sex can be both brutal and transendent; that females, at all stages of their girlhood, are vulnerable in a very particular way; and that there's a certain inevitability to that vulnerability - no one gets through life without growing up. And sometimes growing up can be an experience that leaves you crumpled and nearly broken on the ground.

But maybe that's just me. You'd better play it yourself to see for sure.

“

*I'm beginning to realize
I have only the foggiest
notion of where I am.*

”

GREG TREFRY

LA NOCHE DE LOS MUERTOS

Lost

My feet pound the street in time with my racing heart. I reach the end of the bridge and bolt left down the street running parallel to the river. My lungs burn from the dash. I'm not sure I can keep going. I sprint out of the glow of the streetlight and behind a shed in planted in the center of a small parking lot. I glance back over my shoulder to see if anyone's following me. No one is.

Instead of black-hooded ghouls I see a couple strolling along by the water in the cool September night-air. Instead of my teammates I see a group of Friday night revelers staggering down the street towards a small pub. I'm surrounded by people, but I'm alone. Not one of these people seems to realize the city, their city, is infested with hooded skeletons lurking around corners and behind dumpsters just waiting to pounce and grab me, to rob me of my cherished mask and armband

But I can't tell them this. The ghouls aren't chasing them. They aren't marked like I am. It's not *La Noche de los Muertos* for them. Only I know all of this—well, me and two hundred other players swarming across the city toward some unknown destination. This is not ordinary night; it's the night of the dead.

I'm alone; alone on the streets of Bristol. I only just landed in the country 10 hours ago. I'm beginning to realize I have only the foggiest notion of where I am. I dig into my back pocket and pull out paper damp from sweat. I finger the limp pages loosely and twist to try and get a bit of that streetlight's yellow glow to illuminate the map printed on the front. A river splits the map. What luck, a river runs past me on my right. I take this as a good sign. I decide I'll follow the river and cross back over at the next bridge where I hope I'll be safe from the skeletons lurking on the other side of this bridge.

I lope off down the street following the river for several blocks until I come to a wooden bridge. I've never been to Bristol before and I'm struck by its blend of industrial, modern and ancient architecture. I sprint across a wooden bridge figuring if I were a skeleton charged with chasing down humans I'd guard every bridge. What better place to trap and cut off a player. But no skeletons leap out. I'm met only by the startled faces of a couple on a late night run for groceries. Maybe it's the running or maybe it's the Mardi gras mask I'm wearing. I find myself on a large island with two choices: a dark alley or a dark curving road. Neither seems particularly attractive. I pull out that sweat soaked map again. Ugh. Why did I wear jeans to play a game that demanded so much running? I look around for a street sign I can use to pinpoint myself. Nothing. I glance back over the bridge. I'm still nervous I'm being followed. I need to find another street name, a bigger street that might appear on this damned tiny map.

I find a street sign but no correlation on my map. That's when the panic starts to creep through me. This miniscule game map is the only guide I have to Bristol. It's 10 PM; most of the places I could buy a map are closed. If only this were *Half-Life* or some other video game on rails. A few seconds of fumbling down that alley and I would find it cut off by chain link fence; I would know that I'm supposed to follow the curving road. But peering down the alley I'm pretty sure it goes somewhere—probably no where I want to go, but it does seem to stretch on. Even an open world game like *Grand Theft Auto* makes it pretty obvious when you've reached the end of the content, if not the technical end of the world. The flood of details slows to a trickle. Not here. Man, the Bristol city planners suck at level design.

Then another thought occurs to me. I have no idea where I'm supposed to be staying tonight. A friend of a friend has graciously offered to put me up for the night. But I met him only briefly before all the running and chasing. We're supposed to re-connect at the finish line. And I have no idea where that is—no one does. Only the game designers possess that crucial bit of information. The rest of us have to earn it by completing the game. I check my iPhone which hasn't had been charged in more than 24 hours. Muerto. Of course. And that's when it hits me: I'm really, truly and utterly lost right now. I've no place to sleep. This alley? I don't even know where I am in Bristol. And it's awesome and terrifying at the same time. I feel the artificial terror of the game mixing with a real sense of danger. It's an unusual cocktail of feelings to find stirred into a game, the different flavors intermixing and strengthening one another.

Pause. Restart.

But maybe I should back up a bit, because unless you were there that Friday night in 2009 on the 11th of September in Bristol you probably have only the foggiest notion of what I'm talking about. And your having been there seems relatively

unlikely. Because as monumental as the game looms in my memory, only a couple of hundred people ever got to play. But boy do I wish you were there, because the game was an experience, a co-mingling of rules and time and location that make the experience feel unique and beautiful.

So let me go back to where it all started. Two hours before my panicked realization at the fact that I was totally lost, without an instruction manual and faced with the ever-increasing likelihood that I would be sleeping in the bushes, I was standing in the courtyard between two silent office buildings in a long snaking line of eager players.

I had come to Bristol, England for igfest, an annual festival of real-world games. The festival is spearheaded by SlingShot and Simon Johnson. Each year the festival features dozens of new and unusual games at different locations throughout Bristol. These games could be called new street games—they use the streets as the playing field, often transforming elements of the city into game pieces. The 2009 line-up featured a diverse set of games. There were location specific games like *Snakes & Blaggers*, a chutes & ladders like game that took over a six-story car park. *Circle Rules Football*, a sport featuring a gigantic yoga ball and a single goal offered the athletically inclined a strange cross between soccer and basketball. While some games involved a new fangled piece of technology like GPS-enabled smartphones, most were constructed of simpler stuff—rules, players, wristbands, chalk and occasionally a healthy slathering of face-paint.

The several hundred players now gathered to play *La Noche de Los Muertos* had each been given instructions to meet at a secret location—this dimly lit courtyard—at 7:30 PM. Upon signing into the game we were each given a Mardi gras style paper mask, an armband and a single sheet with a map and some simple rules. We formed into teams of five or six and waited in eager anticipation for some explanation about what the hell we had just agreed to. Having just arrived in town, I chatted with my teammates, only one of whom I had ever met before. Simon Evans, my one contact in the group, and his wife introduced me to our fourth teammate, Nina. Nina was a theater director down from London for the festival. Another young woman none of us had ever met rounded out the group. We all chatted, eagerly introducing ourselves and wondering aloud what was in store.



Photo by Andy Molyneux. Used with Permission.

Then the courtyard buzzed to life as twanging guitars echoed off the concrete walls and an undead mariachi band sauntered in serenading the assembled players. Then Simon Johnson, one of the designers and organizers of the game demanded our attention. Through a crackling megaphone he explained each team's mission: we must visit a series of checkpoints, collecting a trinket at each one en route to a final destination that will only be disclosed at the 6th and final checkpoint. Along the way we must avoid being caught by any of the undead zombies lurking the streets waiting to prey upon us. While playing we must wear our mask and armband at all times. Should a team member be caught, he or she must remove their mask. They are out of the game. The first team to reach the end wins. To win, at least one player from your team must make it to the end without being caught. We must do all of our travelling on foot. And that is basically it—that was the core of what we needed to know to play.

Get to the checkpoints, don't get tagged. Simple enough.

And with that the organizers began to send us off in waves. The first teams were released, with others following closely on their heels out into the darkening streets of Bristol.

My team dashed across a footbridge leading out of the courtyard and down a winding set of stairs, where we have our first encounter with what lays in store for us. On this lonesome footbridge had been erected a sprawling memorial of flowers and votive candles, littered with trinkets. A lone figure dressed in black with face hooded from view stood watch over the otherworldly scene. Catching site of the figure my heart leapt and my teammates and I stumbled over one another as we instinctively recoiled. The figure motioned to the trinkets and we realized this is was our purpose; we needed to grab one. Timidly collecting our first small trophy we spun on our heels and headed for a different set of stairs, bounding down them two at a time.

On the right we heard screams and saw another team being chased by figures in black. My heart leapt into my throat and we sprinted in the opposite direction down the streets of Bristol. A rush of fear mingled with hope. We were getting away. Those poor suckers were barely out of the gate and already running for their lives.



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From folk games to designed games

From a game design standpoint *La Noche* offers few innovations. On the surface it's a pretty straight-ahead chase and race game. You are given a set of spots to reach. Along the way you encounter some non-player characters who leap out, scare the bejeezus out of you and give chase. Your ultimate goal is survival and speed. There's no great need for strategy, just some clever navigating and fast feet. In fact the game is very much inspired by folk games like zombie tag. What made *La Noche* great was not innovative game design, but professional execution, inspired location selection and wonderful moments of small theater. This allowed the game to naturally mix with the texture of Bristol to produce a singular experience for the player.

Zombie tag revolves around the idea of an ever-growing hoard. In its most simple form the game plays like this: There are twenty players; one person is a zombie; when the zombie tags another player, the tagged player also becomes a zombie. With each new person tagged, the hoard of chasers grows. So slowly the game shifts from one player chasing 19 to 19 players chasing one. This gives the game a naturally escalating tension and arc straight out of a horror film. As the number of chasers swells, the game grows increasingly terrifying for the surviving players. This simple version of zombie tag can be played on a big open field with the grounds of the game delimited for players.

So where does this mechanic come into play in *La Noche*. Well it doesn't exactly. Johnson and the other designers, Clare Reddington and Hazel Grian based *La Noche* on a similar game called *Journey to the End of the Night* originally created by a group called SF Zero from San Francisco. That game used the mechanics of zombie tag described above and stretched them over an entire city. 200 players start off racing across the city chased by a handful of NPC zombies. As players are tagged they join the ranks of zombies. So by the end of the game, assuming you've survived that long you have whole mobs of players after you. *Journey* also uses checkpoints as a way to structure the game and give it a shape. By requiring players to pass through certain checkpoints, the game pushes players into moments of danger and interaction. In the big spaces between checkpoints you can assume you are relatively safe. It's as you draw close to a checkpoint that you must raise your guard, because that's most likely where the zombies itching to tag you lurk.

The design team of *La Noche* had run a game of *Journey to the End of the Night* in 2008 and found it both thrilling for players and also kind of broken. In play they realized that balancing for the zombie conversion mechanic is extremely difficult to manage. The number of zombies tends to escalate very rapidly, quickly making the game nigh impossible for the remaining runners. This ground the game to a halt after a few checkpoints.

To prevent this, the *La Noche* team jettisoned the zombie conversion mechanic, relying instead on a set number of non-player characters to act as the chasers. This gave the team more control over the pace of the game. The designers could pick where they wanted to station chasers to help craft the thrills of the chase. They could strategize and pick bridges and key corners near the checkpoints to guard. But this control came at a price. The number of non-player chasers the designers could recruit limited the game. In practice what this meant was the early stages of the game felt densely packed and suffused with danger. Chasers seemed to lurk around every corner you wanted to turn. The designers quite brilliantly anticipated the most desirable paths to the first several checkpoints and littered them with danger. But as the game stretched out over space and time, it began to seem as if the designers had spent all of their NPCs and they weren't able to adequately guard all of the game terrain. In reality they would have needed an army of NPCs to adequately cover the entire area. As the game stretched over more and more space, the number of paths players could take naturally increased. And the mass of players spread out making it harder to stand guard and startle large groups. Despite the checkpoints, it became impossible to guard all potential entrances.

In spite of this gradual thinning of danger, the game remained compelling. The designers had two key elements on their side; player psychology and the ability to tweak that psychology with the right bit of theater.

Out of the brambles and into the crypt

As the screams from our fellow players fade into the distance and we put a few blocks between them and us we slow to a walk and catch our breath. We secured our first token and survived our first encounter with the cloaked seekers. I am already growing a bit lost. I usually have an excellent sense of direction, but I am fast finding myself turned around. The combination of trying to learn a new city while being chased by hooded figures is not doing my internal compass any favors. We pull out the game map and Simon, thankfully more familiar with Bristol than I, suggests a path towards our next checkpoint, a place called Castle Park. He believes if we circle around and enter the park from the back we can avoid the more obvious entrances where chasers will inevitably lurk.

We all give winded nods of ascent and start out again at a trot. All goes according to plan until we get within sight of the park. We carelessly round the corner and standing there in the middle of the street is a figure hooded in black. For an instant we all freeze and then a scream of "Run!" frees us from our paralysis and all five of us take off down the street in a full terrified sprint. As I'm running a thought occurs to me: Get out in front of that short girl, they'll surely catch her before me and my long legs. Our team had begun to form some camaraderie after our small victories

and clever plotting, but in that moment, I think anyone of us would have gladly watched a teammate get caught rather than feel the gloved hand of this hooded chaser wrap around their arm. I don't look back till I round the next corner. Not very gentlemanly, but it's not like I had a secret weapon to ward off zombies.

Fortunately, another team had cropped up at the same time as us and the chaser bolted after them. Our team all arrives intact around the corner and dashes to hide behind the concrete base of an office building. Glancing back we see an empty street. Coast clear.

As I pant and catch my breath, I think about my reaction and my unwillingness to sacrifice myself for a teammate. I ask myself, what should I have done? Some part of me thinks the noble act would have been to try and save my teammates. But what could I have done other than run? The game threw us into a situation of recognizable danger (well, recognizable from movies and games that is): You are being chased by a monster and your team is in jeopardy. My mind instantly goes to *Left 4 Dead* and it's exhortation to stick together. I think of how many times Louis has freed me from a Smoker or some such ghoul. Thank you AI-controlled teammate, you are far nobler than I. What value does sticking together have here? We can't fight back. All we can do is flee. Is a big group even optimal? Wouldn't our team's chances be better if we were running solo, making us harder to spot and catch as a group? One of us would surely get through, right? But being on your own doesn't seem like a good idea either. On your own you don't have the safety of a slower person running next to you making a better target. And plus, it's all feeling a tad freaky and I have no f'ing idea where I am. While I realize our chances of beating all 200 other players to the finish line are slim, I do want to win. Preferably as a team, right? Righhht.

"Let's enter the park over there," Simon says, breaking me out of my reverie. He is pointing at a short wall behind which appears to be thick brush and forest. The ludicrousness of trying to claw our way through that bramble actually offers an enticing comfort. Surely no one is waiting in there to chase us. They'd have to be dumb or crazy to crawl through there. Which we figure makes it exactly the right choice. We trot over and hop the fence and plunge into woods. I am filled with the thrill of the taboo. I am a respectful law-abiding citizen, which means that I don't usually get to hop fences. And while this improvised entrance into the park hardly qualifies as seditious, it does feel vaguely rebellious. So much more so than knocking down an old lady in *Grand Theft Auto* where the only rules are game rules. Without informing the Bristol authorities, *La Noche* has empowered me. I'm just trying to survive. It imbues my out of the ordinary actions with a kind of legitimacy and lets me explore the city in new ways, like crawling through a thicket of bushes.

Halfway up the hill, as we struggle through up the thicket, someone asks Simon where exactly were supposed to be going in the park. To which he responds, "I'm not really sure." And suddenly the brilliance of this move seems questionable. We clear the top of a hill. Just a short way down in a small clearing sits stone building with torches blazing framing a door. And we know that's got to be it! We sprint down the hill in triumph and up to the entrance. Another team is leaving ("That's fine, we'll pass them on the next leg," I think). A guard in black, face painted white and black into the leering likeness of a skull ushers us into a glowing crypt where another ghoulish woman gives us our second trophy. We slowly back out of the tomb, simultaneously creeped out and excited. I'll return to this site the next day for another game and find it only half-resembles a tomb, but in the midst of the game I could swear I've stepped into the land of the dead. At this point I don't even quite realize how thoroughly the game has sunk its bony fingers into me.



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Personal experience versus the object

It is at this point in writing about *La Noche de los Muertos* that I begin to fear that I'm simply recounting stories about my personal experience of the game.

The game designer Nick Fortugno once told me his theory about why games and narratives make such strange and often mismatched bedfellows. Games are like dance. They are about the experience you have while playing. That experience can be powerful and even take on a sense of connection and narrative for the dancer. You experience it and build a narrative in your head out of all of your moves. But describing it often just comes across as a series of mundane choices. I tend to agree with him.

There's nothing more boring than hearing someone describe how they waited until the guard went back in the other room and then they switched to their big anti-gravity gun and then they jumped out and then they wasted all of the robots and it was freaking awesome! It ranks right up there with someone regaling you with hazy descriptions of their dreams. Both dreams and descriptions of your play make horrible, stumbling stories full of repetition and randomness. I love hearing about games, but I want to hear about mechanical choices the designers made to create a good game. Not the choices you made as a player to win the game.

At the same time I would contend that you can't fully understand the aesthetics of a game without considering the experience of playing it. Sometimes just talking about the mechanics of shooting zombies doesn't do justice to the experience of frantically trying to ward off an imposing horde battling at you from all sides.

Unlike a book where the text claims a natural position of primacy over your experience, games rely on the player to animate the game. So while a reader brings all sorts of personal biases to their reading, it doesn't really have much bearing on the state of the story. For one thing, books are largely standardized. We all get the same set of words when we pick up a book. Video games and board games generally offer similar objects, with some exceptions for the systems a video game might be played on, say a console versus a PC. These differences might seem trivial, but they can make the experience entirely different. We've probably all played a first-person shooter that was tuned more for one type of control than another. Perhaps it was tuned easier for a joystick, making play with a mouse and keyboard trivial. Or conversely the game required a level of precision hard to accomplish with dual joysticks.

Experiential differences like these become even more exacerbated in real-world games where the designers must contend with a greater set of factors they cannot control. Rain and shine can both ruin a game. An unexpected event like a passing

group of laughing school children can bring a wonderful light-hearted texture to your game. Or in the case of *La Noche*, you may have a bumbling American fresh to Bristol get utterly lost while playing, through no fault of the game designers, layering the game with complementing levels of fears about the game and the real-world. So in real-world games the experience comes to really dominate the aesthetics of the game.

For me *La Noche* drew much of its power from the tension between the game and the world. In the end, I struggle with how much I loved the game versus how much I loved my experience of playing it.

You don't know what you got till it's gone

We get separated sometime after the third checkpoint. At this point we're really cruising along. We had aced a musical challenge posed to us by the ghoul at the third checkpoint—a Simon-says like drumming challenge versus a tuxedoed figure with antenna sprouting from his bowler.

We have no doubt we'll make it to the end. Heck, we even talk about possibly winning. It sure seems like we're out ahead of the other teams. We get cocky. Up to this point we've assiduously avoided the direct obvious route. But now in our hubris we're making a beeline for checkpoint four. We haven't updated our meet-up points should we get separated.

And that's when it happens. We step out onto a main drag and there are two or three chasers waiting. No one even has to yell run this time. All five of us take off. But unlike last time when we serendipitously head the same direction, this time confusion reigns and the group splits in two, then splinters again.

Next thing I know I'm pounding my way across a bridge, veering off towards a small parking lot where I can hide and regain my bearings. As I'm running I have the feeling of our team splintering. I assume someone was caught and this time I'm actually saddened by the prospect of our team losing a member. At the same I assume I'll be able to meet up with the remains of my group at checkpoint four by skirting down this river and across the next bridge I see. It seems too dangerous to go back the way I came.

I hoof it downstream, cross the bridge and wind up in that dark alley trying in vain to match my map with my current location. And though I thrill at the prospect of being lost, I miss my team. I miss the camaraderie. A flight from the living dead necessitates teammates. *Left 4 Dead* was right, "Stick together." If not for strategic reasons, then for existential ones. We were just getting to know one another; we had so much potential.

I stand now on the fringes of the game, being pulled quickly out of it by the dawning realization that I am indeed truly lost in a city I don't know with a dead cellphone and no way of finding my way home. The designers of *La Noche* don't have the advantage of boundaries keeping their players in and pushing them towards the goal.

Boundaries provide the designers at Valve one of the best ways to shape and craft the experience of the player. The level designer crafting *Left 4 Dead* can disguise the shape of the world with a few well-placed open fields, switchbacks and blown out bridges. The player may not even realize how they are following a tightly prescribed path. The *La Noche* designers must contend with the fact that a player accidentally crosses the wrong bridge, wanders a bit off grid and suddenly their game has melted away into a typical Friday night. The further I wander from the game; the longer I go without sight of a ghoul; the more the game fades away and real-world anxieties take over.

I gather myself. I know I need to be west of wherever I am. I also realize I've probably missed the chance to catch my team at checkpoint four. I decide I will head west until I hit another river. That should indicate that I'm going the right way. A six-minute jog later and I'm crossing a bridge. Finally I find a street sign that matches the map. And like that I'm back in it. I think an approach along the north side of the river will lead me straight into chasers. So I cross another bridge and skirt along the southern side of a river until I catch the torches of checkpoint five blazing through the darkness.

The saving grace of pinch points

Just as in open world video games like *Far Cry 2*, pinch points save the day and give some form to what could otherwise become an amorphous mess. While the open-world nature of *La Noche* and well, the world, allowed me to go off and craft my own "fear of sleeping in the Bristol gutter" narrative the pinch points of the checkpoints brought me back into the narrative of the game.

They work structurally to allow the designers to craft moments of tension and conflict, stationing chasers around them. Equally importantly they offer the designers a place to focus the theater of the game. As with the votive candle memorial and crypt, each checkpoint allows the designers to design a scene that can compete with the real-world. Layering games on top of the everyday world puts the narrative of the game in conflict with the texture of the space. And unless you have a huge budget, the world's going to win out. That's why even on movie sets they're only filming small little views of the world. In a real-world game you can't control camera angles. It's even worse than *Half-Life* where the game allows the user to point the camera wherever they please. In that situation at least Valve knows all of the possible things the user might see and can craft ancillary visuals appropriately.



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It's more difficult to maintain the narrative of deadly zombies when you can turn around and there's a family carrying groceries walking bemusedly by. The pinch points combined with the darkness and torches allow the designers to focus attention and really decorate a location in a way that offsets and complements the real-world. By choosing excellent locations for the pinch points from a stone building in Castle Park to a quiet footbridge to an ancient and overgrown graveyard, the designers can occasionally reinforce the narrative and texture of their game.

More importantly, it gives me a place to meet up with my teammates.

Let's never lose each other again

I wait within the safety zone of checkpoint five for five minutes, 10 minutes, 15. I start to worry. Have I missed them? Are they just gone? Did they give up when we all separated? My spirits momentarily boosted by finding checkpoint five begin to sag. Other teams come running up, accomplish the blindfold challenge required to move on. I see our chances of winning begin to fade. I ask myself if I could preserve our chances at winning by just plunging ahead. But somehow it doesn't make sense to go on alone. I need my team.

And just when I'm ready to throw in the towel, up dash the Evanses, sprinting towards the bridge to reach the safe zone. We cheer for joy at the reunion. We're still missing Nina and that girl whose name we couldn't remember, but we at least have a quorum. We're a team again. Though I barely know these people, I'm relieved to the point of hugs to see them again. I'm reminded of the incredible ways that games forge social bonds. Especially when I consider that if we don't get to the end and I don't find my host, hopefully these nice people will let me crash on their couch.

We set off again. There's an obvious and straight path towards the final checkpoint, but we don't take it. We set off on a circuitous route to enter the park from the back again. The entire time we're jogging down abandoned streets looking over our shoulders and peering around corners. And even while I know in the logical part of my brain there's no way the designers could possibly have enough NPCs to guard this entire area, I give myself over to the fiction and look nervously back and peer trepidatiously around. The game and reality are pulling at each other and competing. In the back of my head I hear a repurposed version of Franklin Roosevelt's maxim, "We have nothing to fear but fear itself." The longer the game goes on the more it cracks at the seams. All of the chasers have been spent. All *La Noche* has left is the darkness and moonlight. But I have had such a good time up till this point, I want the game to work, I owe it. So I forgive the lack of chasers and plunge forward in my self-created anxiety.

Finally we stand at the crest of a large hill looking down across a wide-open field towards a wooden structure again blazing with torches. We know that's where we have to go. We know this is probably the last dash of the game. The moonlight softly blankets the grassy field. We look at each other in relief; that we've made it here; that at least three of us are still together; that it's over and we can stop all of this running soon. We can dimly make out the small figures of other players down there. We know we probably haven't won. But we feel a type of victory nonetheless. We know now, this wasn't a game about winning. It was about surviving. And with one last run we'll have done just that. We take off in a wide arc down towards the torches.

A coda

I am right that the game will offer no more gameplay. From this point on the game evolves into its own long coda. We make masks; we ride an old-fashioned London double-decker bus to an ancient graveyard where we traipse through the dark. A few ghouls jump out to scare us, but there is no more chasing. The game ends with the return of the undead mariachi band and zombies in wedding dresses dancing amongst the tombstone and players regaling one another with tales of their exploits.

We all wind up at a bar afterwards and I am reminded how important experience and especially shared experience can be. We tell stories of the game, of how we avoided chasers and snuck into safe zones and skirted danger like they're our own war stories. And they are. And we know that this is all a game and that most people will never care deeply enough to listen to us recount this experience. But that's okay. Because in this moment our shared experience is still fresh, the sweat is just drying and our muscles have not yet begun to ache. Like dancing the realness of it will soon fade. Some of us will be cursed to look back on it clinically, searching for lessons as game designers, finding fault with the balancing of this or the length of that. But the lucky ones will look back on it as something else, something closer to the wild exuberant experience of dancing and playing and being lost and found.

IMAGES:

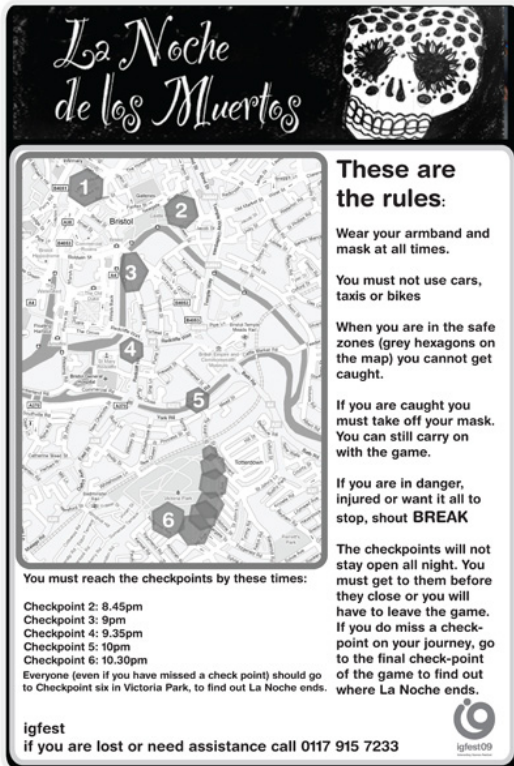


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*The pleasures of WoW as
a player are not at odds
with those of a researcher.*

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**CRYSTLE MARTIN, SARAH CHU,
DEE JOHNSON, AMANDA OCHSNER,
CARO WILLIAMS, & CONSTANCE STEINKUEHLER**

DING! WORLD OF WARCRAFT WELL PLAYED, WELL RESEARCHED

World of Warcraft (WoW) is a massively multiplayer online (MMO) role-playing game that takes place in the fantasy realm of Azeroth and boasts over ten million players. *WoW* was vast in scope when originally released, and has since added on more territories and character customization choices. Originally consisting of two continents, Kalimdor and the Eastern Kingdoms, two expansion packs added the realm of Outland and the continent of Northrend to the map, and, have also expanded the content of the game with the addition of new races, lands, quests, etc., and raising the level cap (highest attainable level). When designing a character, the player is offered a variety of choices, such as selecting a character's faction (Horde or Alliance), race (10 playable races which include Night Elf, Troll, and Undead), and class (9 different classes which include Mage, Paladin, and Druid). The player is able to further specialize their character by selecting two professions, as well as spending points to develop talent builds. In addition, during gameplay, decisions must be made about what armor to wear, what weapons to wield, and in what order to cast spells. The choices are vast and are able to be molded to fit a variety of playing styles, especially considering the social interactions that raids and guilds support, the wide variety of gear choices that are made and re-made regularly, the complex role-play opportunities, and the various patterns that different players develop (and swear by).

As such, *WoW* offers a tremendous number of avenues for the player's enjoyment and just as many avenues of study for researchers interested in informal learning, especially in online collaborative spaces. We all play *WoW* but our backgrounds vary beyond that, ranging from a professor who researches informal learning and MMOs, four graduate students with a variety of research interests (including math, visual studies, and literacy), and a high school senior who is an avid gamer. As players and researchers of *WoW*, we could ramble endlessly about the game but we have instead decided to talk about nine of our most loved things. In this essay, we delve into how *WoW* has redefined gaming, narrative and raid centric playing styles, as well as the multi-level social interactions in *WoW*, as an exploration of what we love about playing the game. Then, we explore character aesthetics and player-produced visual models, the use of math and information literacy, and finally a player's experience with time in *WoW*, for our more research-oriented pursuits. Though we cannot go into much depth for each section in this short essay, we do cover a breadth of topics to offer the reader an overview of the wide variety of perspectives from which to think about *WoW* as players and as researchers.

WoW <3 from the Player Perspective

World of Theseus (Lead: Williams)

According to Greek legend, the ship of Theseus was replaced bit by bit as oars wore out and planks became rotten, until the whole of the ship was rebuilt with new and stronger pieces. Philosophers promptly began a fight—that continues even today—over whether that new ship was the ship of Theseus or a completely different ship altogether. If all the parts of something are changed or replaced, is it still that same *something*? Is there an essence that persists beyond the surface details? *WoW*, that living shifting persistent world that millions visit daily, is our modern Ship of Theseus, changing bit by bit and becoming stronger, newer, and completely familiar.

WoW was originally released in 2004 by Blizzard, and they have been consistently remaking it since. Two expansions (with a third in the works) brought drastic changes to the game for those who paid, but the real story of Theseus is in the patch notes—the long and informative list of changes that serve as the primary reading material during the long (seemingly infinite, sometimes) installation process of each patch. Those notes⁵¹ describe in detail the ways in which Blizzard has been striving to balance their incredibly complicated world, in pages and pages of text, carefully organized. And while some of these changes are small—a bug fix here, a change of gear stats there, an increase of spell-casting distance—others are incredibly large—a map change here, a new quest there, the complete and repeated revamping of talent trees⁵².

As mentioned in the introduction, when creating a character in *WoW*, there are 10 different races to choose from. Next, the player must choose one of nine different classes,⁵³ each of which approach the game quite differently. For example, the rogue class sneaks around and gains extra power for attacks that are unexpected, members of the hunter class capture and train attack animals, and warlocks deal elemental magical damage from a distance. Within each chosen class, the player then must decide over time what *type* of that class s/he wants to be. This choice is made through the use of talent trees, where the player can unlock special skills and strengths by spending painfully earned talent points. Each class has three different talent trees—druids, for instance, have the trees of Balance, Feral Combat, and Restoration to choose from, and each tree supports a particular type of gameplay (in this case, nature spells, shapeshifting melee, and healing, respectively). Using a talent point in the Balance tree unlocks more powerful Balance options, and lessens the options that the player has with Feral Combat and Restoration, so each talent point is an influential decision.

In every single patch they've released, Blizzard has modified some talents, but even more dramatically, they have so drastically changed the talent trees of *every* class at least twice that talent points were completely refunded so players could re-design their character from scratch. For druids, the talent points were refunded a *full four times*, which means that someone who's been playing a druid since day one has re-designed this important aspect of his/her character repeatedly. This sounds a bit frustrating, as with each new specialization, called a "spec", players have to learn new spells and form new habits. But what these changes indicate is that Blizzard is constantly improving the balance between classes and types of classes, fine-tuning the distribution of power in the game. In other words, Blizzard has responded thoughtfully to play patterns and player preferences, working constantly to refresh and polish their world, in a fashion that challenges the often-static nature of conventional games.

Not all games are static; in fact, many of them are static in some ways but offer new downloadable content *or* expansions *or* second releases *or* bug fixes. But *WoW* changes or adds *all* of those new pieces. Games like *Tic-Tac-Toe* don't have anything like expansion packs, really—they are just classics and they stay the same. *Monopoly* gets new makeovers all the time, including gold and diamonds, but I use the same rules and strategies I've always used despite the appearance of the game. *Starcraft 2* is released over a decade after *Starcraft 1*, and they are just as dis(similar) as *WoW* in 2004 and *WoW* in 2010. When I encounter bugs in *Red Dead Redemption*, I wonder *when* Rockstar Games will fix them, but the question is really *whether* they'll be fixed. I've been spoiled, that's all—I expect fixes and new things and dexterous changes as a part and parcel of gaming, as if that's what game companies should do as a matter of course. The truth is, though, that that expectation was created by my *WoW* playing—it may be slowly becoming more normal for game companies to continue working and polishing long after a game's release, but that bar was originally set, met, and exceeded by *WoW*.

It was during the analysis and design of the game, captured in "Math as narrative in *WoW* forum discussions" (Steinkuehler & Williams, 2009), that the unusual nature of *WoW* caught my attention. I realized that I couldn't retrieve the spells being talked about—I mean, I know what "mindflay" looks like *now*, but what did it look like back in 2006 when the data was retrieved? All of these little parts of *WoW* had changed, bit by bit, which changed the way certain classes were played and the way they interacted with other characters, which changed the make-up of raid groups and player-vs-player battles, which changed which classes were being recruited by guilds and started as alts, which meant that *everything* changed. The *WoW* that I play now is not the *WoW* that I played back in 2004, but somehow, simultaneously, it *is* the same *WoW*, and I get that same sense of recognition and wonder when I

log on. Perhaps, to steal Douglas Adams' (1990) phrasing and use it for my own purposes, "to be overly concerned with the original design and details, which are merely sentimental souvenirs of the past, is to fail to see the game itself."

Narrative Immersion and Identity Exploration (Lead: Ochsner)

The Warcraft universe has an incredibly well-developed history. Known as lore, this history spans thousands of years and can be explored in great detail on the official Blizzard website, numerous fan sites and wikis, as well as novels, comic books, and manga that delve into this universe's defining events and its most important characters. The level of importance that any player ascribes to the game's lore is entirely a matter of choice. For some, being engaged with the game's narrative elements is *the* reason to play; for others, narrative features are irrelevant. It is through exploring this engagement (or lack thereof) with the game world's narrative that we can truly begin to see the depth of gameplay options that *WoW* offers to its players.

Taliaraz is my newly-created Draenei shaman. She is a dark-skinned female with wavy black hair and harsh, hostile-looking facial features. She is alien to the game's primary setting Azeroth, having just crash landed on the planet with a group of fellow Draenei who are fleeing a demon army referred to as the Burning Legion. Overjoyed to have solid ground under her feet and filled with a passionate hatred of all Orcs, who were corrupted by the Legion and then betrayed her people on their former homeland Draenor, Taliaraz is eager to begin exploring this newfound world. As a shaman she feels a deep connection with the earth, and as she nourishes that sense of closeness she hopes to be able to learn increasingly powerful magic. Curious about the properties and potential powers embedded in the earth of Azeroth, she has taken up jewelcrafting, believing that diligent study will reveal some of the world's secrets.

This inductive description serves as much more than an introduction to Taliaraz's character – it indicates a certain play style for *WoW*, and it is one of many possible approaches. My choice to place an emphasis on Taliaraz's story and personality shows a play style that focuses heavily on narrative experience. Much of the story introducing Taliaraz comes directly from Blizzard at the very beginning of the game through an opening cinematic that describes the plight of her people. Her physical features and role as a shaman were choices that I made, but from a set of options that the developers provided. Finally, I supplemented the developer-created story and features with my own attempts to further develop and connect with her character. For example, her eagerness to explore the new world and her dislike of orcs are personal touches that I came up with on my own as a way to be more deeply invested in the experience of playing Taliaraz. However, these are features

that are believable and consistent with information provided by *WoW*'s developers. With this approach to play that is heavily focused on role-playing, I would try to experience the world as Taliaraz would and protect her integrity by making choices that make sense for her character. As I play her, I would try to think as if my thought process was hers, and under the most ideal conditions it would be as if my mind and her mind were one and the same. This coming together of player and character is what James Paul Gee terms *projective identity* (2007, p. 50-54), which he uses to describe both the player's act of projecting their real-life identity onto their virtual character and to the player's process of making that character into an ongoing project or creation to be worked on and perfected over time. When players engage in an act of projective identity, they feel responsible for their character and consider what experiences they want that their characters to have throughout the trajectory of the game. They are then careful to play the character in a way that is consistent with that path.

One of the advantages of taking this approach to playing *WoW* is that it allows players to reflect on their character's place in the game world, answering questions about where their loyalties lie and what their goals are. The character might take the time to get to know the people of each region s/he stops to quest in, and s/he might examine her/his reasons for helping them. This approach to play allows the player to explore different facets of her/his identity, trying on personality traits that s/he finds desirable or intriguing. S/he may also be able to play out possible fantasies, such as having a more striking physical prowess, being more assured in her/his powers of persuasion, or possessing more freedom and a greater sense of autonomy. With this kind of play, the player's focus remains concentrated on the game world and on her/his character more than social experiences. The player's experience is largely introspective and involves her/his using the developer-created fantasy universe to create a character s/he can use to explore her/his own identity. The projective identity occupying the space between the player's real-world and virtual identities reflects her/his "own values, desires, choices, goals, and actions" (2007, p. 50), which Gee explains creates a sense of ownership. This experience of creating, controlling, respecting, and developing a virtual character can be deeply pleasurable.

A Non-Narrative Social Approach: Raiding (Lead: Ochsner)

WoW is not just a world of history and lore; it is also filled with characters controlled by players from the real world. While the complex game world might be deeply engaging for some players, others enjoy *WoW* for entirely different reasons. For many, this game is at its core a social experience that players use to hang out with friends, play a role in a group, or compete against other players. A player can be oblivious to the current situation of her/his character's race, might not be able to

explain why certain groups are at war, and may not give a single conscious thought to her/his character's personality or motivations. While it might initially seem like this player is missing out on crucial parts of the *WoW* experience, this isn't necessarily the case. An equally valid and popular approach to the game is to value player-focused social experiences over narrative and character elements.

While there are a number of ways to play *WoW* that focus on the social elements of the game, one play style in particular seems to be a direct foil to the narrative-focused approach described in the last section – that of a raiding guild member. Guilds are self-formed groups of players who support one another and play together. When guilds raid, they form groups of characters that have reached the level-cap and go into dungeons to defeat their faction's more difficult enemies. Serious raiding guilds are demanding and selective, accepting only the most skilled and the most committed players. They often have very specific character requirements determining which players are allowed to join, and many follow strict time schedules.

A raiding player utilizes her/his character to play out a prescribed role as efficiently as possible. Take my own raiding mage character as an example. The main role of a raiding mage is to deal as much damage as possible to enemies. While this sounds like a very simple role, successfully playing any role in a raid group requires a precise process. My mage would be expected to deal a certain amount of damage per second (dps) to enemies. If I want to be considered a valuable member of the group, that damage figure needs to consistently fall within a certain range.

The mage's skills and strengths should be based off of a carefully researched "build" of talent points, which I would research online, often seeking additional advice from my more experienced guild members. Other players have poured countless hours into determining the most successful skill set for a mage, and I am best able to help my group by relying on their expertise. Raiding players are responsible for keeping track of any changes that the developers make to the game because the most successful raiding build can change quickly. For example, for a long time, using arcane spells was the best approach for raiding mages in *WoW*, but recent updates and changes have made fire spells a more successful spell type. Not only is the best type of spell set predetermined for a raiding player, there is also a specific spell rotation (the repetition of certain spells cast in a specific order) that must be used.

Raiding requires participants to play out very specific roles and yet the play style itself acts as a foil to a role-playing approach to the game. A story-focused, role-playing type of play involves the player navigating the game's vast and open world with a character that allows her/him to explore various identities that s/he chooses. Raiders follow a relatively linear path through the raid dungeons and are expected to perform specific sets of actions at very precise times. Yet, raiding is a challenging activity that requires players to take on a lot of responsibility. This type of play

offers players fewer choices, but the high level of challenge makes it an extremely gratifying experience when it is done well, especially since it is a highly organized and complex group accomplishment. While the reasons to value each of these play styles might differ greatly, they are both meaningful and valuable, having a lot to offer their respective players. Ultimately, players who take a narrative and character-based approach to *WoW* are essentially playing a different game than raiding players, finding pleasure in different activities and gaining vastly different skills. Whether it's feeling a sense of ownership out of taking on a projective identity, effectively playing out a critical role in a group activity, or achieving another accomplishment from an entirely different play style, any approach to World of Warcraft has the potential to be both gratifying and offer the player a powerful sense of agency.

Multi-Level Social Interaction in WoW (Lead: Johnson)

The impact of video games on my life has been enormous. *WoW* is a wonderful illustration of what a virtual world, inhabited by players scattered around the globe, can provide to an adolescent male such as myself. Contrary to popular belief, the majority of players in *WoW* are not adolescents, nor are they all male. In my case, this has led to exposure to peer groups that under other circumstances would have remained unknown to me. Late night discussions about politics, gender, and race, although uncommon, are not unheard of in these spaces. Other Internet phenomena tend to make their way into *WoW* as well, popular memes born elsewhere on the Internet almost always pass through chat⁵⁴ demonstrating that although the world of Azeroth is insulated, players enjoy throwing information at each other and seeing what happens.

My first encounter with *WoW* took place in the most stereotypical environment for gaming possible: my mother's basement. Games were by no means a new media to me. In fact, first-person shooters defined most of the peer groups at my school. I remember my first attempt at creating an avatar. I was so puzzled by the User Interface and could not figure out why anyone would want to sit alone and play a video game online with no face to face contact with other players.

Since those heady days of youth I have learned quite a few things about virtual worlds. All of the built-in services are available at all times from any location with an Internet connection and the appropriate computer gear. They can provide the social interactions of a playground, the wonder of watching an elaborate storyline unfold, and learning experiences that, under the right circumstances, parallel those found in the most well-equipped classrooms. The ability to be social with such a broad population in a low-risk environment is a skill no other generation has had the opportunity to master in such great numbers at such an early age. The fact that *WoW* is a persistent world means I can wake up at three o'clock in the morning and

find a group to run a dungeon with. It may be made up of four other white males who are staying up too late, but the number of times I've had the opportunity to connect with say, a stay-at-home mom or siblings waiting for their parents to get home seem to contradict any preconceived notion that *WoW* players are a homogenized population.

If you've ever read science fiction classics, you know that virtual worlds and the unique social situations they facilitate have long been discussed. Groups that differ in many aspects - age, nationality, and gender, to name a few - occupy the spaces provided by games like *WoW*. Over the course of the standard ninety-minute play-session I have no difficulty executing hundreds of player-to-player trades. Through thick and thin, *WoW* has promoted an exchange of perspectives between myself and otherwise disparate peers. The feeling of actively contributing to a narrative whenever you play is intoxicating—and of course, there are two million other players participating in a comparable narrative simultaneously. MMOs have mediated the barrier for engagement among groups that other formats of play cannot due to their social or geographic locations.

WoW provides a space for individuals to create and exchange values, be that through virtual goods or friendships with other players. Within my guild alone, there are sixty members playing four or more hours daily. Each of these players maintains a complex social network as well as participating actively in both personal and private chat channels. Many of them also participate in the frequently lewd and rebellious "Trade" chat channel that is usually used for buying, selling, and trading in-game goods and service. These multiple layers of discourse take place at the same time and most players don't realize the complexity of the social networks they are building.

WoW grabs many players' attention not because of the differences between it and their real lives, but because of the similarities. The conflicts I have moderated as an officer in a guild are not different from the classrooms I have taught in. Completing a long and tortuous progression through the newest content is intended to leave a player with the same feeling of accomplishment gained by completing a project in school or at work. Being mentored by a more experienced player feels the same as being mentored in any other situation. Most importantly, participating in varied and overlapping human interaction is an integral and necessary part of *WoW*, just as it is fundamental to everyday life.

Some of the rather menial tasks that players are asked to perform once reaching the level-cap, such as daily quests, resemble the small hardships that we all face in our day to day lives. Almost all quests boil down to a 'fetch this item' ideal, which can get really boring really fast if progressing through levels is your goal. However, when an element of competition is added between either the player and their compatriots or

their sworn enemies, an enormous jump is made into the realm of engaging social play. Now, when out searching for an item used to complete a quest, interaction with others is almost always the most efficient way to achieve the desired goal. In many cases, specifically with quests that can be completed repeatedly at the level cap (called “dailies”); players with a shared objective will form a group regardless of the difficulty of the task at hand. To avoid boredom at work during coffee breaks, we group up around the water cooler to gossip. At home, we largely follow the tradition of sitting down at the table to eat. Yet, all of these spaces remain engaging despite repetition. Conflict and reconciliation take place between individuals and groups inside virtual worlds in the same way they take place in any other venue viable for discourse.

In Blizzard’s upcoming expansion to this world, social aspects of the game are receiving heavy attention from developers. There are more incentives for a player to both join a guild and stay committed to that guild’s well being for an extended period of time. The fact that the creators of this virtual world are emphasizing the game’s social aspects is a statement about their importance. These spaces are given depth and reek of humanity because of the people who inhabit them virtually. Disregarding the rich, engaging, and thoughtful storylines, it is not the game environment itself that instigates many interactions in MMO, but it is the players who are using the space that make the space rich, engaging content.

WoW <3 from the Researcher Perspective

Looks Matter (Lead: Chu)

It started with a staff. Long, slender, and tipped with ruby gemstones. They called it the Emberstone Staff, and it was a much-coveted rare weapon dropped by a boss in the Deadmines dungeon. My first *WoW* character was a night elf druid with shiny blue locks, and, like most low-level players, I sported a mish-mash of gear, which could only do a three-year-old who dresses herself proud. I spent countless hours in front of the bank in Darnassus organizing the items in my vault storage space and equipped bags. One evening, while I meticulously arranged my linen and wool cloths by type in rows—I was a slight neat freak even with my in-game bags—another night elf druid who bore a striking resemblance to me approached the bank. What caught my eye was less her uncanny similarity to me both in hairstyle and mismatched armor, and more that I could not help but notice her shiny weapon as it beamed in all its glory. “Hey there,” I said, as I swiveled the game screen’s perspective and zoomed in to take a closer look. “Where did you get that staff?” Though only the two of us stood at the bank, it took her a moment to realize that my question was directed at her. “Me? From Deadmines.” After bombarding my in-game twin with a series of questions about the details of her cool-looking staff and the dungeon, I asked my guildmates to lead me to the so-called Deadmines, determined to claim an Emberstone Staff as my own.

In retrospect, as I leveled three different characters to the 70-somethings, the Emberstone Staff was one of the least attractive items I would come to own. My adoration of how cool other players' gear looked and my determination to obtain these items for myself, however, remain unchanged. This gawking often took place inside cities, where a high number of players congregated, many standing idly, resting. In their study of the social dynamics of *WoW*, Ducheneaut, Yee, Nickell, and Moore (2006) observed that a common occurrence was that players would leave their characters equipped in high-level gear parked in front of the auction house in densely populated cities, almost as statues for others to admire. The researchers likened this practice to how spectators would crowd around the best pinball players at an arcade. In *WoW*, the items that players equip signify social status and prestige. They tell other players where you have traveled, what bosses you have slain, and how much wealth you hold. An experienced player can "read" another's outfit and be able to construct a good portion of that character's history and experience with the game. Less experienced players are still able to distinguish between low-level and high-level items by how decorated the pieces are. Armor sets formed with matching pieces take longer and more skill to obtain, so those wearing such sets are therefore more attractive to other players. When playing in groups, wearing good gear is one of the major determining factors for a player's inclusion in a group. Those in immediately recognizable high-level gear are hugely favored in dungeons and raids. In fewer words: looks and aesthetics in *WoW* matter.

Owning appealing gear in order to advance in the game is not the only reason that players collect attractive weapons and armor. Klastrup and Tosca (2009) found that, "many players spend time acquiring clothing with no value to the mechanical game-performance," but items available in the game such as tuxedos, dresses, and Santa suits allowed the players to play a bit of dress-up. They observed that most players, not only role-players and female players, took an interest in looking good and being fashionable. For these players, what they equip act as visual cues to their status or expertise, and often their humor, which motivates other players to obtain similar visible markers for themselves. For me, with three high-level characters, the Emberstone Staff was only the beginning of years of admiring and chasing fashion.

Over the years, there has been growing academic attention being paid to aesthetics in games and their power to visually communicate meanings and values. T.L. Taylor (2009) has investigated the use of mods (user-created game modifications) in *WoW* and describes how mods help to "reconfigure play," by changing the aesthetics of the user interface in order to make what is visible more useful, and often what is hidden more visible, to help players advance in the game. One mod that Taylor discusses, CTRaidAssist, provides options and visual cues (such as broadcasting vital information on players' screens during a boss fight) that are so heavily relied upon it is as though the mod is the 41st member of a 40-player raid. With the understanding that video games are a highly visual medium with imagery composing

a large part of gameplay, I take interest in the kinds of visual cues that are displayed on game screens, such as the gear that players equip or the visible warnings that CTRaidAssist produces. As a researcher, I am fascinated by the layout of game interfaces, and in particular, how and in what ways visual elements on a game screen are significant in communicating complex ideas and concepts during player/user interface interactions. In the following section, I consider further the visual culture of games and its role in game studies by discussing a scenario in which the use of visual models is an essential part of *WoW* gameplay.

Learning to Slay Monsters Using Visual Models (Lead: Chu)

I never anticipated that I would be asked to complete homework for my guildmates. After all, I often played *WoW* to *avoid* studying. Occasionally, I would help a guildmate in high school generate essay ideas for his history class or work through a calculus problem with another who just started college—with the aid of several math tutorial websites, of course. However, this particular request was different. I was reminded of my assignment when a guildmate asked me, “Did you study those boss fights for Thursday?”

At the time, *The Burning Crusade*, *WoW*'s first expansion, had been released for about two months. My guild then had just enough players leveled to 70 and sufficiently geared to attempt Karazhan, a raid dungeon, together. Our guild leader possessed stellar managerial skills that could be the envy of top executives; he posted weekly on our guild message forum the highly detailed work plans for the raids taking place each week. *Click the “Sign Up” tab to fill in your availability. Sign up for only the raids you will show up for. Meet at the portal 10 minutes prior to raid time. Ensure that you have all the gear, pots, and mats⁵⁵ you will need. Go to the Bosskillers website and study all the fights. If you don't know what you're doing and wipe⁵⁶ the raid, you will be replaced.*

Bosskillers, along with numerous other strategy websites and YouTube videos illustrating tactics for conquering *WoW* bosses, have saved me from ever being kicked out of a raid group. In using these resources, I was able to exhibit the appearance of competence and experience with the instances. Little did the other raid members know, I was only a noob⁵⁷.

While countless player-produced strategy guides exist, numerous are text-only. As a visual learner, I value the complexity that a simple diagram can convey. Lengthy descriptions of room setting, player positioning, and fight tactics can be easily illustrated with a few screenshots of the room, marked up with symbols, arrows, and labels. A strategy guide on WorldofStrats.com for killing High King Maulgar in Gruul's Lair, for example, includes a diagram that shows the ideal positioning of enemies in the room. In the diagram, a screenshot of the boss room sits beneath a

layer of arrows and symbols: different colored *translucent* circles show the original positioning of the enemies (where they stand as a group on one side of the room), with arrows leading out of these circles and into *solid* circles that indicate the ideal positioning of these enemies (spread out around the room). This positioning is ideal since some enemies' attacks affect their surrounding area and thus these enemies must be held away from the other raid members to keep them from harm. As circles in the diagram, the enemies are reduced to abstract shapes. The diagram, then, has stripped the raid down to its core, making them easier to comprehend; to illustrate the strategy, the actual appearance of the enemies is superfluous and the use of symbols is more efficient. Many videos made by players show such diagrams in action by animating the enemies moving from their original positions to their ideal locations in the room. Video captures of a group's actual encounter with the enemies, often with text or voice overlay, can be found on numerous video-sharing websites such as YouTube, and also act as useful models for successfully defeating enemies.

And that is precisely what they are; these fandom artifacts are models. Models are significant in their ability to represent abstract ideas and explain processes, as they capture the predictive features of a given system, situation, or phenomena. In scientific inquiry, models guide scientists in their work by helping to explain data and by inciting further exploration, engaging scientists in deeper inquiry that will lead to the revision of these models (Passmore, Stewart, & Cartier, 2009). However, model-based reasoning and inquiry at large are difficult to foster in even formal science learning contexts (Crawford, 2007). Yet, within the *WoW* community, we see players routinely create, circulate, and consume complex models in preparation for play.

If the infamous Leeroy Jenkins video⁵⁸ fails to be a testament to the importance of preparation work done in and out of game leading up to a boss fight for you, then you simply need to stroll into a high-level dungeon without any knowledge of the fights for further proof. You likely will be slain faster than you can say, "I told you so." If there is one thing I learned about being a successful raider, it is to do your homework. And sometimes, that could mean watching countless hours of YouTube videos.

Math and WoW (Lead: Williams)

I love math. Like, *really* love it. Really, really love it. I love math the way Santa Claus loves eggnog, the way Night Elves love their pointy ears, the way that kittens love you in the morning before you've fed them.

But it's a secret. When someone asks me what I do in school, I say, "I study education." Or, "I study video games." Because when I say, "I study math," people flinch. There's some horrific visceral reaction, and suddenly the *fight or flight* instinct wakes up, and I'm in front of someone who has no interest in being in front of me anymore.

So I study video games. And in this case, I'm studying *WoW*, and I'm studying the way that suddenly math is *okay*, possibly even *cool*, because, boy oh boy, can math make you an amazing player! *WoW* is all about *identifying patterns*, then shifting those patterns according to specific stimuli. And it's all about *maximizing this* (like damage-per-second, and regeneration rates, and efficiency for leveling, and auction house profit) and *minimizing that* (like damage taken, or the likelihood of running out of mana during a battle, or wiping completely in a raid). And it's all about messily testing out different ideas and combinations, trying different armor and different weapons against different enemies, working to identify which is the elusive *best*. And it's all about navigating various maps (can we say *Cartesian coordinate plane*, anybody?), and seeing what happens to some stats when others go up (can we say *modeling unknown functions?*), and always finding the best place to grind for each level (and although it sounds almost unachievable when put this way: can we say *maximizing unknown functions?*).

Don't tell anybody, but *WoW* is crammed full of math, everywhere you look. It's informal math, for the most part, and it bears more than a passing resemblance to math we often encounter in "real life." When we have to run a few errands (buy milk, deposit check, buy stamps, drop off book at library), we minimize the distance traveled, trying to complete the errands as efficiently as possible given the constraints of roads, traffic, and locations. When we schedule two appointments at opposite ends of the town, we try to leave enough space in the middle just to travel from one to the other—we don't want to be late, nor wait an uncomfortably short and uncomfortably long 45 minutes in a funny smelling waiting room with old magazines. So we estimate our speed and distance based on prior experience and have some idea of how much time we need. But there's one big fabulous difference between math out here on Earth and math in there.

In Azeroth, we talk about it. When was the last time you systematically and thoroughly compared the efficiency of errand routes? Or examined class requirements and figured out a way to get your bachelor's in 3.5 years, and compared your plan to that of your friends? Or calculated the likelihood of getting sick after eating that raw cookie dough, and evaluated the risk-reward ratio with the baker? Or added a numerical critique to the discussion page of a Wikipedia entry? (Well, maybe you *do* do these things. I mean, *I* do.)

In "real life," *some* people discuss these types of things on a regular basis. In Azeroth, *everyone* is involved in those discussions (or rather, the mathematically parallel ones). Part of just *being* a *WoW* player is being up to snuff on the pros and cons of talent tree distributions, learning how to get places and meet up with people (memories just flooded my brain of groups waiting impatiently for me as I headed for the wrong dungeon!), of figuring out whether to use this piece of armor or that piece of armor ("This one adds to those stats, while this one adds a *lot* to those

stats, but takes some away from these”), being able to read complex displays filled with numbers—all of these skills are expected of an experienced *WoW* player. And the way you learn these skills is a mixture of *doing* (repeatedly, in some cases) and *talking*—talking to guild mates or strangers, posting and arguing on forums, building mathematical models and comparing them with the models others have built.

My fascination with this topic began back in 2004, but only recently have I begun digging further into the mathematical activities that surround *WoW*. Relevant forums, such as those hosted by Blizzard, serve as a nice snapshot of what players think about and talk about. And when examining those forums, math rears its head repeatedly—in the service of scientific argumentation (Steinkuehler & Duncan, 2009), and, in a particularly fascinating case, deeply embedded in a complex blend of narrative and mathematical modeling (Steinkuehler & Williams, 2009). Future research, following in the footsteps of these studies, will hopefully continue to map out what the role of math is for the *WoW* community, and—I suspect—will confirm what resonates with my gameplay experience: math is used consistently as a powerful tool that you ignore at your own risk.

Wonderful math—if only I could share my love of it, like a contagious disease or fleeting smile. Wonderful *WoW*—it’s pretty fabulous what this game can do to so deftly change terror into temerity. Wonderful Azeroth—where everyone speaks my language!

Information Literacy and the WoW Info Sphere (Lead: Martin)

WoW is an amazing place for the study of information literacy skills, which is very important both as a 21st century literacy and a lifelong learning skill. Information literacy has been defined by many different groups all with their own variations, but in general it can be described as the skills needed to find and use information when you have an information need. Typically, information literacy is written about in standards or processes designed for K-12 or university settings, focusing on institutional information sources and institutional uses for the information. However, these skills are imperative in all information use in life, and are especially valuable in being successful in *WoW*.

The information needed to move through *WoW* is a vast sea and requires navigation so as not to get lost on it. Navigation across this sea requires information literacy, for quite a few reasons. First, you have to realize that you need information. This happens to players all the time with questions arising like: Do I want this piece of armor? How should I spec my character? Where can I buy my mount? Next, you try to find the information you need by one of two methods — you either ask fellow players or look it up.

Looking up information for *WoW* is relatively easy. The information community surrounding the game is enormous, offering a variety of wikis, forums, and websites devoted to information about *WoW*. These resources, especially the wikis and forums, are extremely useful information resources because they are kept up-to-date and are vetted by a knowledgeable expert community. In this sense, for use in the game, these information resources would be on par with those you would use to research for a paper in an institutional setting. This comparison can be drawn due to the fact that both sets of resources (*WoW* wikis and published articles in library databases) are vetted and peer reviewed by their respective communities and each are refreshed by new information as either new research is completed or changes are made in the game (and the *WoW* wikis tend to be more up-to-date because the publication time is much shorter and peer-review is done in real-time). This comparison is not meant to lessen what academic publishing offers, but to raise the status of these *WoW* resources within their own context.

Asking for information through in-game chat channels is the other way that information seeking occurs in *WoW*. This is possibly the easiest way to seek information but not always the easiest way to have your information needs met. The usefulness and quality of the information received relies on the knowledge and willingness of the other players to share at a particular time. Most of the time people are willing to share the information they have or point players with information needs to resources outside of the game. It sometimes takes the player who needs the information asking the question multiple times but someone usually answers, and, oftentimes, gives a variety of sources that enrich the information literacy experience.

One of the most interesting aspects of information literacy in *WoW* is the fact that it is a different type of information literacy process than that described in traditional information literacy standards. It is collective information literacy (Martin & Steinkuehler, in press), information literacy that relies not only on resources but the collective intelligence (Levy, 1997) of the community. The knowledge of the individuals of the community creates the knowledge web that supports the information needs of the community. The collaboration within the game, as in many MMOs, has fostered this new type of information literacy using a range of information literacy skills, changed, recombined, and optimized for collaborative settings.

Crossing Time Maps (Lead: Martin)

WoW, being a persistent virtual world, has a clock that runs continuously and—unlike other types of games—*WoW*'s clock matches the solar/mechanical time that a player is experiencing in the physical world. Time functions very differently in different types of games. Time in games where missions or storylines are the driving force is rarely cyclical. Most often time is advanced by the story so that it does not

matter if it takes five minutes or five hours to finish the mission, it will be midnight at the end either way. The only missions where time makes a difference are the *complete this mission in x time* style. For example, you have five minutes to escape before the nuclear bomb goes off ala *Tom Clancy's Splinter Cell: Double Agent*, and numerous other *escape the burning/blowing up structure* situations. In open world games, time is cyclical day after day. In *Elder Scrolls: Oblivion* or *Grand Theft Auto 4*, two open world games, time only moves when you are playing the game, so if you save and quit, then re-enter the game two days later, time will start exactly where it left off no matter what the solar/mechanical time of the physical world is. Also, in these games, the game time—although cyclical—moves at a pace much accelerated compared to our solar/mechanical. However, in *WoW* time is cyclical and moves forward at the same pace as that of time in our daily lives.

Gell, building on Pierre Bourdieu's theory (1977), describes two types of time-maps in which people live (1992). Most people in developed nations would be considered to live in a B-series time map, living a highly structured life where time is cyclical. Times are fixed, i.e., school time, work time, appointments, etc. In this structure time must be scheduled, even time for leisure. A-series time maps are based more on natural activities, such as hunting, cooking, farming, etc., so time is viewed in larger chunks encompassing activities that happen on a freer time scale. *WoW* exemplifies A-series time maps in that many activities, like gathering herbs or mining minerals, falls to the exploration of the player and not to a set time. This looser time structure allows for and encourages exploration of the surroundings. Despite the fact that the game clock runs in B-series time it does not hamper the A-series feel of the game: e.g., no matter what B-series time you go to town, it is never closed and people are always there to buy your goods).

These time maps, according to Gell and Bourdieu, are mutually exclusive, each person lives in one or the other. Curiously, however, when it comes to *WoW*, this mutual exclusivity does not entirely hold. In the "real world," you and I live in B-series time maps where our lives are structured around school and/or work and game time is usually scheduled in the time left for leisure. In the "virtual world" of *WoW*, however, you enter a world that is much more structured around A-series time maps, where activities include gathering raw materials, crafting, and defending yourself against attack can take a great deal of time. Thus, in game playing episodes, players must in fact negotiate the demands of both time maps at once. Such as, when my group is moving through an instance and a member of my group runs into a B-series time conflict (e.g., movie night with their significant other) that causes a problem within the A-series time map in-game. The instance that I am moving through does not necessarily constrain me to B-series time, being that it can take many tries to successfully complete an instance, and the instance does not have a time constraint other than the time it takes is based solely on the skill and organization of the group. So the player with the conflict wants to leave but is held there by her commitment to our group.

Thus, while Gell and Bourdieu argue that a person can only function in an A-series or B-series time map, *WoW* allows people to move beyond this and function in both time maps which are entwined and entangled. This crossover into a time map that players do not normally inhabit may be the reason players lose track of time despite the fact that a clock giving the time experienced in the physical world is always available. The deep level of engagement experienced in *WoW* may be connected with the entanglement of the two time-maps, sometimes evoking “addiction” discourse by some. The ability to cross time-maps offers a unique ability to experience time that most people do not get to experience, experiencing a new time-map gives the player not only a perspective on this new map but also a unique perspective on her/his original map.

Conclusion

We have taken you on a journey across the expanses of *WoW*, sharing with you a modicum of topics that we have explored as players and as researchers. The topics we cover in this essay may seem disparate but two concepts tie them together, participation in an online social environment and informal learning. Whether it's learning and relearning the game as it changes, or learning, creating, and using math, visual models, and information literacy skills to improve your game play, or developing social skills and relationships while exploring the narrative structure of the game, working in a group to raid, or working with your peers to negotiate cross time-map conflicts, the social skills and informal learning opportunities are at the heart of all of our topics. The pleasures of *WoW* as a player are not at odds with those of a researcher, it is not players versus researchers. These pleasures are intimately related, for instance without the complex social elements of the game artifacts we would not be available to study mathematical and information literacy practices. Or, the ability to play *WoW* with different intentions (i.e. narrative based or raiding) affords the opportunity to study the visual elements created to help other players navigate the story or the dungeons. Researching games means playing games, in order to research a game well it is absolutely necessary that you play the game and love to play the game, that you become an insider to the game and the community, because we love what we study, we study what others love and why they love it.

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*This feedback is a subtle,
yet effective way to show
players that they now
are holding hands and
won't lose each other.*

”

DREW DAVIDSON

PLAYING ICO: FROM INVOLVEMENT THROUGH IMMERSION TO INVESTMENT.

Involvement

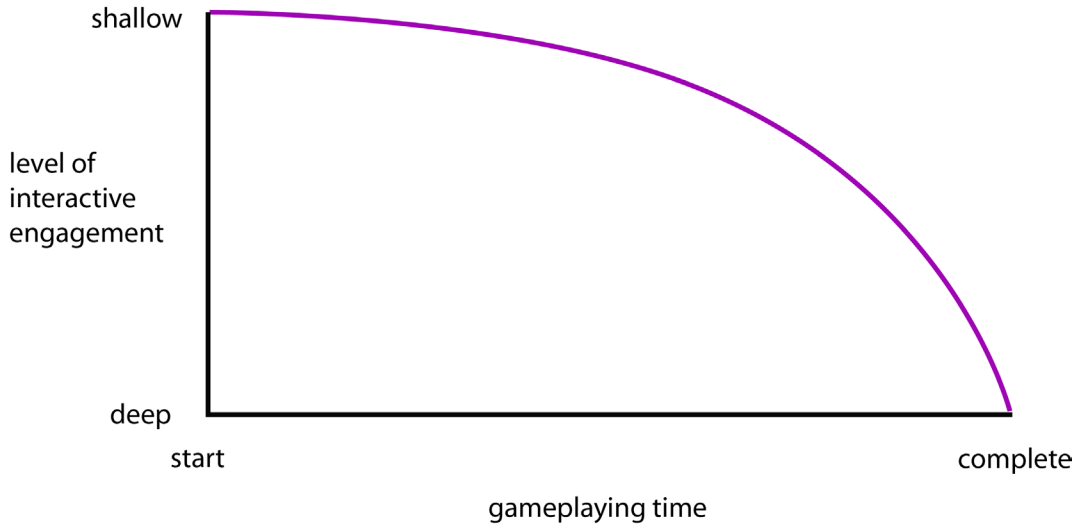
A young boy, with horns on his head and hands bound, rides with three large men, all helmed. The horses walk through the woods, light cutting through the trees. They enter a stone clearing, a constructed space, one that hasn't seen activity for years. The camera pulls up and back, revealing a huge castle complex and a deep chasm. By boat, the group of men row the boy across the chasm to the cliffs beneath the castle. Through a gate, they enter into caves and beach the boat. They approach a large, sealed portal with an idol door. The oldest man speaks in some foreign tongue, and one of the other men goes and returns with a sword. This sword has a radiance that powers a resonating radiance with the idol door, which then opens. The group enters a deep cylinder, and takes a long ride up the shaft. They exit into a large room with row upon stacked row of small sarcophagi, one of which is open. The men place the horned boy into the sarcophagus, telling him it is for the good of them all, sealing him in. The men leave, and the camera reveals that as they descend the cylindrical shaft the floor actually raises, blocking the exit below stone, further sealing the boy away in this large room. The amazing forces involved cause the room to rumble and shake, and the sarcophagus containing the horned boy abruptly breaks free from the wall, shattering opening and tossing the boy to the floor below, knocking him unconscious. In his dreams, we see him in a grainier, darker scene. It is a dark, stormy night and he is walking up a winding staircase. Suspended out in space, where one would expect a grand chandelier centered over the stairwell, is a cage. The young boy sees a slender, entirely black figure lying on the floor of the cage. He yells out to the figure. Unbeknownst to him, a black spot on the wall forms and grows behind him. The blackness grows out of the wall, grabs him, and pulls him into the blackness and he's gone. The horned boy wakes up, back on the floor in the large room full of sarcophagi. The camera pulls back up and above, and our adventure begins . . .

This is an update of one of my first close in-depth readings of a game, *Ico*, in which I initially developed the concept of three interactive experiential stages; involvement, immersion, investment. I wrote it for a presentation and for the proceedings of the 2003 International Conference on Entertainment Computing. And I thought it would be interesting to revisit it in this third edition of *Well Played* to look back on how I started working on an analytical concept of interactivity in order to help me better unpack the meanings found in playing a game.

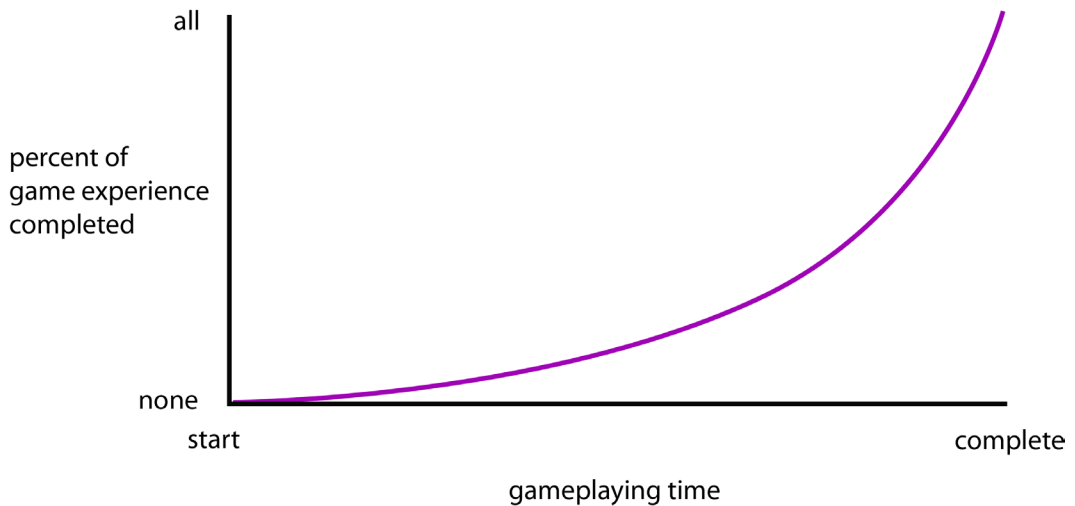
With this article, I will delineate the interactive experience of videogames (playing videogames from the perspective of a player) through a series of three experiential stages: involvement, immersion, and finally, investment. I then go on to relate these three stages to discussions found in the existing game studies literature. I define these three theoretical stages in some detail, and propose that these stages can aid in examining an inherent part of the game playing experience. Throughout, I apply these stages as an interpretative lens of my own playing experience of the videogame, *Ico*, for the Playstation 2 (I should note that I'm going to discuss the game in some details, so consider this a spoiler alert). Finally, I explore how these stages could be useful in aiding videogame developers to design more engaging and compelling gameplay experiences for a variety of players.

Ico is a beautiful game that received a lot of praise for its intuitive gameplay, emotional character design, and subtle story that yield a poignant and evocative experience throughout the playing of the game. *Ico* serves as an ample object of study in which to ground this theoretical set of experiential stages and explore how well these stages help with an interpretation of playing the game. These stages focus on the gameplay of videogames, the interactive process players go through to reach the goal of the game (Federoff). I am focusing on the experience of players, because (to borrow from Brenda Laurel) games have the "capacity to represent action in which humans [can] participate" (1). And games are the realization of the performance theory notion that the audience (with games, the players) becomes performers (Phelan, 161). Games allow players to engage and enact their experiences, interacting, playing within the content (Sayre, 103). Marie-Laure Ryan delineates a move from immersion to interactivity, from text as world, to text as game (175). So, I'm focusing on the interactivity of the text as game, of how players actively engage and interact within a game. By interactivity, I mean that players can, by varying degrees, observe, explore, modify and change the experience of the game (Meadows, *Pause & Effect*, 62). Interactivity is participation and play (Aarseth, *Cybertext*, 49). Within a videogame, the player is the always present participant, or actant (Juul). So with these three stages, I am focusing on the players' interactive experience of playing a game. I believe that these stages describe the arc of a playing experience, one that engages players to the point of finishing the game. If players do not experience one of these stages, they will probably quit the game. But the further along this arc players get, the more likely it is that they will pursue a game to the end. Beyond interpretative, I believe these stages could also be useful in the game design process in order to consider design decisions that could help better engage a variety of players, and offer compelling gaming experiences that encourage players to complete games.

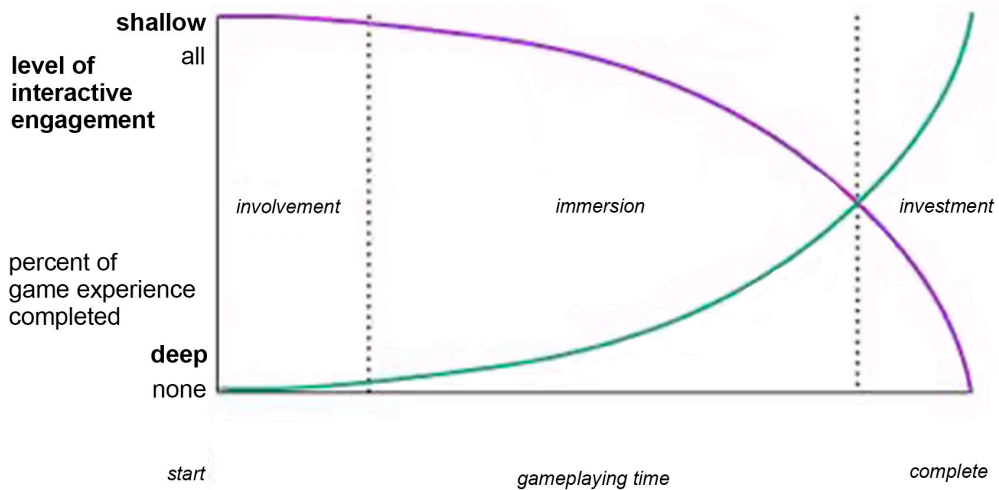
Here's a conceptualized graph to illustrate the process of these three stages. To start, a graph that shows the relationship of the time spent playing a game, from start to completion, along with the level of interactive engagement, from shallow to deep.



So the longer players play a game, the more engaged they become with it. Next, a graph that shows the relationship of the gameplaying time, again from start to completion, along with the percentage of a game completed, from none to all.



So as players continue to play a game, they get closer to completing it. Finally, combining the above two graphs together into one graph showing the relationship of gameplaying time, along with both the level of interactive engagement and the percentage of game completed.



I posit that the first stage, involvement, occurs until a point in which players begin a curve into a deeper level of interactive engagement that coincides with more of the game being completed. Then the second stage lasts, and the third stage begins, when the two variables cross and players become deeply engaged with the game, and are committed to completing the game. Now, these graphs are not meant to be hard and fast, or drive by date, but I do believe they can help illustrate the process of these three stages as players move from involvement, through immersion to investment.

| Involvement - literally, the start of the game. This stage begins with the introductory experience players have within the game. I'm assuming that they have access to the system/console on which the game is played and that they have bought, rented, borrowed the game. They have loaded the game and have begun to play. At this point there is a lot of uncertainty as to whether they will continue to play for 5 more minutes, 1 hour, 1 month, again and again, or not much more at all. Involvement as an experiential stage lasts until players have either quit playing the game entirely (thereby not experiencing the following stages) or until players become engaged enough in the game to continue playing in the gameworld, approaching a point of Immersion.

. . . You now are in control as the horned boy. You can run around, jump, climb, push, pull, grab, throw, and yell. He (played by you) is the protagonist of this game. The light and shadows in the castle are quite beautiful as you run around exploring. You spend a lot

of time exploring. At this point, the implied objective seems to be to get out of this castle (and there is some sense that you may have to go interact in some manner with the figure seen in your dream). You puzzle around your immediate surroundings, and up some stairs you discover a lever. You pull the lever and the camera reveals that directly below you, a door opens . . .

Players' involvement is about moving from the start into a comfort zone with the game. Within this period of involvement, players move beyond the introductory scenes, and into a playing mode in which they grasp the gameplay to the point of it becoming intuitive and less of a conscious act, so that the interactions become more engaging and the game is one in which players want to continue. It's when players understand the gaming situation, the "combination of ends, means, rules, equipment, and manipulative action" required to play the game (Eskelinen). It should be made clear that this period of involvement does not have to be contiguous. It merely represents the in-game engagement in which players go from having started the game to wanting to continue playing it. So, players could have several sessions of gameplay that constitutes their involvement. For whatever reason, if players lose interest in the game and decide to no longer play, then those players never move beyond the stage of involvement. Once players get into a game enough to want to continue playing, then they have moved from involvement to the experiential stage of immersion into the gameplaying experience.

Essentially, it is a question of why players play games. Considering this question, many researchers study players and why some games "hold you for hours while other have you running back to the store to return them" (Saltzman, 27). But as Brian Sutton-Smith notes in *The Ambiguity of Play*, our combined theoretical definitions of play are filled with ambiguity (1). The many modes and methods of study offer up a plethora of proposed solutions. Focusing on this issue, Chris Crawford, in *The Art of Computer Game Design*, claims that the fundamental reason for playing a game is to learn (23). Assuming this basis, players need to learn how to play the game in order to continue playing. A game can and should teach players what they need to know and do in order to succeed. In essence, "play is how we learn" and move from one stage to the next in a game (Costikyan, "Where Stories End and Games Begin"). We are just beginning to understand how to most effectively use these new technologies to enhance our learning within games (Squires). But James Paul Gee notes that well designed games teach us how to play them through rhythmic, repeating structures that enable a player to master how to play the game ("Learning by Design"). Ideally, playing the game should teach players the gaming situation so they can move from involvement into immersion in the game.

Immersion

. . . With the girl, you are now attempting to escape the castle (or at least, just get out of the immediate area it seems, and move forward). Currently, you are in a large room with sunlight streaming through windows high above. Holding her hand, you explore the room together and discover a large crate that you can push over to a wall. Leaving her for a second, you climb up on the crate. From here you can jump and grab hold of a ledge and pull yourself up. The minute you do this, the camera pans and reveals the formation of a vibrating pool of black darkness below, out of which streams a group of oily, smoky black creatures with glowing white eyes. By now, you are familiar with what this entails. These creatures are after the girl. They will try and take her down into the pool of darkness. If they succeed, a dark explosion will end your life. The girl sees the creatures and frightened, she tries to flee them. Jumping down, you call to her and rush to protect her from these creatures. One of the creatures picks her up, carrying her back to the black pool. You manage to hit it with your stick, causing it to drop her. You take her hand and pull her away from them as they follow right behind you . . .

| Immersion - the second stage in the process of experiencing a game. At this point, players have become comfortable with the gameplay and are most likely going to continue playing. The game has become enjoyable as players now understand the way the game is played and have become more immersed in the world of the game and know how to interact within it. This stage lasts until the players reach a point where they either quit (and never experience the last stage) or they enter into an investment to successfully complete the game.

The gameplay of *Ico* is simple, yet meaningful. It's primarily an adventure game, a genre of games where players are explorers (Flynn). But it also has a bit of action thrown into the mix with some combat. When exploring, players have the ability to jump, climb, push and pull. The players can also pick up objects and throw them as well. For the numerous fights with the dark creatures, there are the young boy's hands, horns, a stick and later on, a sword. In some versions of the game there are two easter eggs, where players can get a mace, and even a light saber like the ones in Star Wars (GameFAQs). During the fights, players simply continue to hit the creatures until they all dissipate. It should be noted that the young boy can die in this game. This mostly occurs by falling to your death, or by having the creatures steal away with the girl into one of the dark vibrating pools. But players spend most of their time exploring the castle grounds, and solving environmental-based puzzles that enable them to explore more of the castle. These puzzles are varied in nature, but all are integrated into the architecture of castle surroundings. So players may have to move a block, or pull a lever, or climb a rope in order to get somewhere new.

The gameplay is enhanced by the expressive motion and sound design of the characters. The boy moves around not like a man, but like a young boy, very rough and tumble with yelps and yells. And the girl moves with a willowy grace and has

much more hesitant body movements as well as softer intonations. Granted, these are stereotypical, but they are effective at conveying a sense of the characters involved. And the dark creatures have their own jerky, darting, scary movements. During fights they work as a team, some will try to lead the boy away from the girl so others can get to her. Each character has unique ways of moving on screen, a visual representation that adds to the playing of the game.

One of the most engaging aspects of the game is the relationship between the young boy and the slightly older girl. They do not speak the same language, so players never understand what the girl is saying. In some versions of the game, players can win through the game, and then play the game again and see her dialogue translated (GameFAQs). When not holding hands, players can call out to the girl and she will try to come if she can. She is not as physically capable as the young boy, so players spend a lot of time helping her climb up ledges, and in some heart-stopping moments, catching her as she jumps across chasms. Also, she has some magical radiance within her to which the large portal idol doors react and open. So, without her accompaniment players wouldn't be able to proceed.

If players leave her alone and wander off for too long, the dark creatures will come and get her, effectively ending the game. She does call out in fear when the creatures get her, and she runs from them when they are around, but if players are too far away, they will lose the girl to the creatures. Also, as the game progresses, it seems that she trusts the young boy more and more and runs toward him when there is danger. And at times when players have problems in an area, she will give "hints" by looking at where players should go. Another meaningful gameplay element is the mechanic for saving your game progress. Players have to find little white, glowing benches. They then have to sit down and encourage the girl to do so as well, and they will both fall asleep, resting from the exertions of their adventure (and saving the progress of the game). To continue playing after a save, players move the analog stick on the controller, and the young boy wakes up, then rouses the girl and the game resumes. So players are encouraged in these ways to keep the girl with them and keep her safe. In fact, in some versions of the game, you can play with two players, one controls the boy and one controls the girl. It is a game where the young boy must cooperate with the girl throughout.

One of the most meaningful gameplay elements is the holding of the girl's hand. Players even get a small burst of force-feedback from the controller when the boy and girl join hands. This feedback is a subtle, yet effective way to show players that they now are holding hands and won't lose each other. It adds a meaningful and tactile dimension to the game that illustrates a very haptic part of a relationship, the trust, safety and comfort of holding hands.

. . . You seem to be stuck. You've wondered around for some time now and you can't quite figure out how to proceed. You are in another small courtyard, it seems to be a new part of the castle, so you feel a little lost. There just doesn't seem to be anything to do that could help. Finally, you notice that you can drop down the side of the courtyard wall, and climb out from around it, quickly climbing up the wall and back around to where you can help the girl climb up and join you . . .

The meaningful gameplay of *Ico* described above gives the game has a smooth learning curve in which players are enabled to successfully advance through the game (Crawford, 72). Sometimes, the stage of immersion can become a player's final experience with a game, but a good game will provide an experience in which players gradually get better as the game gets harder. If a game gets too hard, too confusing, or if it's too easy, too boring, or if it's just too long and seems never-ending, players may not finish. For these reasons and more, players can reach a point where they drop off the curve and lose their sense of immersion, becoming bored, frustrated and tired of playing the game. But if a game enables players to stay on course and continues to hold their attention, players will advance to a point where their immersion develops into an investment in which they truly want to successfully complete the game experience.

Investment

. . . You have been making your way through the castle for some time now. Even though it is an extremely large complex, you have begun to learn your way around the place. In a courtyard full of the black creatures, you run toward one of those special portals, sealed by the idol doors across the way. You have learned that these doors have a kinetic response to the girl, if she is near one, she develops a radiance, and the doors respond with a radiant burst and open. A useful side effect of this radiance is the elimination of all the black creatures in the immediate vicinity. Hand in hand, running across the courtyard, you race to the doors with the creatures all around. You successfully reach the doors and at her approach, the doors react, opening and irradiating the pursuing creatures. Through the door you enter a long outer walkway and the main gate lays open ahead of you – freedom! As you approach, the gate begins to close. Together you run for the gate. The girl falls behind, tripping and falling to the ground. Hesitating, with escape so near at hand, you turn and go back to the girl. Behind you, the gate closes, you crouch by the girl asking her if she is okay . . .

| Investment - the final stage in the experience of a game. At this point, players have fully mastered the gameplay and have complete comfort within the world itself. Now, the compelling goal is to actually finish the game successfully. Players are invested in the completion of the experience, an investment that will be satisfied with successfully attaining the end of the game. This stage lasts until the players complete their experience with the game. The ideal end result is a successful

completion of the game. But this final stage is slightly different from the preceding stages, as it can be an incomplete stage of experience. Players move from involvement to immersion, or you don't reach immersion at all. Players then move from immersion to investment, or they don't reach investment at all. Players finally reach investment, the stage in which they're playing to complete the game, or they finally quit without fulfilling their investment. In other words, players can reach a point where their experience with the game ends (they quit playing) without having successfully finished the game experience itself. So the players have an investment that does not pay off, they do not complete the game. In the end, the investment in a game experience is most gratifyingly satisfied with a successful completion.

Ideally, players finally get fully invested in a game. They are over the hump and think they see the light at the end of the tunnel. The game gives players the "illusion of winnability" which encourages them to strive for a successful ending (Crawford, 73). The game should set up situations in which players act to the end, or as Greg Costikyan puts it, games should require decision-making and management of resources in pursuit of a goal ("I have no Words..."). With the final goal in sight, players truly want to successfully complete the game, because it allows them to believe that they can. An interesting wrinkle of the investment stage can be the desire to prolong the gameplaying experience (Gibson). Players can reach the investment stage, and they are enjoying the game so much, that they want as close to a full return on the gameplaying experience as possible. Instead of rushing toward the completing the game, and quite possibly missing parts of the experience, players extend their play by attempting to completely explore everything the game allows them to experience. It seems that part of this urge comes from being so invested that players don't want the enjoyment of playing the game to end, so they prolong the game by trying to engage with 100% of the gameplaying experience, doing everything they can within the game.

In *Ico*, if players experience investment, then they will solve the final puzzles, and seemingly win. They will then have victory, and the girl, snatched away, as they face a final confrontation with the black magic queen. As mentioned above, this is a rather unique stage, and players can reach a final point where they cannot and do not reach a successful conclusion. They lose the game and quit trying to have a successful completion. But if they stay invested, they will eventually persevere and have a satisfying return of their investment in the game experience.

The investment and inspiration for this article comes from the on-going and seemingly ever-changing technological developments of the relatively new industry of videogames and also the wonderful and multi-faceted discussions and debates of the even newer field of game studies. It is an attempt to establish some ground on which to build a "reflective, questioning stance," or a "critical literacy" of games (Warnick, 6). The game industry has been making games for close to 40 years now,

and has developed some proven processes for the best production of games, as well as some given tenets as to what constitutes good game design. Even so, the never-ending technological advances keep enabling, and confusing, the possibility of making new innovative leaps in how games are designed and experienced. This continual cycle keeps the industry almost always on the verge of doing something that has never been done before. Thus, the game industry leans on its past while trying to divine its future.

Now, more academic attention is being to be paid to the medium of videogames. There have been many people studying games for years, but the field of game studies as a whole, is becoming more mainstream, and is being considered as a component of popular culture and media studies. Scholars are now discussing and debating how to best define and describe the phenomenon of playing videogames, and how to best ascertain the place videogames hold in our culture. Throughout this academic dialogue is a common thread of agreement; the desire to find a language, a system, a rubric, that best elucidates and interprets this experience. Some are looking back to other, older forms of interpretation and criticism on which to build, while others are looking to create completely new forms. Games are a remediation of other media (Bolter, 25). So like the game industry, academe has looked back, and around, as it looks forward to what games are becoming. This essay was an attempt to add to the ludology, the study of games, analyzing games as games (Frasca). And in relation to Aarseth's promotion of a methodology of game analysis, I believe these three interactive stages can help articulate connections between the study of game design, the observation of players, and the act of gameplay, aiding with the exploration of the experience of playing a game ("Play Research", 4).

I believe the experience of playing a game has these three stages; involvement, immersion, and investment. I have used these stages to describe the experience of playing the videogame *Ico*. But I think they can be used to effectively describe any game playing experience. By using these three stages as a way to discuss the experience of playing a game, you can look at how effectively a game engages players from their perspective. These stages can also be used as a way to look at how successful, or not, a game is for a variety of players, and can serve as a basis of exploration into why a game engages some players but not others. Analogous to Wayne Booth's rhetoric of fiction, there is also a rhetoric of games, a way in which games apply certain rhetorical devices to help the players through the game (105). Similarly, David Myers discusses game semiotics in an attempt to delineate the common elements of games ("Computer Game Semiotics"). And Michael Mateas and Ian Bogost have written on the importance of procedural literacy, or how the procedural, computational nature of how the playing experience is created. These three stages have more of a focus around a gaming literacy, an exploration of the gameplay and mechanics of a game (GameLab Institute of Play).

These stages are meant to serve as a semiotic framework within which to discuss a rhetoric of games; in other words, they are meant to help us talk about the gameplaying experience people have with games. So we could discuss how well the involvement works. Does it encourage new, casual players? Does it allow hardcore gamers quick access into an immersive experience? These stages could be conjoined with quantitative or qualitative information; demographics, focus groups, recorded playing sessions, etc., to help collect data that could be analyzed as to how people play games, and what factors determine if they complete a game or not, if it is fun or not (Fulton). For example, Aki Jarvinen, Satu Helio and Frans Mayra propose looking at analyzing games with a framework of four interrelated components of playability: functional, structural, audiovisual and social (Jarvinen, et al., 28). And Robin Hunicke, Marc LeBlanc and Robert Zubek developed the MDA (mechanics, dynamics, aesthetics) approach (Hunicke, et al.). Ian Bogost has developed the concept of “unit operations,” an analytical methodology in which the parts of an experience are viewed as various units that procedurally inter-relate together to create the experience as a whole (Unit Operations). Also, James Paul Gee has written about thirty-six learning principles associated with games, which illustrate how a game teaches us to play (What Video Games have to Teach Us about Learning and Literacy). Jesse Schell has discussed interest curves across experiences and the element tetrad (story, technology, game mechanic and aesthetic style) and in his book, The Art of Game Design, lists 100 lenses through which to consider a game’s design. And these are just some of the many concepts people are using to analyze games. Any of these perspectives could be used along with these three experiential stages to look at how a game is played. Others could use these perspectives to help develop a common rhetoric of games to use in the analysis of a gameplaying experience.

Considering an industry standpoint, these three experiential stages could serve a similar function from a different perspective. Henry Jenkins states game designers are “narrative architects” who set up situations in which players have experiences (Jenkins). The teams that make these games could keep in mind that these stages make up the playing experience, and use this “player empathy” with players’ experiences of a game to help make design decisions (Bates, 22). The stages could help game developers determine what players want and expect (Rouse, 8). They could architect their game design to try and insure that players experience each of these stages and complete the game, and they could help keep a focus on user-centered game design (Microsoft Game Studios). Game developers could use these stages as a way to include a range of players from casual to hardcore, or to focus in on a certain type of experience they would prefer a player have with their game. For example, by looking at involvement, developers could explore how to best get people from this stage and into immersion, designing the game experience to accommodate, facilitate and enable players to learn how to play the game, so that they go from the start of a game to becoming immersed in the experience.

Along with this, there are a variety of community-driven and industry-hosted websites that offer up tips and tricks to help players complete games (GameFAQs). These sites do not alter the fact that the game playing experience contains these three stages. Instead, they serve as a way in which to players can get help and learn enough about the game in order to transition from stage to stage on their way to a successful completion. Even so, I believe the developers don't intentionally make their games so impossible that people have to turn to outside sources in order to successfully complete a game. Instead, they strive to create compelling interactive experiences that engage players from start to finish. By keeping these three stages in mind, I think games could be designed to better engage and teach players, and give them a more satisfying and complete game playing experience.

I believe it is useful to consider games from a variety of perspectives. In doing so we can, as Marie-Laure Ryan notes, observe features that remain invisible from other perspectives (Narrative as Virtual Reality, 199). As Julian Kücklich notes, "a literary approach to interactive fiction that reflects the limitations of its critical terminology can provide valuable insights into these games' narrative, and semiotic, structure" (Kücklich). And Lindley and Eladhari discuss object-oriented storytelling as a way to explore the logic in a game ("Causal Normalisation"). So, narratology has illustrated some components of games. Concurrently, ludology is developing and can be applied to other media, revealing features from this new perspective. In fact, I think that these three stages might be useful beyond their application to games. I think these stages could be used in describing and discussing other forms of interactive experiences (for instance, theme park rides, net.art, interactive fiction, etc.). And I think that these experiences also engage us in unique ways that require us to formulate these new methods of investigation. Lev Manovich discusses how when we engage new media, we oscillate "between illusionary segments and interactive segments" that force us to "switch between different mental sets" demanding from us a "cognitive multitasking" that requires "intellectual problem solving, systematic experimentation, and the quick learning of new tasks" (The Language of New Media, 210). Indeed, games and other interactive media require people to assume different roles with varying degrees of control (Newman). Engaging with interactive media is a multi-faceted experience in which we input information, watch cut-scenes, and interactively play with the content. In the end, my hope is that this theoretical set of three experiential stages can help serve as an analytical focus around which discussions of our interpretations and analyses of games can become a part of the discussions of our design and development of games, helping to enhance the diversity and quality and sheer enjoyment to be found in playing games.

. . . You have destroyed the queen, and have been rescued from the imploding castle by a dark spirit, possibly of the girl, but you are not sure. You awake. You've washed ashore on a beach, alone, both horns torn from your head from the violent battle you seemed to have survived (or maybe this is heaven?) You explore the beach some, and see off in the distance - a body? Running across the sand, you come up on the girl, just above the line of the tide. You approach and she opens her eyes . . .

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“

*Reading is a continuous
process of creating
contingent meaning
from potential meaning.*

”

**JIM BIZZOCCHI
& JOSHUA TANENBAUM**

WELL READ: APPLYING CLOSE READING TECHNIQUES TO GAMEPLAY EXPERIENCES

Introduction

Close reading is a technique from literary theory that has evolved over the years since its early formulations by John Crowe Ransom and the other “New Critics” in the late 1930s and early 1940s. A close reading is a detailed examination, deconstruction, and analysis of a media text. It is the quintessential humanist methodology, born in the study of literature, and adapted to other media forms such as cinema studies.

Sheldon describes the paradox of criticism: the tension that comes from turning a critical lens on a well loved work until it is impossible to see it with innocent eyes.

The purpose was to see beyond the entertainment value each film possessed, to see the seams, to see how all the elements came together to create a unified entertainment experience. If you can get to the point where your favourite game no longer entertains you, you will have taken a crucial step toward understanding how it worked its magic. It can be a sad moment and an exhilarating one all at the same time. (Sheldon, 2004)

In this sense, close reading is a way of laying bare the faults and inconsistencies of a media artifact. However, close reading is at the same time a celebration of the many ways in which a text can create meaning. Through the act of close interrogation and explication, a theorist may use close reading to excavate previously hidden qualities of a media artifact.

In this article we consider several of the unique challenges in reading digital texts and describe close reading methodologies that are compatible with gameplay experiences. These close reading methodologies are used to reveal insights into the design of games, and also into the variety of pleasures afforded by game experience, such as imagination, emotion, kinesthetic engagement, narrative immersion, and ludic flow.

Game and New Media studies have long drawn on interpretive and critical techniques from humanities scholarship, under the guises of textual analysis, structural analysis, autoethnography, and many other names. Aarseth drew on the vocabulary and techniques of literary theory for some of his early work on nonlinear texts (Aarseth, 1994), which in turn led to his seminal work on ergodic literature in *Cybertext* (Aarseth, 1997). Aarseth evaluated how traditional literary notions broke down when confronted with procedural and nonlinear texts, and proposed extending literary theory in ways that allowed it to account for new media texts. Van Looy and Baetens collected a number of close readings that analyzed various forms of electronic literature (Van Looy & Baetens, 2003). These readings address challenges of the mutable and multilinear text that also apply in the close reading of electronic games. James Gee turned to “New Literacy Studies” as part of his argument on games and learning, drawing on theories of reading and context to explicate gameplay experiences (Gee, 2007). Janet Murray drew on literary theory to construct her theoretical framework for participatory narratives in *Hamelet on the Holodeck* (Murray, 1997), and Brenda Laurel situated her work on interactive narrative in a context of dramatic theory in *Computers as Theatre* (Laurel, 1993). More recently, Ian Bogost proposed a theory of “unit operations” for games grounded in a convergence of literary theory and object-oriented programming theory (Bogost, 2006).

Interestingly, while the theories of game criticism draw broadly on literary theories, none of them undertake to closely explore the nuts and bolts of humanities practice and critical reading as they apply to games scholarship. Mia Consalvo and Nathan Dutton describe an analysis technique that is very similar to close reading, however they don’t situate it within a broader methodological tradition (Consalvo & Dutton, 2006). As a result, their “methodological toolkit for the qualitative study of games” does not present a comprehensive analytical technique for games researchers. However, the four areas of analysis they propose – Object Inventory, Interface Study, Interaction Map, and Gameplay Log – constitute a set of possible analytical lenses for studying games. This is an important outcome - we maintain that the construction of analytical lenses is a crucial component of a rigorous close reading methodology.

In one of the few games studies works to engage literary theory for games at the methodological level, Dianne Carr proposes an approach to game studies rooted in three distinct (but interlocking) forms of criticism: structural analysis, textual analysis, and inter-textual analysis (Carr, 2009). Of these techniques, she writes:

The point of using such models is that it allows for specificity. This is necessary given the confusion in the field as to what constitutes ‘textual analysis’ and hence its limitations. According to textual analysis as conceptualized here, meaning emerges when a text is actualized or practiced (read in the case of a novel; played in the case of a game) (Carr, 2009).

Carr's formulation of textual analysis as it pertains to games parallels much of our own work on close reading, and yet, like the other writers applying literary theory to the study of games, she resists drawing directly on the theory surrounding close reading. We regard this lack of a suitably theorised close reading methodology as a critical gap in games criticism. In the first section of this chapter we consider close reading in a literary context, before exploring its utility as a technique for the analysis of games.

Theories of Reading

Within literary theory, the act of reading is a complex phenomenon—a gateway into a rich combination of experience, meaning making, and interpretation. Reading may be regarded as an epistemological act, in which new knowledge bubbles to the surface before being stirred back into the potentialities of future readings. Reading is a continuous process of creating contingent meaning from potential meaning. Discussions of the theory of reading often come across as mysticism and superstition, and not without cause: in a very real sense reading is a magical act of imagination and creation by which a human mind transforms symbolic and representational input into meaningful ideation. Julian Wolfreys uses the metaphor of the *haruspex* for the reader (*haruspicy* being the divinatory practice of interpreting the entrails of sacrificed animals in order to predict the future), thus treating the reading of a text as an act of precognition.

Reading, therefore, is always—always already—connected with some mystical or perhaps telepathic possibility, with the desire to translate in ways which are not reducible to matters of logic or rationality, so as to make sense of events or, in some other fashion, to make sense of events yet to occur...All subsequent acts of reading therefore seek to retrace the traceries of veins, arteries, vessels, and other means of communicative tissue in the form of textile, textured exegesis. And that we term this exegesis suggests, through its classical form, that we wish to rationalise and distance ourselves from the moment of psychic consumption. The grotesque, corporeal aspect of reading is cleaned up, the act aestheticised, given a refiguration in a clean light. Yet in reading there is still, always, regurgitation. In our acts of reading, research comes back via the bodily ruins we call citations.(Wolfreys, 2000)

The metaphors used by Wolfreys here invoke an understanding of reading as a destructive act as well as a creative one. Reading involves vivisectioning texts, in order to trace their workings through a practice of “textured exegesis”. The notion of reading as exegesis is a potent and a relevant one: exegesis involves the critical explanation or interpretation of a text, and is often connected to the reading of a spiritual or theological work. Exegesis is connected to hermeneutics, which also deals with the methodological principles of the interpretation and reinterpretation

of texts, and which arose initially in the study of religious texts. One place that this is perhaps best exemplified is in the practice of reading and interpreting the Torah in Jewish tradition. Judaism has developed a tradition of exegetical discourse surrounding the Torah known as the Talmud, in which Rabbis and scholars interpret and reinterpret the text in an ongoing discussion that is second only to the Torah itself in importance within the religion.

At the heart of these complementary philosophies of the act of reading is the notion of reading to make a momentary meaning, and then of reading again to make a new meaning, and then of reading again, to make another meaning, in a cycle that can not, and should not, be completed or closed. This hermeneutic circle denies the possibility of reaching a final “true” reading, which is indeed counter to the act of reading. Reading is present tense and continuous; to say something has been “read” is to suggest that it has been consumed and that the possibility of meaning creation has been exhausted.

The bad reader (whom Derrida admits to loving, by the way) is the one who rushes with indecent, even journalistic haste, to decision, to decide on a reading, and thereby have done with reading, once and for all. Bearing this in mind, and seeking all the while to avoid becoming the bad reader, to have the last word or to close the book on reading, how do we read so as to avoid having read? How do we learn to read patiently, rigorously, in such a manner that we know all the while that we have not yet read, we have not yet done (with) reading...all we can do is practise acts of strong reading which will be, inevitably, misreading. (Wolfe, 2000)

One example of this process of knowledge creation may be read in Roland Barthes' 1970 reading of Honore de Balzac's *Sarrazine*. In *S/Z* Barthes treats the original short story as a terrain to be traversed in explicit detail, resulting in what has been described as the “most sustained yet pulverized meditation on *reading*...in all of Western critical literature” (Barthes, 1970) In *S/Z*, Barthes identifies five distinct codes, or groupings, of textual signifiers, the Hermeneutic, Semantic, Proairetic, Cultural, and Symbolic.

Each code is one of the forces that can take over the text (of which the text is the network), one of the voices out of which the text is woven. Alongside each utterance, one might say that off-stage voices can be heard: they are the codes: in their interweaving, these voices (whose origin is “lost” in the vast perspective of the already-written) de-originate the utterance: the convergence of the voices (of the codes) becomes writing, a stereographic space where the five codes, the five voices, intersect... (Barthes, 1970)

Barthes is arguing for an understanding of a text as a multi-voice, interpreted experience, where denotational meaning is continually fracturing under the lens of connotational meaning. Diane Carr draws on Barthes' codes in her critique of Resident Evil 4, summarizing them as:

Hermeneutic code – which relates to narrative enigma, questions posed, and truths revealed

Proairectic code – the code of actions, logical sequence, causality

Semic code – connotations, themes

Symbolic code – mythic antitheses and binaries

Referential code – cultural codes, values (Carr, 2009)

We can understand each of Barthes' codes as a distinct "analytical lens" which allows the reader to partially isolate a particular facet of a text. We return to this notion of analytical lenses in section 5.3. Perhaps more importantly, Barthes demonstrates in S/Z how a close reading of a text can reveal important details, not only about that specific text, but about the poetics of a medium writ large. Carr acknowledges that applying these codes to games is not without its difficulty. She asks:

Would the code of enigma relate to mysteries presented in the back-story, as well as the enigmas (challenges, puzzles, delays, and obstructions) presented by the game's ludic elements? What of the enigmas that are the result of player error, such as getting lost? Would the proairectic code refer to the actions in the back-story, the actions called for by the game, or the actions taken by the player – or all of these? Would accidental or unsuccessful actions differ from deliberate actions? (Carr, 2009)

To help to grapple with the issues raised by the associative context in which a game is played, and in particular the relationship between the connotations embedded in the text of the games, and the associations made by the player, Carr turns to Bennet and Woollacott's work on inter-textuality. Inter-textuality, in this case, refers to "the social organizations of the relations between texts within specific conditions of reading" Bennet and Woollacott, as cited in (Carr, 2009). Of their work, she writes:

The authors argue that texts cannot be understood in isolation, but rather than proposing a straight switch to audience studies on that basis, they consider aspects of the relationship between text and user, finding that the reading or viewing subject arrives at a text with a set of 'reading formations' in place, and these will influence if (or which) aspects of that text will have resonance for that subject (Carr, 2009).

This notion of reading formations is a valuable bridge between theories of textuality that focus solely on the text or solely on the reader. Close reading, thus, is a process-driven practice rather than a product-driven one. Knowledge which emerges through this methodology is situated within the particulars of each reading, in context of all other readings. Interestingly, the need to understand a reading within its own context did not extend to a need to understand the text which was being read within its authorial and cultural context, at least not at the methodology's onset. New Criticism introduced a form of reading that placed all critical emphasis on the text itself, rather than contextual elements of the text, such as historical context and authorial intent. As James Inman writes:

Although the concept of close reading may be said to have broad historical roots, its rise to prominence clearly came in the mid-20th century American academy with the emergence of the New Critical school of textual interpretation...The New Critical approach suggests more or less that text may be analyzed as an object itself and, thus, that it is best understood in terms of its central elements, like symbol and image—these are, so the thinking goes, what holds any text together. The identification of these elements, then, is close reading, and the implicit suggestion is that history, economy, and other human conditions are less important in any interpretive transaction. (Inman, 2003)

The technique of close reading changed as literary theory grew and evolved. In more recent times, close reading has been turned back towards an investigation of the text in context, with approaches that draw on feminist theory, Marxist criticism, and post-colonialism. These approaches take a particular perspective or filter and apply it to a text, looking at specific themes within the text such as the treatment of women or of ethnic minorities.

With the additional incorporation of the techniques of deconstructionism, developed by Jacques Derrida, close reading once again becomes hermeneutic exegesis, but a secularised hermeneutics.

In essence, deconstructionists practice close reading by searching for and locating moments at which a text appears to contradict itself; many times, this questioning and dismantling involves the problematizing of binaries, such as the man-nature and self-other; or even something more seemingly simplistic like large-small and outside-inside. (Inman, 2003)

This perspective on close reading returns us to Lee Sheldon's observation that achieving a critical awareness of a media object can be both "sad and exhilarating." (Sheldon, 2004) Sheldon's remark describes how he was trained to

perform close readings, and is indicative of a further broadening of the methodology into a technique for the analysis and critique of film. We believe that anyone who has undertaken a close reading of a work is familiar with this feeling of expansive loss that we encounter when delving into a loved work. The sadness that Sheldon describes comes from a change in the relationship to the text, and from a loss of innocence that prevents it from working its magic in the same way that it did before it was laid bare through the close reading process. However, even as the naive pleasure of the unexamined text recedes, there is an exhilaration that comes from learning how a text casts its spell. In section 6.2 we will discuss in greater detail how this occurred in our process of close reading Oblivion.

Textuality and Digital Media

As games and new media become more prominent in our culture we are presented with an opportunity to further expand close reading as a methodology, which first requires expanding our notion of what constitutes a text. A text, in the most traditional sense, is written words on a page. In theatre studies, the term text is often used to refer to the scripted and spoken dialogue, as distinct from the performances of the actors, or the movements of the camera. In order to perform a close reading of a digital media artifact such as a game or a piece of new media art we must first consider how these forms might be considered texts to be read, and what—if any—differences exist between novelistic and filmic texts and interactive digital texts.

Medium, message, and poetics

Each medium privileges certain types of communication, as observed by Harold Innis in the 1950s, and extended by his student Marshal McLuhan in the famous, or perhaps infamous, phrase, “the medium is the message”. (Innis, 1991; McLuhan, 1995) This is consistent with that facet of literary theory that has been concerned with the formal aspects of a text.

If we approach media from a formalist perspective, then it seems that new digital media technologies must be treated differently from old media technologies, in the sense that the form varies wildly with the introduction of computational mediation. However, work has been done that supports the possibility of extending the notion of textuality to media technology, even if the narrative content of some digital media never manifests as literal, written words on a page or as dialogue in the mouth of actors.

When close readings are performed, they are not performed in an observational vacuum. The scholar-reader brings her own set of theoretical issues and observational lenses to bear in the analytical process. These lenses were originally

based in literary traditions, but later came to include the traditions of other media, as well as concerns drawn from the broad tide of cultural studies. As discussed above, close readings were used in the analysis of texts drawn from a variety of media, and the analytical perspectives were broadened to include feminist theory, Marxist criticism, and post-colonialist analysis—among others.

This broadening was—and still is—critically important, but the perspective in our work has a narrower focus. Our interest lies in understanding the development of form—the poetics—in emergent media. According to Bertens, narrative formalism focuses on structure (form) over content (meaning), and is thus consistent with the media scholarship advanced by McLuhan and Innis. (Bertens, 2008)

Winthrop-Young has a more nuanced argument, claiming that there is a relationship between meaning and form that he frames as a relationship between narrative and media technology. Where McLuhan argues for the primacy of medium over content, Winthrop-Young suggests that both exist in a reciprocal relationship, arguing that:

1. Narrative is a media technology;
2. Narratives depend on media technology;
3. Narratives deal with media technology, particularly their own. (Winthrop-Young, 1997)

Winthrop-Young uses media technology as a broad term that positions narrative as a cultural tool, one that is instantiated and inflected across a range of “hardware” from cuneiform tablets to computer screens. We suggest that his use of the word “narrative” in this argument can also be understood as a shorthand for the broader notion of “content” or “message”. His positioning of narrative (message) in an overlapping relationship with a specific media technology (medium) pushes against a binary division of form from content. McLuhan holds that the medium is as salient to the experience as the message which it communicates, if not more so. Winthrop-Young leads us to see the dynamic relationship that binds the two.

What does it mean for something to be a text, then, from this perspective? To describe a text as words on a page or as the lines spoken by characters in a film is to describe the medium of communication only. If medium and message are so entangled, then textuality must be likewise entangled, not just in the apparatus for communication but also within the message which is being communicated. Thus, a text might be understood as a gestalt of medium and message.

Our claim is that the nexus for this reciprocal relationship is found in the design of each work. A creator’s design decisions instantiate her content within the form of a particular medium in order to afford the user experience that she intends. This specific engagement with the form, design, content, and experience of an individual

work is at the same time an engagement with the general form and the overall design dynamics of the chosen medium. Aristotle’s seminal work “Poetics” bears witness to this connection. In modern terms, Aristotle “reverse engineered” the poetics—the design principles—of Greek tragedies through his own close readings of its classic works (Aristotle, 1951).

This process of understanding poetics and form through deep reading and analysis is particularly useful during moments of media transition and emergence. Cavell argues that a medium begins to exist when it is instantiated by concrete works, and that it has no existence that is independent of these works (Cavell, 1979). In order to fully understand a medium, we need to have a deep understanding of how it functions in praxis. Henry Jenkins argues that for new media such as video games, serious critical and scholarly analysis is a vehicle for the maturation of the medium, for the training of its practitioners, and for the education of its audience (Jenkins, 2000).

Digital Humanities

Winthrop-Young’s contributions to the broadening of the notion of textuality coincided with a growing scholarly interest in digital media, in particular Murray’s *Hamlet on the Holodeck* (Murray, 1997) and Bolter and Grusin’s *Remediation* (Bolter & Grusin, 1999), and is indicative of a movement to adapt traditional humanities methodologies for use in the study of new media. In his essay on *Electronic Texts and Close Reading*, Inman proposes several key consequences of the close reading of digital media, which he derives from a set of collaborative close readings of web pages, held in an online chat room among fellow scholars and other participants. He writes:

- Access matters, both in the way readers physically encounter electronic texts and in how they function within various discourse evident.
- Close readings are social in nature.
- Reading is as much about the “shape of the page” as it is about any individual elements in a page.

Multimedia, like graphics and audio files, may draw significant attention from close readers, whether intended for such scrutinization or not.
(Inman, 2003)

By performing readings in a collaborative environment, he explores the ways in which the methodology of close reading may be shared across multiple participants and perspectives. He also highlights some of the particularities of reading a digital artifact—in this case web pages. His assumptions about the textuality of the sites

extend to the tangible presence of “multimedia” artifacts as well as less tangible aspects of the site design such as layout and colour. Inman proffers the following explication of the relationship between close reading of traditional texts, and close reading of electronic media:

The brief conclusion I offer is to remind readers that the contemporary close analysis of electronic texts intersects with print-based close reading practices, giving the two a rich and diverse shared tradition, not erasing either from disciplinary consciousness or memory. More, the two are mutually informing. An individual who has performed close analyses of both print and electronic texts will be a much different reader than some who has only done one or the other; I strongly advocate that everyone finds value in both (Inman, 2003).

Within the canonical work of Interactive Narrative studies and New Media theory there is plenty of evidence of hybrid readings that draw on more traditional narrative texts in order to explicate digital media. For instance, Janet Murray, author of *Hamlet on the Holodeck*, has a background in Victorian era literature. Lev Manovich, author of *The Language of New Media*, is a scholar of film in addition to being a classically trained artist and graphics programmer. Both of these authors use previous media as touchstones for their discussion of the emergent digital forms. Murray uses the metaphor of the Holodeck from the TV show *Star Trek* as her prototypical future media experience, but she also often turns to her roots in literature to describe her vision of the future, dedicating lengthy discussions to the implications of the lives and writings of the Bronte siblings. (Murray, 1997) Manovich uses Russian filmmaker Dziga Vertov’s *Man with the Movie Camera* to guide his discussion of new media forms. (Manovich, 2001) Marie-Laure Ryan structures her book *Narrative as Virtual Reality with framing examples from both traditional linear fiction, and more recent procedural texts including Neal Stephenson’s The Diamond Age and Baudelaire’s Artificial Paradises* (Ryan, 2001). While these works do not devote very much discussion to the epistemological stance of the authors, the practice of close reading can be observed at the heart of their analyses.

Challenges for Reading Digital Media

The close-reading of even a simple non-digital work is a highly interpretative process. Careful attention to fine details can cause the analysis of relatively small texts to seem cumbersome and unwieldy. Audiovisual media and digital media like film and video games add a complexity to the close reading process because of the necessity to simultaneously read across several modalities of communication. Interactive digital media, such as games, further complexify this process due to

three medium specific factors that must be grappled with in any reading. Interactive digital media in general, and digital games in particular, are challenging to read due to their indeterminate and shifting natures, their size, and the inherent difficulties of engaging with the medium which are built into them. In this section we consider each of these challenges to reading digital media.

Indeterminacy

New media and games suffer from a certain degree of indeterminacy: one cannot guarantee that two readers will encounter the same media assets while interacting with a game, or that they will experience them in the same order. Nor can one guarantee that they will observe and attend to the same details of the experience. In traditional literary discourse, the text is a fixed point to which the critic may safely refer.⁵⁹ Digitally mediated texts, on the other hand, have the potential to shift aspects of their form, making it problematic to refer back to any element of a reading as representative of a singular, unified text. This may take the form of changing the ordering of a reading, as is the case in hypertext fiction, or it might take the form of traversing a virtual environment in a different way on different readings. In a digital text, the reading must be able to account for the indeterminate nature of the experience. This is further exacerbated in games where players are often forced to choose between multiple exclusive paths without the option of backtracking to see the other potential outcome. This indeterminacy is a different phenomenon from the notion of shifting interpretations and readings of the same content discussed in the above section. Rather, the instability of digital texts is rooted in an explicit and literal restructuring of the content and presentation of the experience in conjunction with a shifting set of reader interpretations.

The procedural nature of digital environments, coupled with the unpredictability of the reader conspires to transform digital texts into “moving targets”. In single-player games, the emergence of new experiences occurs within the relationship of the player and the simulation. In multi-player games this is extended by the relationship of the players to each-other. In Massively Multiplayer Online Role Playing Games (MMORPGs) such as World of Warcraft the presence of other people within the digital environment introduces the potential for emergent social dynamics far beyond what any author might have anticipated. In more open ended Virtual Worlds (VWs) this is even more pronounced, especially in environments such as Second Life where user created content is constantly reshaping the environment and its inhabitants. Close reading of these digital spaces enters into a difficult gray area in which “text” and “world” intertwine, perhaps because these worlds exist at an intersection of Humanities and Social Sciences. In VWs close readings become more like autoethnography or participant observation.

Scope

As if this were not already problematic enough, the very size of many of these texts often defies rigorous explication, with some computer Role Playing Games (RPGs) requiring upwards of 400 hours of gameplay time to traverse the narrative from beginning to end (compared to the time it takes to watch a film or read a novel). In RPGs, one of the measures of a game's quality is the number of hours of play afforded. One of the best examples this can be found in Grand Theft Auto: San Andreas (GTA:SA). GTA:SA is one of a growing genre known as "sandbox" games, in which the player is deposited in a large seamless environment with only a loose mission framework to govern her actions – a framework which she may disregard entirely if so inclined. In a sandbox game, the size of the world substantially impacts the game experience, and thus as these games have evolved, so too has the scope of their environments. GTA:SA takes place in an environment that is 6km by 6km, or 36 million square meters – a measurement that excludes the interior environments in the game (GameSpot 2005). GTA:SA doesn't just include a single urban environment, like its predecessors: it includes three distinct "cities" separated by rural environments and small towns, bordered on one side by miles of ocean. In a physical environment of this size, it can take a reader many weeks of play to begin to feel as if she has fully apprehended it.

Often in games it is possible and even necessary to replay the game several times in order to experience all of the possible available content (such as variations to playstyles across different character types, or variations to the game narrative that are contingent upon different player choices). Replayability is also one of the ways that games measure success: many games often intentionally limit the player's ability to experience everything the first time through in order to encourage multiple playings. Furthermore, many games provide only minimal "bookmarking" ability, which limits the reader's ability to return to previous points in the gameplay and explore them fully. Some games, such as Fable II, maintain only a single, automatically updating, savegame of the player's progress, thus preventing players from backtracking to previous points in the game's story. By contrast, it is relatively easy to return to a section of interest in a novel or film and examine it closely. All of these factors add up to an artifact that requires a substantially larger time commitment in order to read and which problematizes the process of reading closely.

Difficulty

The final factor that sets digital artifacts apart from older media is the skill level of the reader, and the difficulty of the experience. Games require highly specialized skills ranging from hand-eye coordination in order to manipulate the controller to complex

modelling of the interrelated dynamics of a game system in order to understand the impact of player actions in the game world. A player who is busy struggling with the controls and mechanics of a game is likely to attend to very different details than a player for whom the interaction has become automatic. Similarly, a player who is immersed in the interplay of challenge and success in a game (Csikszentmihalyi, 1990) will attend to different details than a player who has grown so skilled as to render the challenges of the game trivial.

One game where this is particularly evident is *Rock Band*. In *Rock Band* players must develop a different set of reflexes and muscle memory than those needed to succeed at many other games, due to the novelty of the three different instrument controllers. While first grappling with these new controllers, it is difficult to pay attention to other aspects of the game, such as the performances of the digital band in the background. As a player grows more and more comfortable with the interface, and with the routines, more and more attention is freed up to attend to the other visuals on the screen, as well as the performative embodiment of the musician that the game supports outside of the screen. At conferences and parties we have observed players grow more physically engaged in their performance as they get better at the basic interactions, jumping up and down and dancing to the music: as the skill levels of the players changes, so too does the core experience.

Readings of games must contend with the changing skill level of a player over time. Careful repeated play, such as that practiced in a close reading of a game, has an inherent danger of distancing the player from the pleasures of the game. In order to address this, a reader of games must learn to oscillate between a position of critical distance and one of immediate pleasure.

Successful Oscillation: Techniques for Reading Games

A final, and more subtle, complication to the technique of close reading in games is the stance of the scholar with respect to her own reception of the work. Close-reading traditionally entails a deep immersion into the experience of a work. From an epistemological standpoint, it relies on the highly idiosyncratic insights of the individual theorist in order to explicate nuances of the work that might not be apparent to the average reader. In the context of game studies, the strength of the method is that the analysis can be deeply grounded in the defining core of the medium—the experience of gameplay. We propose that for this reading to remain true to this play experience there must be room for the theorist to engage the game in an authentic manner, while still generating close observations and insights. By “authentic manner” we mean that it is not sufficient for a scholar to engage a game solely as a critic: he must also engage the game as a player or a “gamer” playing the game on its own terms.

In order to undertake a close reading, then, the scholar assumes a specific dual stance in relationship to the play. This type of reading involves a form of role-play on the part of the scholar, who must maintain two different levels of cognitive attention.

On one level, the scholar enacts the play of a naïve gamer—one who is encountering the game as a fresh participant. This perspective is open to all nuances of the experience and ready to absorb the game without preconceptions. In Bolter and Grusin's terms, she must commit to a complete state of immediacy—unconditional surrender to the experience (Bolter & Grusin, 1999).

At the same time, the scholar is—and must be—distanced from the experience. She must bring an objectivity to the observation of her own experience and faithfully remember and record a wide range of critical details. From this perspective, she plays the game in a state of hypermediation—an awareness of the fact of mediation.

The close-reading scholar must successfully oscillate between these two states in order to build the necessary data set of reliable, consistent, and comprehensive observations. This paper outlines examples of specific observational strategies that make this dialectical process more effective for the identification and collection of relevant gameplay data.

The Imagined Naïve Reader

Current methodological trends in game studies often emphasize empirical observation of game playing situations. (Gardner, 2003) While this approach can provide much information about the situation in which people play games, it does not have much traction in the analysis of the games themselves. The observational approach treats the game experience as a series of social and mechanical interactions to be observed and measured, rather than as a meaningful experience to be interpreted. While this approach may have the advantage of being more scientifically verifiable, it is only able to evaluate the surface layer of the play experience. In our approach to close reading, we are able to generate much more nuanced and deep observations, but at the potential cost of empirical objectivity. One of the strengths of this method is a reliance on interpretation; however our ultimate goal is to create a play experience that is authentic enough to give rise to valuable insight and interpretation. One approach to this issue is for the theorist to construct a phenomenological study of an imaginary reader or interactor. Bizzocchi describes his process of reading as role-play in his analysis of Ceremony of Innocence, a “lost masterpiece” of multimedia art.

My observations form the basis for the Close Reading sections that follow. The observations can be treated as a data set built through multiple reviews of the books and the puzzles, constant referencing and modification of my notes, and repeated screenings of a videotape of the cut sequences. Despite the considerable amount of information I had at my disposal, I tried to write the descriptive sequences of the close reading sections as if they represented the perspective of a naïve interactor. The naïve interactor whose voice I created is someone who has not read the books, and is playing the game for the first time. These descriptive sequences therefore represent a constructed phenomenology. It is completely based on my own experience, but it approximates the experience of a different and theoretical interactor. This theoretical interactor is far less informed than I was, but has considerable power to observe and comment in detail on his own reactions to the event. (Bizzocchi, 2001)

By creating an imagined reader, a theorist is able to address issues of variability and of perspective in a close reading of a digital text. This theoretical interactor is imagined as an individual who has not yet encountered the text, and who is interacting with the digital environment as someone exploring a new experience. This naïve interactor has the freedom to shift his perspective from a broad evaluation of the experience to a narrow look at details that compel him. By imagining the reading from the point of view of a naïve interactor, theorists can avoid the temptation to shift perspective away from the experience of reading and toward mechanical details of the medium, except where they are of relevance to the experience.

There is a close connection between this notion of the imagined naïve reader and Janet Murray's criteria for immersion in media experiences. Murray constructs immersion as a cognitive act in which the reader not only suspends her disbelief, but in fact actively creates belief in the fiction of the experience. (Murray, 1997) This active creation of belief permits the readers to build a relationship with media experiences which is immediate while remaining firmly within a fictional reality. Murray's notion of immersion does not propose that the reader forget that she is engaged in a fictional experience, but instead allows for this knowledge to be safely held to one side. In other words, the process of genuine immersion is supported by the exercise of a powerful imaginative and creative faculty. In this way it is quite similar to the process of role-playing that we advocate for the close-reading game scholar.

Close reading using this approach remains a phenomenological investigation of the critic's reading process, but as Bizzocchi points out, it is a constructed phenomenology; it is a reading of a performative experience. It represents a single reader's experience of an artifact that can conceivably generate an infinitely varied set of possible experiences and readings.

A Performed Player Stereotype

In addition to the generic stance of the imagined naïve reader, we have also found it valuable to construct more specific fictional readings, as seen through the eyes of imagined player types. Close reading has grown and changed much in the years since its original formulation. One thing that distinguishes its current form from previous incarnations is the post-modern emphasis on the explication of the bias of the reader. Close readings are no longer performed solely under the guise of presenting a neutral, objective view of a work. Instead, practitioners of close reading often select a particular perspective from which to read; thus we see feminist readings or Marxist readings of texts. Similarly, when reading games closely, it is advantageous to explicate the particular play style or bias being brought to bear.

While it is possible to imagine a player who has never encountered the game and is approaching it from a naive or neutral perspective, research in game studies has long acknowledged that different players have different preferred ways of playing the same games. This notion of player types, or play styles, has been formalized in a number of different systems. Richard Bartle divided players into four primary types—killers, socializers, explorers, and achievers—by observing common player behaviours in text based MUDs. (Bartle, 1996) Batemen and Boon used Meyers Briggs typologies from psychology to identify a number of different playstyle preferences in game players. (Bateman & Boon, 2006) Craig Lindley surveys a number of player typologies, including one from vernacular theory for Live Action Role Playing games which divides players into dramatists, gamists, and simulationists. (Kim, 1998; Lindley, 2005)

To a theorist performing a close reading of games, what this means is that a neutral reading may not always capture the variety of possible play experiences. This is especially true for games which are targeted at specific gamer demographics. Much like the act of performing an imagined naive reader, reading with player stereotypes in mind requires theorists to role-play a particular type of imagined player. However, unlike the above technique, the goal is not to construct a neutral unbiased experience, but instead to construct a particular bias in order to discover a specific thing about the game play. This might mean subverting the ways in which the game is intended to be played, or it might mean acting within carefully constructed play constraints in order to experience a specific facet of the game's design.

Focusing Readings with Analytical Lenses

So far we have described techniques for *reading* games during the play experience, emphasising the shifting nature of the scholar's attention during play. After the play ends it falls to researchers to *make sense* of the reading. In the subsequent

analytical phase, the scholar steps back from immersion in *the experience*, instead becoming immersed in the *data set* of observational notes and the memory of the gameplay. The scholar is now a sleuth, sifting through the observational data in order to unriddle the salient facts and insights that best inform a deeper understanding of the game. In effect the close reading now becomes a process of using the experience to reverse-engineer the mechanisms and dynamics of the design. This often means having to sift through an unwieldy collect of notes, recordings, and observations, which can quickly threaten to overwhelm the researcher. One way to make this process more manageable is to use carefully constructed *analytical lenses* to constrain and direct the interpretations of the data.

Dianne Carr arrived at this notion, in her argument for textual analysis in games, writing:

It would be a mistake to categorize in-game elements as either structural or textual depending on their particular properties. It is more productive to regard each element in the game as potentially viewed through analytical lenses. Their interpretation will depend on the analytical lens employed (structural, textual, or inter-textual, for example). There is no reason to assume that one of these meanings would be definitive or dominant, although particular interpretations might be more or less likely or appropriate in different contexts. (Carr, 2009)

As discussed above, readers of games must grapple with media experiences that are often comprised of many hours of playtime. In order to make sense of the often vast amounts of data gathered during a close reading, it is often necessary to identify a specific aspect of the play to focus on. Isolating specific phenomena to read allows theorists to limit claims about the contribution of the reading. In the same way that a literary theorist might focus on the use of metaphor or imagery in a text, a game scholar may choose to focus on the dynamics of reward and motivation, or the believability of the game's non-player-characters. This constrains the types of analyses that any one reading may accomplish, allowing game scholars to fruitfully explicate smaller sections of gameplay experiences, rather than attempting to catalogue and evaluate the entirety of a game.

Choice of lens is idiosyncratic, often resulting from some combination of researcher expertise, preliminary early-stage insights, specific qualities of the game, and intended goal of the reading. The nature of the lens can and often does evolve during the process of the reading. As the scholar examines the work, fresh insights inform the process of analysis and modify the analytical tools. The dynamic between the reader, text and methodology is therefore an evolutionary process. Because of this, it is impractical - and perhaps counter-productive - to attempt any exhaustive survey of the possible analytical lenses available to game scholars. In the following examples we will consider some of the different lenses and perspectives used in our own work, to focus close readings of games.

Close Readings in Game Studies

Close reading is a methodology that is gaining traction in the game studies community. The first volume of *Well Played* provides a sampling of close playings of games, in which many of our reading strategies are evident. Drew Davidson writes that “this book is full of in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game...Video games are a complex medium that merits careful interpretation and insightful analysis”. (Davidson, 2009) Davidson proposes the concept of “well played” which he uses in two senses: to be skilled in the playing of and interpretation of games and to be skilled in the design and execution of games. Thus, Davidson’s book takes us to both playing experience and poetics. In keeping with this tradition we present two examples of close reading from our own work. In our first example, Bizzocchi describes his process of close reading in *Ceremony of Innocence*. In our second example, Tanenbaum describes his close reading of the video game *Oblivion*.

Bizzocchi’s Account: Close Reading in *Ceremony of Innocence*

I relied on close reading as the heart of my analysis of the design of *Ceremony of Innocence*. (Real World Multimedia, 1997) *Ceremony of Innocence* is a lost masterpiece—an interactive CD-Rom adaptation of Nick Bantock’s *Griffin & Sabine* Trilogy. The books are a love story told in a series of fifty-eight post cards and letters exchanged between the protagonists. Each book is an interactive experience in its own right, with pull-out letters and rich graphics, penmanship, and font choices that reflect the characters of the lovers, both of whom are graphic artists with visual styles as distinctive as their personalities. The interactive work retains the entire narrative structure, and all component media of the books. It adapts the visuals of the postcard graphics into fifty-eight separate interactive puzzles, each of which must be solved in order to hear the text on the reverse side.

I framed my scholarly engagement as a quest, the heart of which is the close reading of *Ceremony of Innocence*. For a close reading, the traveler becomes a hunter, a tracker seeking clues and signs in the details of the work. Based on his sharp look at the territory, the hunter *sketches* a map that *echoes* the journey. All of the paths in the map share a similar approach. Each looks for the trace of narrative concerns as instantiated in the work: plot, story, character, emotion, theme. Each concentrates on the nature of the instantiation: what is actually happening, what does it feel like, what is its role in the complete work? Finally, each looks for the relationship between interactive craft and narrative. These close readings become data, which forms the background and provides the raw material for the theoretical work of the thesis. (Bizzocchi, 2001)

I began my examination with a general idea of my starting direction. I knew I was interested in the relationship between gameplay and narrative, and I was determined to discover if there were substantive relationships between the interactive design—the poetics of the gameplay—and my experience of significant story variables. As I played the puzzles, I kept notes on my gameplay. The notes were organized into categories, so my notetaking took the form of populating a database. The database design was an active and iterative process; as my understanding of the game design grew stronger, I would add categories and subcategories. Where it seemed critical, I would return to earlier puzzles in order to add notes within the new database categories. I didn't fill every category for every puzzle, but my notes were reasonably inclusive and complete. My final database had the following four major categories: narrative, theme, gameplay, and media. I had between three and nine subcategories within each of these four major categories. In the process of compiling the data, I played the game through a number of complete and partial iterations.

My analysis addressed the question of a possible disjuncture between suspension of disbelief and the pleasure of story on the one hand, and the interactive media on the other hand. Active participation in the decision-making required for most interactive narrative experiences has the potential to interfere with the pleasure of surrendering one's self to deep immersion within a rich narrative storyworld. I identified two design directions in *Ceremony of Innocence* that helped to suture this disconnection. The first was a consistent attention to a pervasive "narrative texture" distributed across all the component media of the experience: graphics, font choice, music, sound effects, voice, and animations. Innumerable creative decision across these media components all helped to develop significant aspects of the overall narrative experience: character, storyworld, emotional context, or narrative theme.

The second direction I identified was the incorporation of narrative sensibility within the heart of the interactive experience—the game's interface. I identified two aspects of interface design directions that reinforced the experience of character. The first concerned the look of the interface. The cursor's visual design is transformed relatively frequently in *Ceremony*: sixteen cards/letters out of fifty-eight change the look of the cursor. I identified systematic differences in the look of the cursors associated with the two protagonists—Griffin and Sabine. Griffin's cursor iconography tends to be relatively prosaic: mammals, things, people. Sabine's are less grounded, more other-worldly: birds, insects, angels, familiars, a ghostly paintbrush. I argued that these design decisions reflected and amplified differences in character. Griffin's cursor designs evoked the ordinary, the mechanical, the limited. Sabine's visuals manifest an ethereal quality, such as the lightness of flight, as well as an exotic attraction. The graphic re-designs of the various cursors supported the respective character directions within the main narrative.

I then examined a more significant direction for the incorporation of narrative within the interface design. I reviewed the re-design, often to the point of subversion, of interface functionality. The standard conventions of the desktop GUI are based on a clear and transparent relationship between the hand on the mouse and the cursor on the screen. However, in many of the puzzles in *Ceremony of Innocence*, this transparent and reliable functionality has been subverted. In these cases, understanding the new relationship between the mouse and the cursor is part of the process of solving the interactive puzzle. The puzzles associated with Griffin tended to have more substantive and numerous subversions of the interface functionality than those associated with Sabine. I argued the resultant difficult and indirect nature of user action within these puzzles reflected the emotionally crippled, indecisive, and indirect nature of Griffin's own personality. This is a critical extension of narrative expression. Diegesis and mimesis are augmented with a third narrative mode – that of praxis. Story is developed not just in the telling, or the showing, but also in the doing.

My close reading revealed specific strategies for addressing and reducing disconnection between narrative pleasure and interactive decision-making: the infusion of “narrative texture” across all media channels of the interactive work and the incorporation of narrative sensibilities within both the look and the functionality of the interface design. In the next section we will see how Tanenbaum extended my work on narrative and interactivity in his own close reading of *Oblivion*.

Tanenbaum's Account: Close Reading in *Oblivion*

I performed a triad of interconnected close readings in the RPG computer game *Oblivion*. (Tanenbaum, 2008) The qualities that made *Oblivion* successful and groundbreaking—an enormous virtual world and a sophisticated AI system for controlling the behaviours of the NPCs—are also responsible for making the game extremely difficult to read. Prior to beginning my analysis, *Oblivion* had been one of my favourite games: I logged hundreds of hours of playtime in the fictional world of Tamriel prior to attempting to study it formally without feeling like I had experienced even a small portion of what the game had to offer. In order to render the reading manageable it was first necessary to construct a set of useful analytical lenses. I began with a list of ten lenses, addressing various aspects of the game. As the research progressed I narrowed this to the three analytical lenses which best allowed me to explicate some of the unique phenomena particular to *Oblivion*: Believability, Adaptivity, and Performativity. (Tanenbaum, 2008)

Each of these lenses required a slightly different approach to close reading. In assessing the game's *believability* I took a broad look at the behaviours of the NPCs in the world, breaking believability down into several sub-lenses, which were derived

from a survey of the theories of believability in psychology, artificial intelligence, and animation. This analytical lens allowed me to consider a wide range of ways in which the characters and world of *Oblivion* were believable (and unbelievable). The lens broke believability into three different dimensions, each of which was further decomposed into three sub-dimensions for a total of nine different aspects of believability. These included lenses that addressed the gameworld in ontological terms (such as the extent to which the characters and environments had material, conceptual and temporal realness), lenses that addressed the extent to which the game satisfied the internal expectations created by the fiction and the simulation as well as the external expectations I brought to the game as a player. I also looked at believability in terms of the causal consistency of phenomena within the world, such as character personalities, emotional responses, and response to changes in the world's internal model of the player character and narrative events over time. (Tanenbaum, 2008)

I alternated between time spent within the game world playing and exploring and time spent reflecting and writing on my experience of the game using my sub-lenses to isolate and identify these different aspects of character and storyworld believability in the game. For this reading, the act of oscillation happened between play and analysis: while playing I endeavoured to suspend my critical self seeking to engage the game from a place of observant immediacy. I processed these observations in the time immediately following play, writing out a narrative account of my time in the game world, much like an ethnographer reflecting on a day of observations. My experience of believability in *Oblivion* was a mixed one. On the one hand, there were plenty of brilliant and nuanced details in the gameworld's response to the actions that I took during my play: NPCs spread rumours of my exploits, regarding me with fear or awe depending on my choices, and the history of the world had a materiality that pervaded the experience from the design of the environments to the packaging of the game. On the other hand, there was an inescapable tension between the dynamic and emergent systems in the game world and the static embedded quests and stories which structured much of the play. The game's inability to reconcile my actions and choices with the various narrative threads running through the world was jarring, ultimately undermining my ability to suspend my disbelief. (Tanenbaum, 2008)

For my reading of *adaptivity* in *Oblivion* I took a very different approach. In a sense the entire game is a large adaptive system, which slowly transforms itself in response to the actions of the player. However, I was interested in looking at a particular instance of adaptation in the game. In the very beginning of the game, players are taken through an introductory dungeon which serves to train them in the basic skills needed for play, and to introduce the core narrative of the game. At the same time that this is happening, the game is also assisting the player in the creation of the character that she will play for the rest of the game. Some of this character

creation process is conventionally transparent: the player creates and customizes her avatar and selects some special abilities. Where *Oblivion*'s opening sequence becomes interesting is in the selection of a character "class", which will govern the playstyle of the character for the entire game. *Oblivion*'s primary adaptive conceit is that the game "observes" the actions of the player during the introductory dungeon and at the end recommends a character class based on its interpretation of her preferences. The first time I played the game I was blown away by this mechanic. "*How does the game know I am a bard?*" I thought. As I became more interested in player modelling techniques, I knew I wanted to open the "black box" of the opening sequence.

For this reading I needed a different approach. Instead of a broad and immediate playing of the game, I instead engaged in a series of performative playings of the opening sequence. Each playing represented a performance of a different "player type", covering the three primary playstyles in the game (Warrior, Thief, and Mage) as well as a number of more hybrid and idiosyncratic performances. My goal was to reverse-engineer the game's adaptive system within this carefully bounded opening sequence. For these readings I was in perpetual oscillation between the imagined player perspective which I was enacting and the analytical perspective that was constantly surfacing in order to record the details of the play as data. Not knowing which choices were being measured by the system I established a rigorous coding system for tracking every action that was evident and measurable to me as a player. These included what I termed as "Major Choices" such as the selection of race, gender, and special abilities, and also more "Minor Choices" such as fighting with a sword instead of an axe, using magic or stealth, and selecting different options in conversations. I also created a high-level narrative account of each of my play-sessions, describing the character that I had created, and the broad strokes of how I had conceived of that play/performance. For example, for my warrior run, I picked the Orc race for their strength, and endeavoured to charge headlong into danger, swinging the heaviest weapons I could find. For my Mage run I selected the magic-using Elf race, only used magic, and only wore the cloth robes. I used the game's internal feedback to track some quantitative data, such as skill point increases, tracking everything in a large spreadsheet, (Tanenbaum, 2008)

I was surprised by what I discovered. Certain choices, such as race and gender, had no impact on the class which the system recommended. In other cases, my actions were mismapped to the responses of the system (in the most extreme of these, playing the game in stealth mode prevented the system from being able to recommend any of the thief or rogue classes). The system also contained several playstyle biases which made playing the opening as a non-warrior an exercise in frustration. In opening the black box for my adaptivity reading I discovered only broken parts, and none of the magic that I had experienced during my naïve playthrough of the game.

My final interest in the game was to explore the play experience through the lens of *performativity*. My understanding of performativity in this context was as an intersubjective emergent process that arose from my first person experience of the world and its responses. For this reading I needed a system for understanding the game experience as a dialogue between myself as a performer-player and the game artefact as a co-performer. To do this I adopted a framework from improvisational theatre which broke performative knowledge into five different types including communication, playfulness, sedimentation, sensuality, and vulnerability (Lockford & Pelias, 2004). For this reading I neither role-played specific playstyles, nor did I attempt to play the game in a purely immediate space. Instead, I approached the game the way I would approach an actor in an improvisational scene, making dramatic offers (via actions within the game world) and accepting the offers made by the game. The first thing that made this problematic was the very limited means of communication which were available to me as a performer within the game: I could engage in a wide variety of violent actions, but had only a limited palette of non-violent options available, such as re-arranging objects in the world, or interrogating the inhabitants of the cities about quest related information. Of these options, only the violent actions elicited any meaningful response from the game world and the NPCs. In improvisational theatre terms, the game was “blocking” most of my dramatic offers.

While each of these readings was performed in a different way, using a different analytical lens, each one uncovered specific aspects of the game that provided insight into the other two phenomena, which in turn pointed to bigger issues in the game’s design. For example, the breakdown of believability across the emergent and the embedded content in *Oblivion* could be framed as a conflict between adaptive and non-adaptive components of the game. Likewise, the failure of the adaptive system to accurately incorporate player action into its player model could be seen as undermining the game’s believability both by violating the player’s external expectations, and through internal causal inconsistency. Finally, the game’s limited affordances for performative play arise from both the limitations of the game’s adaptive mechanisms and the tension between simulation and hard-coded content which underlie the issues with the game’s believability.

Conclusions

Close reading is an effective humanities-based methodology with a long pedigree. It is a versatile approach which has been applied under a variety of labels against a number of works across a variety of media. It can incorporate a range of analytical perspectives, and yield results in various conceptual directions. The close reading of the poetics of an individual work will reveal insights into its design and experience.

More substantively, close reading of the poetics of an exemplary work will yield deeper and more focused understandings of the nature of the medium itself. This is particularly useful in moments of media emergence and transition. Close reading of poetics can also directly align digital media scholarship with two cognate domains: artistic practice and engineering research. Bizzocchi's close reading of slow-motion in experimental cinema and video art informed his own art practice in the creation of ambient video art. This in turn revealed the need for engineering research in slow-motion video algorithms, carried out by his colleague Ben Youssef (Bizzocchi & Youssef, 2009; Youssef & Bizzocchi, 2008). In a technologically based medium, both creative insights and technical innovations are revealed by the focused attention to media design inherent in the practice of close reading poetics. Close reading is also methodologically versatile. It can be applied loosely and informally, or in a more careful and systematic fashion. Any of these variations can be useful in the service of a particular argument. However, we are particularly impressed with results that may be achieved through a more complete commitment to a rigorous and systematic use of this methodology.

In this chapter we have outlined a number of techniques for adapting close reading to games and interactive experiences. These include the construction of analytical lenses to focus and guide the reading, the performance of an imagined naive reader, and the construction of performative player stereotypes. Each of these techniques provides the scholar with a different tool for engaging in the oscillation needed to simultaneously read critically and authentically. We believe that our approach demonstrates the value of a rigorous formalized system for reflective practice in games.

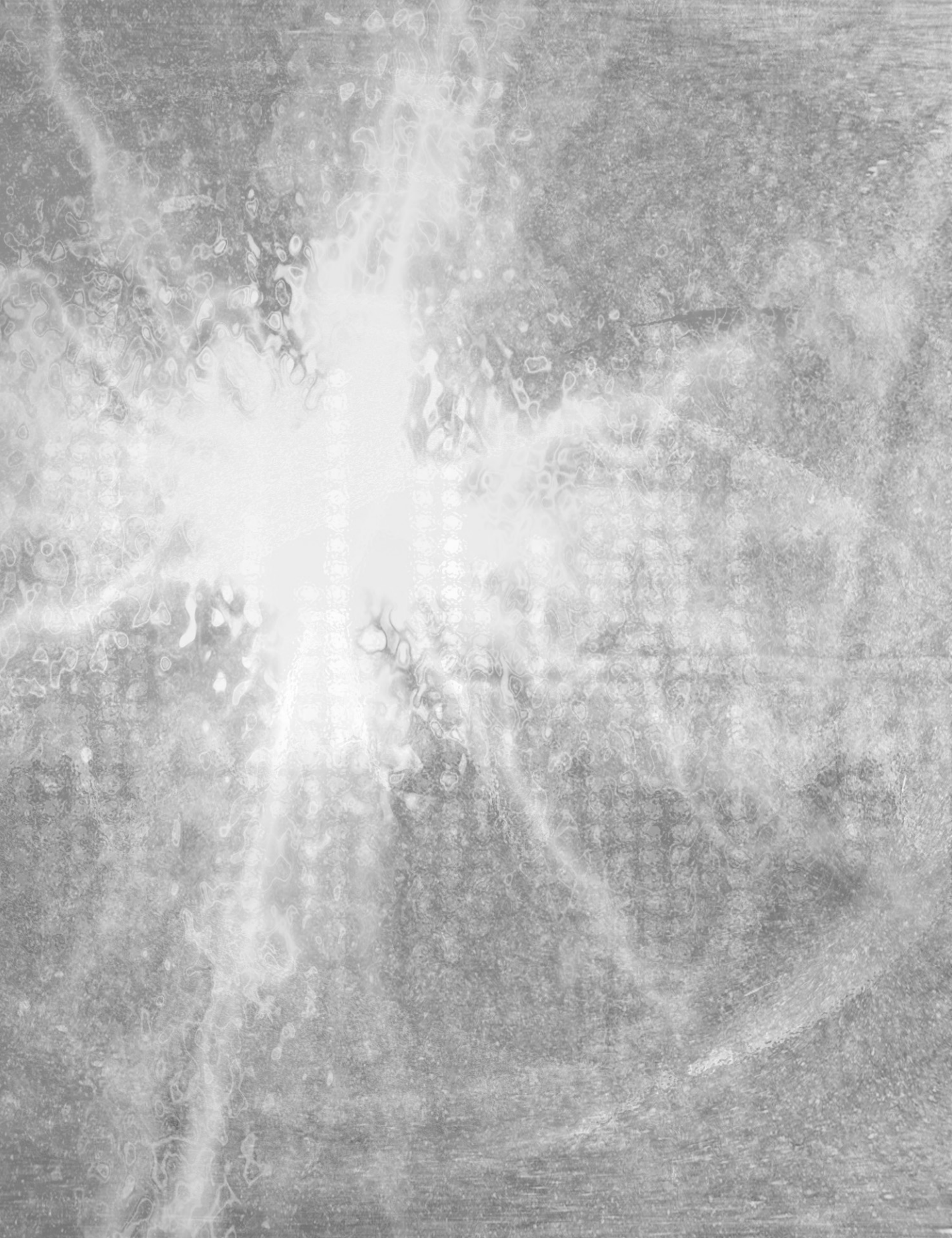
We do not pretend to have closed the book on close reading in games with this chapter. There will be important new directions for this work which we believe will further expand the effectiveness and the utility of this technique. One example is the pedagogical applications of close reading. In particular, close readings that focus on the design of exemplary games will reveal the poetics of the emergent medium to the students who will soon become the scholars and lead practitioners of the maturing medium. Bizzocchi has engaged his undergraduate students in the close readings of video games as part of his courses in both Narrative and Game Design for ten years. The process of close reading has served to objectify the mediated experience, and in the process to reveal the design decisions of the individual game and the design parameters of the medium. In another example, while attending a recent conference we learned that a colleague has been using collective close reading in the classroom to conduct shared group critiques of games (Boluk, 2009). Students would take turns playing the game in front of the class, while everyone participated in picking apart the game using a variety of lenses. This form of collaborative social reading is perhaps uniquely suited to games, due to their performative dimension. It is possible to utilize a direct and reciprocal loop between the audience and the player that is not possible in the analysis of other media,

such as literature. By collectively reading, it is also possible to simultaneously develop a multitude of potential readings in dialogue with each other, thus collapsing much individual iteration into a single reading cycle. We believe this has utility as a pedagogical tool, and as an alternative method for better understanding the increasing sophistication of game design and the corresponding complexities of game experience. This example also highlights the versatility of the close reading methodology, and the importance of sharing its many variations within the scholarly and pedagogical discourses of game studies.

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BIOGRAPHIES

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Jim Bizzocchi <www.dadaprocessing.com> is an Assistant Professor in the School of Interactive Arts & Technology at Simon Fraser University. Jim's research interests include interactive narrative, game design, and the future of the televisual moving image. His scholarship typically relies on close-reading to reveal the design and poetics embedded within media and new media artifacts and experiences. His writings on these topics have appeared in a number of books, scholarly journals, and conference proceedings. He has taught a variety of undergraduate and graduate courses related to his research interests, and is a recipient of the University Award for Excellence in Teaching. He is a recognized expert on educational technology, and a past-President of the Canadian Association for Distance Education. Jim is also a practicing artist - his Ambient Video art pieces <www.ambientvideo.ca> complement and inform his scholarly writing on the future of the moving image.

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Heather Chaplin is an assistant professor of journalism at The New School and author of the book, *Smartbomb: The Quest for Art Entertainment and Big Bucks in the Videogame Revolution*. On the topic of videogames, she has been interviewed for and cited in publications such as *The New Yorker*, *The Atlantic Monthly*, *The New York Times Magazine*, *Businessweek*, and *The Believer* and has appeared on shows such as *Talk of the Nation*, and *CBS Sunday Morning*. Her work has appeared in *The New York Times*, *The Los Angeles Times*, *GQ*, *Details*, and *Salon*. She is a regular contributor on game culture for *All Things Considered*.

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Theresa Chen is a game producer and designer currently residing in the San Francisco Bay Area. She spent her undergraduate and graduate years at Carnegie Mellon, graduating from the ETC in 2010. Currently an assistant producer for the Sims Web team, she focuses her energies on creating and sustaining the ever-expanding Sims 3 community. Ever interested in games that target the atypical consumer audience, she hopes to one day lead the production of new titles that reach non-gamer players.

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Sarah Chu is a doctoral student in Curriculum and Instruction at the University of Wisconsin-Madison. Her research interests are centered on video games, education, and visual culture. In particular, she is interested in the design of digital exhibits and games in science museums and how visitors learn in and around them. Prior to attending UW-Madison, Sarah worked as a learning technology consultant at Ryerson University. She holds an MEd in Educational Technology from York University and an Honors BA in Visual Studies from University of Toronto. She has worked on Constance Steinkuehler's Pop.Cosmo research team to examine learning and literacy in and around massively multiplayer online games. Currently, she works at the Morgridge Institute for Research where she develops video games for learning science.

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Drew Davidson is a professor, producer and player of interactive media. His background spans academic, industry and professional worlds and he is interested in stories across texts, comics, games and other media. He is the Director of the Entertainment Technology Center – Pittsburgh at Carnegie Mellon University and the Editor of ETC Press. <http://waxebb.com/>

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Simon Ferrari is a doctoral researcher in digital media at the Georgia Institute of Technology, where he studies expressive game design, criticism, and competitive play. His first book, co-authored by Ian Bogost and Bobby Schweizer, is *Newsgames: Journalism at Play* (MIT Press, 2010).

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Alex Games is Education Design Director at Microsoft Game Studios. He is deeply interested in the inseparable relationship between play and learning, and in ways to undo the artificial divide that the educational systems of most nations have created in them. He was formerly Assistant Professor in **Telecommunication, Information Studies, and Media**, and Adjunct Professor in **Educational Psychology and Educational Technology** at Michigan State University. There he conducted research focused on the relationship between game design and learning at the **Games for Entertainment and Learning Lab**, and co-chaired the **Meaningful Play Conference**. While conducting his doctoral dissertation with the Games, Learning and Society group at the University of Wisconsin, he played a key role in the design and implementation of Gamestar Mechanic. He is gamer at heart and has an extensive background in game design, software engineering, and robotics.

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Stephen Jacobs is an Associate Professor in the Department of Interactive Games and Media and the Director of the Lab for Technological Literacy at the Rochester Institute of Technology where he teaches courses in game history, analysis, design and writing. He also currently serves as the Visiting Scholar at The International Center for the History of Electronic Games at the Strong National Museum of Play where he assists in exhibit design and collections interpretation. He is Editor-in-Chief of the Journal of Game Design and Development Education (<http://gameeducationjournal.org>).

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Andy Jih is a producer and game designer living and working in Pittsburgh, PA. He most recently was the VP of Production at Evil Genius Designs, a Pittsburgh start-up company focused on bridging the gap between game design and location-based entertainment through the use of mobile devices. Prior to Evil Genius Designs, Andy was a producer at Schell Games where he worked on projects ranging from Nintendo Wii titles and an original IP Nintendo DSi game to an interactive theme park attraction at Epcot.

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Adrian Avery-Johnson is a graduating senior at Malcolm Shabazz City High School in Madison, WI. He has always wondered about the mystical, behind the scenes machinations of the modern library, which has led him to his current pursuit of a Masters in Library and Information Sciences. For much of his life gaming has served as an outlet for energy and emotions that he did not have the tools to deal with. As he approaches the close of his high school career and moves forward with his education, he has decided to limit the time he spends in MMORPGS to weekends, while re-initiating a previous weekly devotion to Dungeons & Dragons.

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Scott Juster is a writer and a graduate student studying History. Along with Jorge Albor, he produces essays and podcasts for www.experiencepoints.net <<http://www.experiencepoints.net>> , a website dedicated to the serious, but not humorless, analysis of video games. He also posts bi-weekly on the PopMatters blog, “Moving Pixels,” in which he writes about game design and the cultural significance of video games. His interests also include video game preservation and the historical relationship between video games and other media.

Richard Lemarchand

Richard Lemarchand is a Lead Game Designer at Naughty Dog and is currently working on the studio's forthcoming game, *Uncharted 3: Drake's Deception*. He was the Co-Lead Designer of the award-winning, critically praised *Uncharted 2: Among Thieves*, which was widely acclaimed as the Game of the Year for 2009. Richard has been a professional game designer since 1991, working mainly in the field of character-action console games. He worked on *Uncharted: Drake's Fortune*, *Jak 3* and *Jak X: Combat Racing* for Naughty Dog, and helped create the successful game series *Gex*, *Pandemonium* and *Soul Reaver* at Crystal Dynamics. He organizes the annual GDC Microtalks, is on the faculty of the GDC Experimental Gameplay Sessions, is an Advisor and sometime Conference Co-chair of IndieCade, and is involved with GLS and Games for Change. Born in England, he grew up in a small rural town, dreaming of ancient civilizations and outer space. Perhaps as a result, he has a degree in Physics and Philosophy from Oxford University

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Crystle Martin is a doctoral student in Curriculum and Instruction – Educational Communications and Technology at University of Wisconsin-Madison studying with Professor Constance Steinkuehler. She is a researcher on Professor Steinkuehler's PopCosmo research team and a member of the Games+Learning+Society group. Crystle's research interests include information literacy, online reading comprehension, informal learning, online communities, and MMOs. Her upcoming dissertation will focus on information literacy in online affinity spaces. She has a Master's in Library and Information Science from Wayne State University and Bachelor of Arts degrees in English and Latin/Classics from Michigan State University.

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Matt McLean has earned a Bachelor of Science degree in Mechanical Engineering Technology from Central Michigan University and a Master's degree in Entertainment Technology from Carnegie Mellon University. He currently resides in San Francisco, California working as a producer in the games industry. He is also a writer, photographer, designer, artist and daydreamer. Matt believes in the power of interactive experiences to help make the world a better, inspiring, and more playful place. He can be contacted at matt.m.mclean@gmail.com, and he invites you to visit his website at <http://mmclean.webs.com>.

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Amanda Ochsner joined Games+Learning+Society group and the department of Curriculum and Instruction at the University of Wisconsin–Madison in the fall of 2010. She is working with Constance Steinkuehler and her PopCosmo research group. Amanda's research interests focus around games for adolescent girls, as well as issues of identity formation through video game play and by participating in online gaming communities. For the past few years, she has worked as a freelance writer and editor on the press side of the games industry as an editor for IGN's Green Pixels site and as a freelance writer. Currently she spends much of her time writing for the family-focused game site What They Play. One of her more recent projects is a series of interviews with parents who play video games with their children. Amanda received her undergraduate degree in English from the University of Minnesota, Morris in 2008.

Charles Palmer

Charles Palmer serves as director of the Center for Advanced Entertainment & Learning Technologies, at Harrisburg University, where he leads developments in digital storytelling and entertainment technology. As a creative educator, administrator, and producer with fifteen years experience in New Media development, his current work focuses on the learning side of games and how games can shape STEM educational initiatives.

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Arthur Protasio is a writer, researcher and producer of narratives and games. As a bachelor of laws with an additional degree in digital media and technology from the Pontifical Catholic University of Rio de Janeiro, he coordinates CTS Game Studies, a game research and development project from the Center for Technology and Society at the Getulio Vargas Foundation in Rio de Janeiro. Given his interdisciplinary profile, his law and game studies involve the analysis of game prohibitions in Brazil and the importance of advocating free speech and proper ratings for the game medium. As a speaker, Arthur not only gives talks on these academic topics and the value of games as works of expression, but also runs the LudoBardo videolog aimed at discussing narrative in games. Additionally, he organizes, along with fellow independent producers, Gamerama, a game design collective, dedicated to integrating the Brazilian game design community, focused on developing experimental projects through prototype oriented methodology. His fictional and academic writing are available at **www.vagrantbard.com**.

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By day, Chris Pruett is a Senior Game Developer Advocate at Google, focused on Android. Under the cover of night he writes indie games and blogs about horror game design. The views expressed here are his alone and not those of his employer. Chris lives in Cupertino, California with his wife and daughter.

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Matthew Sakey is a freelance games journalist, consultant, and industry analyst, and is a sought-after guest speaker at university games curricula and gaming conferences. For the past seven years he has been a featured monthly writer for International Game Developers Association, where he writes about the influence of gaming on culture in his column Culture Clash (www.igda.org/culture-clash). Matt also owns and maintains the popular gaming and entertainment website Tap-Repeatedly (**<http://tap-repeatedly.com>**), and works as an e-Learning developer, helping corporations bring games-based training to life. He lives in Michigan. Reach him at steerpike@tap-repeatedly.com.

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Mark was born in Groton, Massachusetts in 1983. During his childhood he cultivated a love for games, play and competition with his two brothers, Seth and Scott. Mark received education from Northeastern University, where he currently teaches in the Creative Industries Program. His love for games was not sated in the engineering field so he clawed his way into the video games industry with research in games for rehabilitation, education, and player experience. He currently lives in Boston, Massachusetts.

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Francisco was born and raised in Caracas, Venezuela and moved to Pittsburgh, PA in his early twenties to pursue his Masters at Carnegie Mellon University. He currently works in Pittsburgh as a Game Designer and is a co-creator of Friends on Play, a podcast about game design. His work has been shown in Pittsburgh, New York, Las Vegas, Italy, South Korea, Singapore and Spain. He enjoys games of all kinds, traveling the world, European soccer and media-based, unconventional storytelling. If you wish to know more about him, Google might be a good starting point. <http://www.franciscosouki.com>

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Constance Steinkuehler is an Assistant Professor in the Educational Communications and Technology (ECT) program in the Curriculum and Instruction department at the University of Wisconsin–Madison. She is a founding fellow of the GLS Initiative at UW–Madison and chairs the annual GLS conference held each summer in Madison. Her research on cognition, learning, and literacy in MMOs has been funded by the MacArthur Foundation, the Spencer Foundation, and the Academic ADL Co-Lab, including research on such commercial titles as **Lineage I**, **Lineage II**, **Star Wars Galaxies**, and **World of Warcraft**. She earned her PhD in literacy studies in curriculum and instruction in 2005, her M.S. in educational psychology in 2000, and three simultaneous B.A.s in Mathematics, English, and Religious Studies in 1993. She teaches graduate courses in research in online virtual worlds, analyzing online social interaction, critical instructional practices on the Internet, and gender and technology, and an undergraduate course in digital media, pop culture, and learning. She sits on the editorial board of several journals including the **Journal of the Learning Sciences**, the **International Journal of Gaming and Computer-Mediated Simulations**, and **Second Nature: The International Journal of Creative Media**. She is the Chair of the AERA SIG “Media, Culture, and Curriculum,” sits on the National Academy of Sciences (NAS) Committee on Gaming, Simulations, and Education, and recently received a NAS/Spencer Post-Doctoral Fellowship.

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Alice Taylor has worked with internet-delivered content for entertainment and education since 1995. Outgoing Commissioning Editor for Education at Channel 4, Alice spent the last three years commissioning award-winning digital products targeting teens and tweens. In December 2010, Alice announced her intention to leave Channel 4 in order to pursue a 3D printed network-aware toymaking startup: Makieworld. Alice writes a personal blog, Wonderland at www.wonderlandblog.com and has contributed variously on the subjects of games, new media and technology for the BBC, New Statesman, The Guardian, Paste, and more.

Greg Trefry

Greg Trefry has wide array of experience designing games—everything from web-based MMOs to hit casual games to alternate reality games. He co-founded the game design studio Gigantic Mechanic to explore the bounds of game design through mobile games that interact with the real-world. He serves as director of the Come Out & Play Festival, a festival of street games in New York City. Greg teaches at New York University and recently wrote the book, *Casual Game Design: Designing Play for the Gamer in All of Us*.

Jason Vandenberghe

Jason Vandenberghe is a Creative Director at Ubisoft. He has been designing and producing games for about sixteen years, with tours of duty at EA, at Activision, and now at Ubisoft. He has no plans to stop any time soon.

Much of his time had been spent working on big licenses (James Bond, Lord of the Rings, X-Men, and the like), but recently he's been branching out and making actual *game* games, which is a nice change of pace. His latest effort was the semi-critically-acclaimed Red Steel 2, which was all about swinging the Wii Remote around like a sword, and defied the skeptics by being pretty darn good.

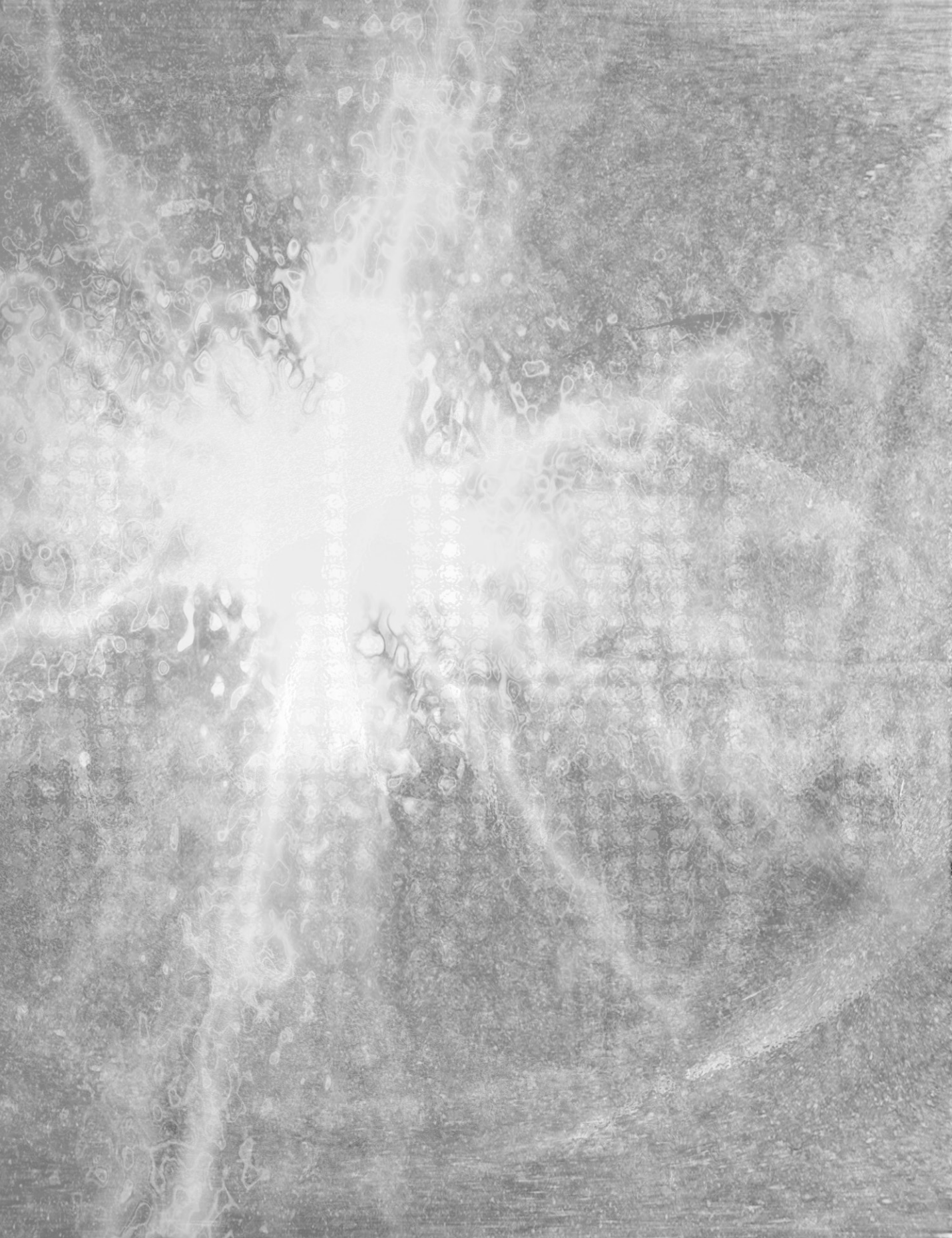
Jason is currently working on not-very-secret Ubisoft projects, but hasn't told anyone which one(s) yet. He lives in Paris, which is really weird, man.

Caroline "Caro" Williams

Caroline "Caro" Williams is a PhD student in Curriculum and Instruction at the University of Wisconsin-Madison, with a focus in Mathematics Education and a joint Masters in Mathematics and Mathematics Education. Her adviser is Dr. Amy Ellis, whom she works with on two major research projects: the Inductive and Deductive In-and-Out of Mathematics (IDIOM) grant with Drs. Knuth and Kalish (www.idiom.wceruw.org); and the Supporting Proof in Algebra through Reasoning with Quantities (SPARQ) grant. Caro studies cognition and learning in Massively Multiplayer Online games (<http://gameslearningsociety.org/research/cognition-and-learning-in-mmos>) as a member of the Games+Learning+Society group and Dr. Steinkuehler's PopCosmo research team. Caro's many interests bridge the worlds of math education and gaming, with particular interest in: (a) virtual worlds that are designed as supplemental to classroom content, as well as what types of mathematics learning are intended and actually instantiated within those dynamic environments; (b) commercially produced virtual worlds that have mathematics content and learning quietly embedded in the game structure, and the types of learning that occur as a result; and (c) the general constraints and affordances that games may have for different populations as they enter and participate within the designed "worlds." Currently, she is working on a design-based research project focused on the design, evaluation, and iteration of Little Big Planet (www.littlebigplanet.com) worlds that support an informal understanding of the Cartesian coordinate plane.

José P. Zagal

Dr. José P. Zagal is a game designer, scholar, and researcher. He is Assistant Professor at the College of Computing and Digital Media at DePaul University where he teaches game design, online communities, and ethics. His research work explores the development of frameworks for describing, analyzing, and understanding games from a critical perspective to help inform the design of better games. He is also interested in supporting games literacy through the use of collaborative learning environments. His book on this topic, "Ludoliteracy: Defining, Understanding, and Supporting Games Education", was recently published by ETC Press. Dr. Zagal is on the editorial board of Games & Culture, the International Journal of Gaming and Computer-Mediated Simulations, and the Journal of the Canadian Gaming Studies Organization. He is also a member of the executive board of the Digital Games Research Association (DiGRA). José received his PhD in computer science from Georgia Institute of Technology in 2008, his M.Sc. in engineering sciences and a B.S. in industrial engineering from Pontificia Universidad Católica de Chile in 1999 and 1997. Further information on his work is available at: <http://facsrv.cs.depaul.edu/~jzagal/>



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- 45 Dan Cook has a great article about the Two Factor Theory as applied to game design. http://www.gamasutra.com/view/feature/1992/constructing_artificial_emotions_.php?page=1
- 46 *The Misadventures of P.B. Winterbottom* was later released for Windows via Steam.
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- 51 Patch notes can be found quite tidily arranged at <http://www.worldofwarcraft.com/patchnotes>.
- 52 Talent trees are the tree structure in which a player can spend talent points earned through experience in the game
- 53 Death Knights are a class but also—in some ways—a race. As a strange case, we will not be considering them here.
- 54 Chat channels are different text and voice chat streams that have specific purpose, allowing you to communicate with certain people or groups of people depending on the channels you and they are signed in on
- 55 “Pots” is short for potions, and “mats” is short for materials, such as herbs and cloths.
- 56 “Wipe” is short for wipeout, which is to cause the entire group of players to be killed.
- 57 A newbie or novice.
- 58 The Leeroy Jenkins video can be found at <http://www.youtube.com/watch?v=LkCNJRfSZBU>.
- 59 This is only in comparison to a piece of digital media. Readings of print media can suffer from a shifting point of reference, such as multiple editions and translations of the same material; however, the variability is not implicitly (and explicitly) built into the work, as it is in digital media.



Well Played 3.0

**Video Games,
Value and Meaning**

Edited by Drew Davidson



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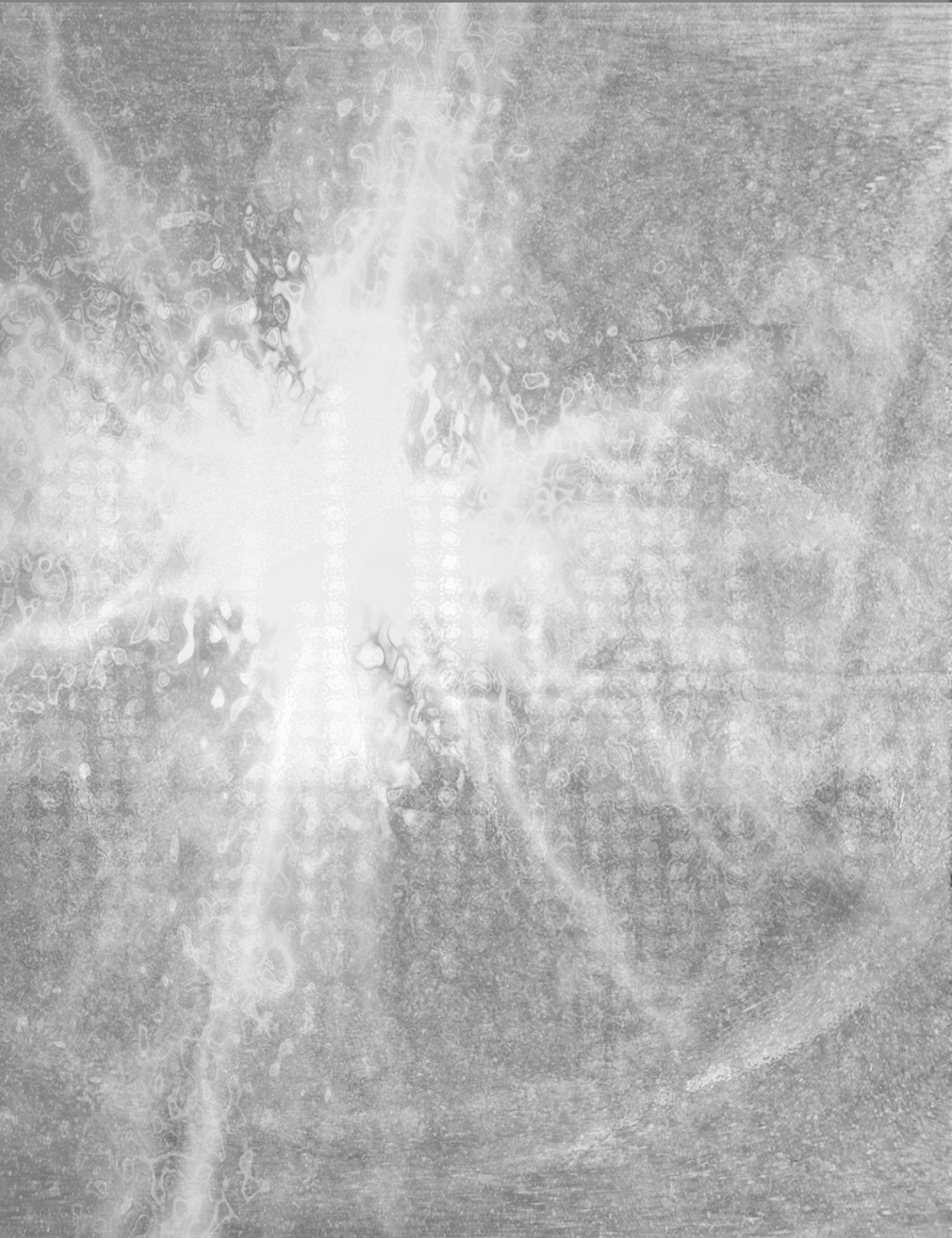


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Design & composition by John J. Dessler

THANK YOU

This third Well Played book was yet another enjoyable project full of interesting insights into what makes videogames great. A huge thank you to all the contributors who shared their ideas along with some inspiring analysis. A thank you to John Dessler for his great work on the book design. And thanks again to participation and support of everyone who has joined in the discussion around games being well played. And to my wife, as always.



CONTENTS

| | |
|--|------------|
| Thank You | V |
| Well Played 3.0. | XI |
| The Deeper Game of Pokémon, or, How the world’s biggest RPG inadvertently teaches 21st century kids everything they need to know | 1 |
| ELI NEIBURGER | |
| Hills and Lines: Final Fantasy XIII | 13 |
| SIMON FERRARI | |
| And if You Go Chasing Rabbits The Inner Demons of American McGee’s Alice | 25 |
| MATTHEW SAKEY | |
| Limbo | 37 |
| ALICE TAYLOR | |
| The Neverhood; A Different Kind of Never Never Land. You Had Me at Claymation | 45 |
| STEPHEN JACOBS | |
| Heavy Rain – How I Learned to Trust the Designer | 55 |
| JOSÉ P. ZAGAL | |
| Fallout 3: How Relationship-relevant Decisions craft Identities that Keep Bringing Us Back to Enjoy the Horrors of the Nuclear Wasteland | 67 |
| ALEX GAMES | |
| Uncharted 2: Among Thieves - Becoming a Hero | 77 |
| DREW DAVIDSON & RICHARD LEMARCHAND | |
| Mass Effect: Leveraging a Science Fiction Childhood | 113 |
| MATT MCLEAN | |
| The World Ends With You | 119 |
| THERESA CHEN | |
| Anything you can do, Chrono Trigger can do better | 127 |
| FRANCISCO SOUKI | |

| | |
|--|------------|
| The Opposite of Accessible: Street Fighter IV | 137 |
| JASON VANDENBERGHE | |
| Majora’s Mask | 157 |
| SCOTT JUSTER | |
| Blocks, Planes, Drain, and Kain: Well Played for Legacy of Kain: Soul Reaver | 165 |
| MARK SIVAK | |
| Toy Soldiers | 177 |
| CHARLES PALMER | |
| Siren is the Scariest Game Ever Made | 193 |
| CHRIS PRUETT | |
| Narrative Reincarnation in The Way of the Samurai 3 | 205 |
| ARTHUR PROTASIO | |
| Limbo and The Misadventures of P.B. Winterbottom | 217 |
| ANDY JIH | |
| The Path | 231 |
| HEATHER CHAPLIN | |
| La Noche de los Muertos | 237 |
| GREG TREFRY | |
| Ding! World of Warcraft Well Played, Well Researched. | 253 |
| CRYSTLE MARTIN, SARAH CHU, DEE JOHNSON, AMANDA OCHSNER, CARO WILLIAMS, & CONSTANCE STEINKUEHLER | |
| Playing Ico: from Involvement through Immersion to Investment. | 273 |
| DREW DAVIDSON | |
| Well Read: Applying Close Reading Techniques to Gameplay Experience. | 289 |
| JIM BIZZOCCHI & THERESA TANENBAUM | |
| Biographies | 317 |
| | |

WELL PLAYED 3.0

Further Perspectives on Video Games, Value and Meaning

Well Played 3.0 is another great book of in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game. As before, contributors have analyzed sequences in games 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. Across the three books, contributors have provided a variety of insightful perspectives on the value of games.

For those who have yet to see the two previous 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 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.

And this book is completely full of spoilers on all the games discussed, so consider this your fair warning. While it's not necessary, all the contributors encourage you to play the games before you read about them.

Well Played 3.0 is going to be the last book. We're now going to follow these three books with a regular on-going Well Played journal series open to anyone who is interested in submitting an essay analyzing a game. We're also going to host Well Played tracks with live play and analysis of games at the Games, Learning and Society Conference and at IndieCade as well.

The goal of all of the books, and the following series and conference tracks, is to help create a forum for discussion that further develops and defines a literacy of games as well as a sense of their value as an experience. Also, the books have focused specifically on close readings, having an on-going journal and conference tracks can also enable us to consider distant readings (a la Franco Moretti) of games and how they've evolved across time. Video games are a complex medium that merits careful interpretation and insightful analysis. By having contributors to look closely (or distantly) at video games and the experience of playing them, we hope to show how many different games are well played in a variety of ways.

“

*These are the minds of
the future. There's a lot
at stake. Fortunately,
Pikachu is on the case.*

”

ELI NEIBURGER

THE DEEPER GAME OF POKÉMON, OR, HOW THE WORLD'S BIGGEST RPG INADVERTENTLY TEACHES 21ST CENTURY KIDS EVERYTHING THEY NEED TO KNOW

1. Introduction

So, is *Pokémon* really that big of a deal? Yes, it is really that big of a deal. 200 million units sold, only the Plumber is bigger, and even runaway hit franchises like Halo or Madden can only dream of success on this scale. Most of these players are future adults, and the franchise ensnares their little minds with not just the narcotic Japanese adorableness of this little fleet of collectible fluffy ideas, but with a nearly bottomless gameplay, offering young players the opportunity to find out exactly how deep the rabbit hole goes... but almost entirely outside the game world.

While not discounting the masterful management of the property for Nintendo by The *Pokémon* Company, a big part of the enduring appeal is the slowly increasing complexity of the dynamics underneath the relatively simple and fixed surface gameplay, as well as a steady trickle of new creatures and features. Balancing this ever-deepening knowledge space with a front end that remains extremely accessible and inviting is a goal that few franchises attain; part of *Pokémon's* perennial success is due to the fact that each new release is devoured by the hardcore fans as readily as it encourages new fans to take the first step.

Pokémon is so big with so many kids, across its various formats, media, and series, that many adults can't help but look at it as some new hot impenetrable craze that these kids are into, and it snares them so deeply it must be because it's narcotic and nefarious, leading innocent children to commit crimes against culture and tradition such as naming the family dog Squirtle or other atrocities. On the lists of things banned from many elementary school classrooms, along with weapons, drugs, and cell phones, are *Pokémon* cards. While it's understandable that something so much more interesting than the curriculum would get a chilly reception from the teacher, it's an unfortunate perception because *Pokémon* is a powerful learning tool, far deeper and robust as a learning mechanism than the educational technologies normally found in a classroom.

Pokémon teaches some obvious things; one of the most powerful impacts, frequently overlooked by disapproving teachers and librarians, is that *Pokémon* is an outstanding literacy tutor. There are over 200,000 lines of text in a *Pokémon* cartridge and no voice or video; all the multiple layers of information that the players interact with through the game is plain old text, often with vocabulary far beyond grade level and ample opportunities to immediately apply the information gained through text parsing, one of the critical literacy building loops. And unlike the assigned curriculum, *Pokémon* players actually want to read and understand every single line of dialogue that every single player, terminal, or talking signpost says as they never know where critical information will be hidden.

In addition to being such a literacy driver, *Pokémon* is a very positive example of how to compete with grace and sportsmanship, what winning and losing really mean (not much), and how to balance risk and reward. Primarily, engaging in battles against other players risks nothing other than honor; the player's game save is unaffected by either a win or a loss. This sets up a low risk environment so that players are more willing to experiment, take chances, and go for the brass ring, with the option of trying it again and again if need be. Allowing kids to try challenging tasks repeatedly until they find success is not a common experience in today's test-driven schools.

However, the real power of *Pokémon* is that far beyond these benefits, the very fabric and gameplay of the series stretches young minds in exactly the directions they most need to be stretched, and that their 20th-century styled educations barely even poke, as they are required to actively subsume large bodies of abstract knowledge through play and experimentation (supplemented with online resources) and build a ready working knowledge of a complex and hidden set of rules. Most tellingly, the primary learning task of excelling at *Pokémon* is not to memorize as much as you can, but to learn which bits of knowledge you'd better have in your head, and which can safely be stored on the net, in your pocket, at your fingertips. As ubiquitous internet access continues to change our society, this skill, being able to subconsciously determine which facts must be stored onboard and which can be left in our extended knowledge corpus, is likely to become a prerequisite for success in technical work (if it isn't already) and it's safe to say that this is not a focus in most elementary schools.

In addition, the act of learning, researching, and playing *Pokémon* leads to emergent behaviors that take the gameplay far beyond the limits of their tiny screens as kids are drawn to do complex analysis, arrive at consensus, and quickly access the knowledge available in other heads, all while cheering each other on and encouraging originality. Most compellingly, the *Pokémon* world gives kids a model for how science is done by allowing them to participate in a world where

graspable new in-world science is actually being done, theorized, argued about, proven, and documented, among a community where credentials are irrelevant and only reputation and accuracy are prized.

While not every kid plays *Pokémon*, just as it used to be a safe bet that the kid with the Chemistry Set or the Soldering Iron (back when kids were allowed to have things like Chemistry Sets and Soldering Irons) will find a career in science, the kids who are drawn into the bottomless complexity of the *Pokémon* universe are likely the Scientists, Engineers, and Programmers of tomorrow, and the institutions they build to support the dissemination of the new science that happens within their beloved game worlds will set their expectations for how business and science are conducted online as adults for the rest of this century. These are the minds of the future. There's a lot at stake. Fortunately, Pikachu is on the case.

2. Knowledge Spaces

A big part of the reason that *Pokémon* is not very popular with grownups is that our ossified 20th century brains aren't quite up to the task of soaking it all in to the point that true proficiency would require. Of course, we also lack the single-minded enthusiasm of youth that allows a young mind to easily chase each thread of knowledge out to the end and see what else it's tied to along the way. When a kid is getting into *Pokémon*, their first advantage is that they're not immediately cowed by the scope of the gameworld, and their second advantage is that their supple young brains can easily stretch to store the barrage of multilayered knowledge that lies within.

There are so many *Pokémon*, places, objects, people, moves, modifiers, traditions, challenges and rewards, but they all collapse down to an approachable set of good and bad actions in a battle engine that has changed very little over the years of the series. The core of success and failure is the type matchup table, where each of the 17 types of *Pokémon* and attacks combine to determine the efficacy of an attack. Each *Pokémon* has one or two types, and each attack is one type; an attack can have one of 6 levels of efficacy depending on the types of its target. That's a 3-dimensional knowledge matrix with over 4,600 cells, and each of the cells with 1 of 6 potential values; making a space with over 23,000 incorrect possible values and 4,624 correct values. On the surface, the more of this matrix you can hold in your head, the better you will perform in battle. But some type matchups are exceedingly rare, and some never legitimately appear, making some cells of critical importance and some of no importance. The game of learning this table is knowing what you need to know and what is safe to look up if it ever comes up... but then finding that that distinction is irrelevant because you went and retained it all without even trying to.

Of course, this specific knowledge is unlikely to be useful to a player's future career (unless they pursue a *Pokémon* profession), but the ability to handle a dataset of this complexity and dimensionality while accounting for the varying importance of individual values will be a critical skill for a wide range of 21st century careers.

While *Pokémon* players, like all gamers, make a mental map of the game's knowledge space as they play, going beyond the surface of the battle interface and results reveals a deeper world of knowledge that, while almost completely hidden to the casual player, is essential to succeeding against elite players who may have already reached the heady echelons of Middle School. For a beginning *Pokémon* player, being asked "Have you heard of EV training?" is likely to be the first Morpheus moment of their young lives, and if they are intrigued, and curiosity leads them to choose the red pill, they will truly discover how deep the rabbit hole goes.

EV (Effort Value) training determines what a *Pokémon*'s stats will be when it reaches max level 100, meaning that an EV-trained level 100 Charizard will kick the fiery ass of a noob-trained level 100 Charizard. EV training involves picking the XP-earning battles that you expose your *Pokémon* to carefully, and fully understanding the interplay of each *Pokémon*'s mysterious Nature (there are 25 different natures that affect base stats, but also interplay with how a *Pokémon* is treated) to ensure that your *Pokémon* reaches its fullest potential. EV training requires extensive out-of-game recordkeeping as no part of the game's interface reveals anything about the EV progress your protégé may or may not be making. Discovering this arcane but critical knowledge is the first step into a larger world that says to kids, there is more, just beneath the surface, and you can understand it and use it to your advantage; just read this.

Pokémon is also a Global phenomenon (although limited to the types of places where kids have Nintendo handhelds or playing cards in their pockets) and while the wordplay-inspired names of *Pokémon* may be different in other territories, the numbers and many of the terms are international, even transcultural; kids can often play a robust *Pokémon* match even if they have no language in common and their cartridges come from different regions. There are *Pokémon* Wikis in 8 languages that have joined forces to become an Encyclopaediae *Pokémonis*; the English version, Bulbapedia, has over 16,000 articles.

One of the ways that the game world differs from the real world is that it is periodically and unmissably enlarged when a new game comes out. Of course the fans count down the days and hours, but the most inspiring part is the flurry of edits and fora activity as players race to discover the secrets of the new domain, be the first to confirm a rumor, document evidence in support of a theory, or just fill in a detail in the shared knowledge space that somebody missed. It's akin to medicine discovering a new organ to study every 2 years; the resulting explosions of shared theory, evidence, and knowledge are experiences few modern scientists will have had in their disciplines.

Most positively, even a kid who knows they know everything about *Pokémon* knows they don't know everything about *Pokémon*. With experimental conditions easily reproducible, there's little room for Dogma. Either's it's reproducible truth or it's just something somebody said, and with the steady growth of the knowledge space, it's a rare *Pokémon* player who will completely dismiss an assertion made by a fellow player who has proven themselves to be credible. *Pokémon* teaches kids that there is always more to know in a way that fills them with anticipation instead of dread, and it's critical for 21st century minds to feel this way about knowledge.

And the best part is that it's all just a side effect of pursuing the most entertaining, engrossing, satisfying gaming experience possible; these games are not intended to be educational. And thank goodness, because wouldn't that just SUCK? Part of the success is due to the slow reveal of the depth to new players; the player needs to know very little to have success as a beginner. Nobody ever tried *Pokémon* and put it down, saying it was too complex (except for adults). *Pokémon* teaches kids that learning more every day is fun, and that's unfortunately a very rare lesson in the classroom.

3. Knowledge Acquisition

Here's the most telling part of the *Pokémon* player's experience: they learn and apply all this knowledge with not a single lecture, textbook, quiz, project or report card. They learn it because it is challenging, engaging, and immediately actionable. Not even the most dedicated *Pokémon* players study the game; they just play more. Play is study. Our educational systems are built around Play and Study being polar opposites, and you only get the Play when you've slogged through the Study. The amount of information the kids absorb into their little heads in the course of simply playing this game is astounding, especially when you consider how slowly the game itself dribbles out information to make sure a wide range of players can keep up.

This actually helps the knowledge acquisition process along, because most kids rapidly want to know more about the game than the game is ready to reveal, leading more experienced players to be a critical resource without the baggage of a generation leap as looking to experience often requires. That said, no kids sit together and go over each *Pokémon*, with the master patiently reviewing each detail for the noob; instead the knowledge sharing is about what game knowledge is most important to success, directing attention to the less obvious aspects of the game that are key to success, then allowing the newbie to absorb the data as they play, leading up to the moment when the Red and Blue pills are offered.

One of the most striking aspects of *Pokémon* culture is that despite the intense competition, there is no spreading disinformation, no withholding of critical knowledge, and no proprietary ideas. Because the entire world is so meticulously and authoritatively documented on the web, any subterfuge would quickly be discovered at a massive reputational cost to the player. The *Pokémon* ethos makes it very clear that keeping secrets about the world is something that only bad guys do.

As a result, *Pokémon* knowledge is truly social knowledge; it's clear to every player at a tournament that the entire room of players knows much more about *Pokémon* than any single player in the room, and the more quickly questions can flit from head to head, the more quickly the head that contains the answer with a high degree of certainty will be located and tapped.

It's not that there are no tests, no success and no failure for the *Pokémon* player, quite the opposite regardless of whether they're playing the single player campaign or playing against other humans, but the challenges are structured to have very little risk and ample opportunity for learning. Beating a gym leader in the single player campaigns requires the player to learn enough about their style and their *Pokémon* to find a weakness and turn the tide of battle, and they can try it as many times as they need to. It's not that you never forget your first gym battle; you never forget any of your gym battles.

In addition to the gameplay experience, the *Pokémon* web offers such a huge body of text to rely on to extend the social learning, which drives interest in, and understanding of, online research, with a critical awareness of source quality. A forum post is not authoritative, but the community wikis or the writings of Talmudic scholars certainly are, complete with nearly divine, legendary sources that are fabled to have connections on the dev team.

This is important, because the *Pokémon* universe has an almost completely silent creator in The *Pokémon* Company, one that only speaks in marketingese and never says a single thing about the deeper aspects of the game. All that's known about that is the result of player theorization, experimentation, and documentation, often including elaborate tools and reference sources. At the same time, unlike the real world of science, the *Pokémon* universe is solely made of fully readable byte code for players who have the time, the tools, and the desire to examine the very fabric of their universe in its entirety. While only the most dedicated and patient enthusiasts can perceive the universe at this level, they report back volumes about what they discover, with complex analysis of the implications of this knowledge.

4. Knowledge Analysis

Even EV training is just the tip of the iceberg; understanding and applying knowledge about the *Pokémon* battle system is what separates the rookies from the masters. In addition to the authoritative wikis, there are several prominent sites that do detailed analysis on the huge possibility space that a *Pokémon* battle contains to condense the endless options into a set of best practices.

However, exactly how some of this information came into the hands of these scholars is shrouded in mystery and legend. It's believed that Serebii.net, the definitive source on information about EV training, was given some information by the developers, presumably with the expectation that it would be leaked, explored and dissected. There's no analog for this in the real world, unless you count inspiration delivered by Niels Bohr in a dream or the equivalent; a rare flash of insight that allows entire networks of mysteries to be unraveled.

While the leak, if it actually happened, rapidly advanced the science of *Pokémon* training, it's a law of gaming that everything that can be known about a game will eventually be known, inferring that the leak was intended to jumpstart the deeper analysis of the game and give older, more experienced players a whole new way to play the game that they could then evangelize to the little kids who were mystified by their powers.

At the same time, most of the game knowledge space is defined above the surface, in the menus and screens, in such a way that even a casual player can at least understand how much information there is that can be known. This provides an opportunity for players to get in on the act of collecting data, reproducing and verifying experiments, and filling in the well-understood blanks of the items, places, people, shows, and monsters that make up the world.

Nowhere is this clearer than in the flurry of edit activity on the canonical wikis in the months leading up to, and following the release of, a new title in the series. In the 4 months bracketing the Japanese release of *Pokémon Black & White*, the English-language Bulbapedia had (X) edits contributed.

Being a part of this process necessitates a solid understanding of the game knowledge space, external recordkeeping, and an appreciation of wiki etiquette; again, not projects kids of these ages are likely to tackle as part of a school assignment. The scope of the opportunity is made clear by official sources, such as formal announcements of new *Pokémon*, surface gameplay aspects, or advertised new features. Players can then jump in and start filling in the blanks.

Of course, the whole point of this knowledge is to succeed in as many battle situations as possible, and the pursuit of the ideal *Pokémon* team versatility drives deep analysis and optimization, complete with lineup-engineering-specific terminology like “sweeper” and “wall” and such. In addition, like many other games, the *Pokémon* scholars often develop consensus-oriented “tiers” of *Pokémon* to establish the fundamental worth of each *Pokémon*’s individual possibility space.

Succeeding in competitive play essentially requires the extension of the gameplay beyond the DS and onto external tools, both universal, such as EV calculators, and special-purpose, such as Lineup analyzers that draw on agreed-upon measures of *Pokémon*’s versatility.

In addition to these player-created analytical tools, players have also created online battle simulators and battle simulator networks that allow you to enter any starting conditions and lineup to try out your theories using a reverse-engineered battle process that behaves just like the real thing; in essence, a battle modeler, free to download.

Of course, all knowledge has its dark practitioners, and there is a great deal of hacking activity in the *Pokémon* world, complete with players who think that anything goes and others that find it an abhorrent practice. Because hacking devices like the Action Replay are sold at retail, many parents will simply purchase the tools without understanding or really caring what it means for their kids to send an artificially-juiced *Pokémon* into battle against a carefully raised organic free-range specimen.

This touches on the fact that *Pokémon* encourages kids to confront issues of Digital Ethics and the consequences of cheating in a much more nuanced way, thick with implications that their parents do not understand, with the only knowledgeable role models available to model good behavior as a *Pokémon* trainer being their own peers or slightly older posters on fora that no adult ever visits.

In short, it’s safe to assume that when a *Pokémon* player is deciding what move to use next, they’re doing more sophisticated thinking and applying deeper analysis when they’re playing *Pokémon* than they ever do at school.

5. Knowledge Creation

It’s hard to find real-world analogues of the phenomenon that the *Pokémon* world goes through when a new title drops. There have been breakthroughs that open up entirely new realms of science before (something like the double-slit experiment comes to mind) but they don’t usually have countdown timers that allow all the players to clear their schedules and just know that they’ll be researching the new domain of their expertise that month.

While it would normally be a stretch to consider all the text that happens about a popular game, including walkthroughs, tables, and FAQs to be a part of the gameplay, it's hard to separate out the activities that are required to keep the *Pokémon* world fully documented and discretely knowable from the highest levels of the gameplay itself. In fact, around the releases, it's clear that a considerable contingent of serious *Pokémon* players are more interested in being the first to formally document or confirm some new fact than in playing the game itself, making the knowledge creation an extended part of the gameplay of the series, and even another opportunity to attempt to express dominance.

Players understand, of course, that participating in the creation and refinement of reference materials about the game world is an optional activity; but it's clear that consuming the output of the contributors is not optional if you want your *Pokémon* to reach their fullest potential. This tilts the activities that happen outside the game towards a multiplayer model that encourages specialization and recognizes that the battle can only be won if you find your job and do it right. And again, while it may be a stretch to call these activities gameplay, it is clear that the play is happening on two levels; the surface battles with their attacks and items and statuses and winners and losers, and the collective action of the player community to achieve social mastery and grok each title in fullness, no matter how deeply the creators have obfuscated the game's true nature.

Along the way, the players are building tools, calculators, spreadsheets, standardized terminology, and databases that support the knowledge game and make the tools of the trade freely available to all players. The ubiquity of these tools (and of the games themselves) make it much easier for experiments to be reproduced and theories tested. This makes it much, much harder to perpetrate a hoax or spread disinformation in the community because the reputation hit would be so great if a player or site was found to be acting in bad faith. And a higher reputation weight and little room to argue over initial conditions, leads to trust networks growing more quickly because everyone knows that everything is being checked and would be quickly exposed if untrue.

So, as the trust networks expand, less original work needs to be repeated, allowing for greater specialization throughout the community and very short lives for competing theories. While every forum's denizens leap to defend attacks against their expertise, the fact is that a theory that is demonstrably untrue has a brutally short life in the *Pokémon* universe, and it goes without saying that nobody is interested in teaching any controversy.

Like other big titles, the fan consensus becomes a major component of the game, as player-created rankings and analyses make objective judgments about different strategies or lineups, leading players to insist on things like "Uber Bans" to prohibit the most powerful *Pokémon* or setting up Low Tier tournaments, using only the *Pokémon* that the community has judged the weakest to shake things up.

Again, the frequent drops of new titles, combined with an amazingly consistent and meticulously tended-to canon, leads to plenty of opportunity for players to get involved with knowledge creation. Even though not every player participates in this, they all understand that the body of knowledge is player-created, and there's something transformative for you to feel that your most cherished reference tools were created by the collective actions of your peers instead of the deliberate actions of some impenetrable scholarly body. Most tellingly, it's clear that all the print strategy guides are a joke, barely scratching the surface of the game and openly focusing on marketing over knowledge. For this generation, the only things that are printed are ads. At the same time, the player's understanding of the ever-shortening loops between release of game and completion of fan analysis changes expectations about science, knowledge, and collective action in the future.

6. Conclusion

OK, so obviously, this is a bit of a love letter, but there's never been anything as complex as this that kids have been expected to consume for fun. Most adults don't do anything this complex for fun, although lots of them do things this complex for a job. *Pokémon* combines the stats hunger of sports worshippers, the nurturing models of Tamagotchis and their ancestors, the completist drive of the collector, the safe thrill of close, friendly matches with little on the line, and a bottomless rabbit hole of knowledge to make a cocktail that gives players super-powers of retention, recall, analysis and decision-making when consumed.

Not every kid plays it, but tens of millions do, and a great many of them are going to grow up to have technical jobs. It's not that this is the only way that kids can prepare for a 21st century career, but I think you're going to have a pretty hard time, come 2030 or so, finding a scientist (especially in biosciences) who wasn't seriously into *Pokémon* as a kid.

The most amazing thing is that's its all about the gameplay and the game mechanic, on the surface and below, and it's inspiring that making something so complex and demanding should lead to essentially untouchable success in the marketplace. And yet this success makes it a target for controversy and misunderstanding. While school programs struggle to adapt to the 21st century, it's unfortunate that such a powerful framework for learning, that requires research, collaboration, documentation, analysis, understanding of complex systems and development of advanced conceptual frameworks, is being forcibly set aside when it's time to learn. Especially when it provides such a powerful and accessible model for how science is actually done, and the killer combo of no requirement to memorize facts, but a clear advantage in retaining them that leads to low-effort, experiential learning.

Just by pursuing commercial success, The *Pokémon* Company has built a world of knowledge and gameplay that spills over the confines of its tiny platform and rearranges fine young minds for the better, no matter how unreachable they may seem in the midst of a gym battle, and it's likely that just as current scientists have been known to cite Star Wars or Star Trek for getting them inspired about science, scientists of the 21st century will devote entire chapters in their eMemoirs to *Pokémon* and the expanding influence the consuming gameplay had on their formative minds.

“

Final Fantasy XIII argues that no player should be left behind, that no hill should prove impossible to ascend assuming a modicum of critical thinking.

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SIMON FERRARI

Introduction

Final Fantasy has always been a JRPG (Japanese Roleplaying Game) about a group of dynamic, known mathematical values coming together in unexpected ways to tackle a static, unknown mathematical value. The former is the team of player characters, and the latter is the enemy. The major difference between *Final Fantasy XIII* and every past entry in the series is that it harbors no illusion that it is about anything else.¹ *Final Fantasy XIII* is not a story about two worlds, Pulse and Cocoon, standing in opposition. It's a process of blindly ascending hills, hills carefully placed one after the other in a line to make sure that the climber always has what she needs to make it to the top of the next in sequence. And I can tell you, as someone who lived most of his life in the foothills of Appalachia, that *Final Fantasy XIII* is as good as climbing hills gets.

Hills

Randomized encounters can never be as precise as explicitly designing them. Within the history of the *Final Fantasy* series, two constraints are placed on how random encounters work. First, zones in the world or dungeon map are delineated, and only certain enemies can spawn within those zones based on the probabilities of occurrence and volume---in the opening area of the first *Final Fantasy* I might have a fifty percent chance to run into 3-4 goblins, a thirty-five percent chance of two slightly stronger wolves, and a fifteen percent chance of a powerful but solitary nightmare.² Second, these encounters can be limited by the size of the monster relative to the size of the combat screen or zone. Two dragon-type characters might take up enough room on the combat grid (in 2d) or circle (in 3D) to prevent the occurrence of any of other enemy.

Final Fantasy XIII doesn't randomize encounters, and the player sees every threat on the map. Each encounter thus becomes a conscious choice to confront the enemy head on, to sneak up on the enemy for a preemptive strike, or to run past the enemy. What is the value of randomizing encounters over making threats visible on the map? Variety is the spice of virtual life, or so the thinking goes. The two constraints detailed above generate a modestly robust amount of difference. The downside of randomizing is that it becomes harder to account for the player's skill level (in fact, it seems strange that more JRPGs don't attempt to numerically gauge this somewhat intangible property). This means that a system initially set in place to provide variety often ends up creating a grinding experience---one trades the player's time for greater configurability.

“Grind” has become a naughty word in the wake of the Everquest widow problem.³ Some Western roleplaying games have attempted to deal with this problem through adaptive difficulty. But this fix has its own problem: the elimination of any serious challenge to the player. In a Bethesda or BioWare game, enemies simply take longer to kill as the game wears on. The player is never pressured to develop novel strategies or skills. A new time sink appears to replace the old one, and, considering the amount of people who claim to enjoy the gentle massage of the grind, it is unclear where the moral high ground for designers might be. *Final Fantasy XIII* does away with these problems altogether by compelling its players through a tightly designed obstacle course. Its literacy model is not built into the hundreds of tutorial and help screens; rather, it resides in the carefully staged progression of combat encounters.

Final Fantasy XIII's “paradigm” system is a natural combination of the series' earlier “outfit”-based systems in *Final Fantasy V* and *X-2* and the “gambit” system of *XII*. These are the six combat roles, roughly in order of importance: Saboteur (debuffer), Commando (primarily melee), Ravager (primarily magic), Medic (healer), Synergist (buffer), and Sentinel (tank). The player only controls the team lead, while the two other active party members always take the optimal action given the party's current state and known information about the enemy. Magic doesn't cost mana as it does in most games; it is simply an attack type, limited only by the time it takes to charge the action bar. Each party member is good at three roles, so there are around four viable party makeups (a combination of Fang, Lightning, and Hope being the most versatile). There are five slots for paradigms, which the player can customize in between battles. While in battle, the player can execute a “paradigm shift” to any of those five predetermined combinations.

The object of any battle is to “stagger” an enemy. When a Ravager inflicts damage, a yellow stagger bar slowly fills. Filling the bar both increases damage to the enemy and brings it closer to a stagger state, which makes it more vulnerable to afflictions and allows a Commando to launch it into the air (rendering it unable to attack or defend). Saboteurs and Commandos are the most important party members, because the stagger bar actually decreases over time. An attack from either of the two will slow down the speed at which this bar decreases. Many enemies, especially bosses, can only be significantly harmed while staggered. No battles actually require the use of a Sentinel, and the Synergist exists only to speed battles up. Many battles can be won without pausing to heal, but the Medic is almost always required for any key encounter.

Earlier I said *Final Fantasy XIII* is about climbing hills blindly. We're now ready to understand what the two elements of this statement mean. First (“climbing hills”), the carefully staged progression of encounters steadily elevates challenge while teaching the player how to kill each enemy. A level will begin, say, with two soldiers, and then it will add a third soldier to the next encounter. Then the player

will encounter, say, two slimes or a larger enemy such as a behemoth. After these smaller hills have been ascended, the final battle before a checkpoint will combine those enemy types: three soldiers and two slimes, or three slimes and a behemoth, etc. By slowly adding challenges and then combining different types of challenges, the game tests the tipping point where the player has to finally change her dominant strategy and develop a new cycle of paradigm shifts.

Second (“blindly”), every new enemy the player encounters has a data sheet explaining its strengths and weaknesses. This sheet always begins blank. When an enemy uses a special attack, one of its strengths gets entered into the data sheet. As the player damages the enemy with magic and melee, its weaknesses gradually become visible. Filling out the data sheet is vital, because AI teammates act on the best available information. The player can also spend a special, limited resource called “technical points” to use Libra. The player can only ever have five TP, and Libra costs one. These points are also used for summons and to revive the entire team in the event of catastrophic loss. Libra is a shortcut to the natural, gradual discovery process; it automatically tells the player most of the enemy’s weaknesses.

In past *Final Fantasy* games, Libra is a spell just like any other. I can distinctly remember never using it as a child playing *Final Fantasy I-VII*. If an enemy was aquatic, the player would assume that lightning spells worked best. If an enemy had a reflective barrier or can absorb fire damage, the player found that out naturally within the first few rounds of the battle. By making Libra a special ability, by separating it from all other spells, *Final Fantasy XIII* makes an argument about the essence of its system that was probably true of the series all along: the game is a matter of finding an enemy’s weakness and exploiting it. This isn’t a groundbreaking realization, and it isn’t a unique way to build a signature combat system. *Final Fantasy XIII*’s beauty lies not in innovation but in its minimalism, purity, and transparency. It recognizes its genealogy and invites the player to study it.

The purity of *Final Fantasy XIII* cannot be overstated. Absent are many traditions of the genre, such as conversation with NPCs, a world map, and villages to visit. Those subsystems that do remain---treasure hunting, weapon upgrading, and shopping---exist as options to help along players of lesser skill. They stand in for a difficulty slider and for the need to grind. A player who lets the game teach her how it works need not upgrade a single weapon or even open a single treasure chest. Experience points are still important for upgrading basic skills and attributes, but the player doesn’t need to stop at any point to harvest them. Summon spells, a staple of the series, have lost their ability to turn the tides of a battle. Instead, each character in the game must at some point confront the summon beast (called an Eidolon) within. These battles, perhaps the most difficult in the game, serve primarily to teach the player how to think about upcoming boss fights. The Eidolon are depicted as vehicles (horses, airplanes, motorcycles) for player characters within the game, while for the player they are vehicles for more nuanced knowledge about the battle system.

Final Fantasy XIII argues that no player should be left behind, that no hill should prove impossible to ascend assuming a modicum of critical thinking. In order to make good on its dedication to teaching the player, it features incredibly little of what Jesper Juul calls “setback punishment.”⁴ Whenever a player fails a battle, she will emerge with full health right in front of the encounter that felled her. After each battle, the entire party regains full health. Figure 1 shows what *Final Fantasy XIII* (left) feels like compared to *Demon’s Souls*, a game that surprised mainstream players in 2009 with its harsh difficulty curve (right).⁵

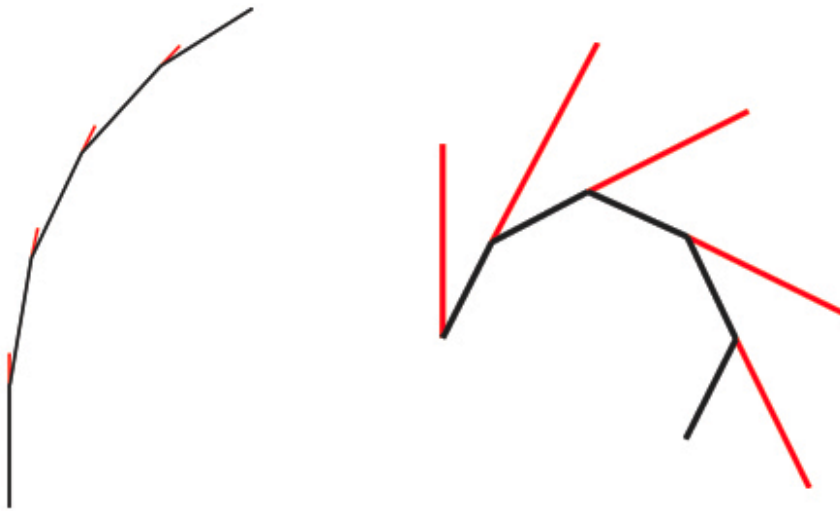


FIGURE 1: How the difficulty curves of *Final Fantasy XIII* (left) and *Demon’s Souls* (right) feel.

Black lines represent progress without death. Red lines indicate time spent on a failed attempt at some segment of the game. *Final Fantasy XIII* proves that “hard” is not “the new good.” Gentle games have just as much to offer us as brutal games do. Difficulty, like everything else about a game, serves a distinct expressive purpose. Painstakingly clawing one’s way up a mountain isn’t “better” than joyously bounding over a hill. The experiences are simply different in their demands and reward structures.

Lines

The first twenty hours of this game ask the player to follow a straight line toward a checkpoint. At intervals of fifty to one hundred paces, a group of enemies awaits. Floating treasure chests are placed after every fourth or fifth group of enemies. This corridor, perhaps the longest unbroken span of narrow, unilinear space in videogame history, makes one realize something that was true of *Final Fantasy*

games all along: we've always been running in a straight line. The decision to explore or not, represented here by the floating chests, has always been a matter of whether or not any given player is the kind of person who welcomes momentary distraction.

It has become increasingly common to see others criticize linear games for their linearity, without any effort to discern what the difference between good and bad linearity might be. An example of engaging linear space is the train-hopping sequence in *Uncharted 2*. The modularity of a train lends itself to constrained difference. The designer of the level has a few binary values to select for any given car: is it open or covered, is it a platforming challenge or a combat challenge (the latter being further divided between assault and stealth), is the arrangement of obstructions symmetrical or asymmetrical, and, if the car is covered, can its roof be reached and traversed?

Once each of these binary values has been determined for the individual car, one must arrange relationships between each car in the string. This creates a rhythm, which can be punctuated by unique scripted events---the helicopter, the "boss," and the heavy gunner on the log. All of this goes into describing what amounts to nothing more than a line, and a line is in no way deprecated by the fact that games can, as computational works, support other lines (and an opportunity for the player to choose between them) if its designers want them to. One of the values of identifying core pleasures of a medium in the first place---agency, immersion, and transformation in Murray's original account---is that the withholding of these pleasures can be used for the purposes of creating challenge, intrigue, variation, or expression.

Once one understands what a good line looks like, it becomes much easier to see why the first twenty hours of *Final Fantasy XIII* constitute a rather boring line---structurally speaking. There is no reason to create obstructions within, or alternate paths through, this space, because interacting with space isn't a value or strength of the JRPG. Environmental puzzles have always felt strange within the genre, especially in games featuring random encounters. Nothing is more tedious than trying to figure out how to shove a boulder from one end of a cavern to another with enemies interrupting every five paces. Golden Sun might be seen as the peak of poor JRPG spatial design, with its absurd reliance on pillar-pushing puzzles and point-and-click adventure guesswork.⁷ In the context of some JRPGs, environmental manipulation makes sense. These are almost always games with such a large cast of playable characters that splitting them into groups for solving interlocking puzzles in key dungeons provides an engaging diversion from standard play.

This works in the case of *Final Fantasy VI*'s Phoenix Cave and final dungeon.⁸ The encounter rate on enemies was low enough, and the cast massive enough, that dividing the heroes into three parties to solve puzzles made sense. There was also

a limited variety of puzzles that changed things up without being too confusing: the player could either push a pillar or pull a switch, which might trigger the shifting of a platform or the dispersal of lava. The same party-dividing conceit doesn't work in the more contemporary *Lost Odyssey*, which features a smaller cast, only two party-dividing and puzzle-solving dungeons, and only has one puzzle type, which we might call "push the transporter over the cliff."⁹ *Final Fantasy XIII* features a small cast of characters; it splits the party up for a while, but the player can't switch back and forth between them; thus, environmental puzzles have no place in the game.

Final Fantasy XIII was released in Japan at around the same time that *Mass Effect 2* was released worldwide. It should come as no surprise that both of these series transitioned from previously multilinear level designs to these unilinear, non-interactive corridors. For years, the makers of this kind of game were told that they needed to embrace the computer's ability to produce nonlinear game spaces. "Open" worlds of various quality proliferated, and players received hours and hours of "content" defined by the exploration of structureless, monotonous space. Everyone quickly realized that, perhaps, not every genre needs to maximize every affordance of the digital medium. This particular brand of stat-crunching, combat-focused game works just as well in a corridor as it does in a sandbox. It is also possible that many designers weren't ready to leave the comfort of the line; designing a nonlinear space demands knowledge of the line in much the same way that abstract painting demands knowledge of representation.

And that's the realization that the designers at BioWare ended with when they sat down to design *Mass Effect 2*—stripping away its "open world" hub spaces and replacing it with a number of smaller, more distinct portals to linear missions.¹⁰ The designers of *Final Fantasy XIII*, on the other hand, took the realization one step further: the shape of their game spaces could be used as spatial allegories. In the melodrama tacked onto this brilliant game about blindly ascending hills, two worlds (and the two factions of demigods ruling over them) called Cocoon and Pulse exist in perfect opposition. Cocoon, ruled over by the Fal'cie of the Sanctum, is a bounded sphere where humans are simultaneously provided for and controlled in every conceivable way. Hannah Arendt would identify it as the ideal centripetal totalitarian state, one in which the government controls a populace by dominating rather than destroying its public space.¹¹

Pulse exists outside Cocoon, or below it, or around it—exactly what their spatial relationship to each other might be is vague, but Cocoon appears to be some sort of moon orbiting the planet of Pulse. The Pulse Fal'cie determined that their world would be a *laissez-faire* one. It is simultaneously beautiful and deadly, a place where human civilization collapsed while demigods and beasts roam free. Pulse's absolute freedom, though, is a farce. The Fal'cie of Pulse exert a centrifugal totalitarian control, the manipulation of their human servants through the destruction

of a shared public space. In the minds of Square Enix's English localization team, this world connoted Australia. They probably did this because of Pulse's geography, natural beauty, and extreme wildlife. By doing so, they happened to connect the divine management of Pulse to the troubled history of British imperialism. Fang's and Vanille's brands become convict stains.

This story of two worlds is overwrought. One can only be thankful that it is only half-delivered by *Final Fantasy XIII's* myriad cutscenes. The other half of the story must be gleaned from information files generated after each cutscene. Or, if the player is smart, it can all be ignored; every cutscene can be skipped, every data file left unread. Grasping the conflict between Cocoon and Pulse requires neither video nor text, because their respective spaces structure play in a way that lets us experience the difference between them firsthand.

Reviewers of *Final Fantasy XIII* remarked that the game "gets better" or "truly begins to shine" when the player hits the 20-hour mark. That's when the player transitions from Cocoon to Pulse. We trade a series of stifling hallways for a wide, open world driven by the kind of hunting quests that dominated *Final Fantasy XII*. In Pulse, it is somewhat difficult to find one's way to a definite goal. Many enemies will instantly kill the player's team on being engaged. The literacy model carefully constructed throughout the first half of the game flies out the window. Instead the player is left to fend for herself, to pick her battles and hope for the best. She has left a world where everything a human needs is provided by divine stewards, entering another where the demigods have decided to let natural selection reign. Figure 2 is a phenomenological map of the spatial difference between the two.

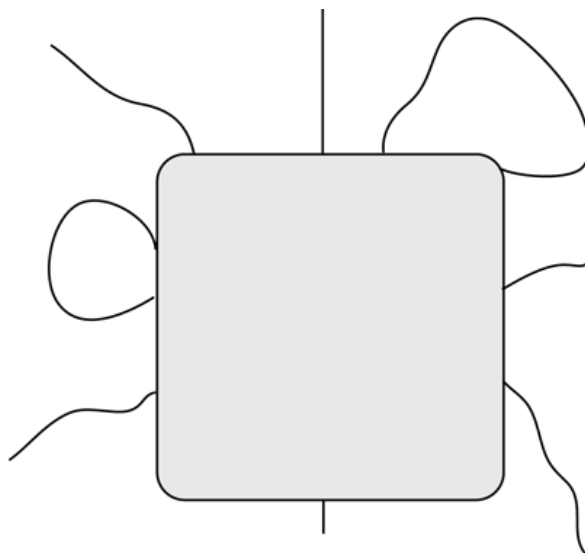


FIGURE 2: Spaces of Cocoon (left) and Pulse (right).

One can forgive reviewers for not understanding how carefully the distinction between the two worlds has been constructed. We are, after all, trained to make judgments about a game world from its story. In the case of the *Final Fantasy* series, we've come to expect this story to be delivered through elaborate cutscenes. And the cutscenes in *Final Fantasy XIII* tell players little about these two worlds. We might ask a negative reviewer: "How would you, without words, convey the feeling of living one's entire life on a string?" We can accept that it isn't necessarily fun to be forced to endure twenty hours of running in a straight line just to have a fairly simple truth bestowed upon us, but deep play demands deep structure. That so many have complained about the game's linearity is a sure sign of the design's success. Life in Cocoon is something worth complaining about.

Notes on method:

This critique is my first effort to use the framework developed in my Master's thesis, "The Judgement of Procedural Rhetoric." It contends that Ian Bogost's theory of procedural rhetoric describes the primary meaning-making structure of games—that a game uniquely makes an argument or expression through rules alone—while diverging from Bogost's formulation of the notion in two significant ways.¹² First, I argue that the construction of space has largely been misunderstood as a layer

of contextual information rather than a set of spatial, ludic rules.¹³ Second, that procedural rhetoric takes place not only from a designer's perspective—where one attempts to drive players toward a desired experience or argument—but also from the player's perspective. A critical player, armed with the proper analytic method, can articulate which rules mean what to her while ignoring others as personally non-meaningful.¹⁴

The method set forth in my thesis assumes that the non-meaningful rules of a game derive from its genre substrate. These generic rules are a form of literacy that serve to integrate players into a game's core mechanical loop. Designers can push new aesthetic experiences to players by incorporating new rules and spatial structures into play, subverting conventions and inspiring a player's reflection on divergence from the genre. My introductory example of this principle comes from the Call of Duty series, where infinite enemy respawns limited by a trigger point convey the futility of "eliminating" enemy numbers: enemies spawn continuously into a space until a pre-defined boundary is passed, at which point a new set of respawn locations perpetuates the experience of constant threat.¹⁵ This rule constitutes a significant divergence from the genre of run-and-gun shooters.

We can also separate a game's rules into material and conventional constraints. In an analog game, most constraints are conventional. They are enforced by the play community, and they afford both cheating and spoil-sporting as described by Huizinga.¹⁶ A videogame, on the other hand, is composed primarily of material constraints. One cannot change the numerical values and algorithms structuring its play experience without resorting to hacking or modding, which are meta-gaming practices quite different and more technically involved than traditional cheating. Some of the only conventional constraints that persist for a videogame are endgame goals: from speedrunning, to iron-manning, to generally deciding when a play experience is sufficient and complete.

I would argue that my analytic method uniquely suits two implicit goals of the Well-Played series: that some exceptional games demand close readings, and that these close readings are demonstrably unique for all possible players. For instance, in my reading of *Final Fantasy XIII*, I purposefully avoided two significant portions of the game that lend themselves to generic play. In the case of *FFXIII*'s genre, these conventional sections imply grinding. Both the middle portion of the game and its post-story play experience afford grinding for achieving the side goal of hunting enemies of difficulty greater than those found in the main mission. I would describe these, in my geographical analogy, as mires dotting the hills and lines of my phenomenological experience.

My *Final Fantasy XIII* is a game about numbers. It asks me to blindly ascend a sequence of hills, in a line, up until the point where it sets me free. It does so for the expressive purpose of make me experience firsthand the difference between total determination and complete freedom. *Final Fantasy XIII* teaches me how to gauge the strengths and weakness of each type of enemy, then it asks me to adapt to various arrangements of different kinds of enemies. It argues that the *Final Fantasy* series has always been about this sensing process, the conflict between known, dynamic numerical values (the heroes) and a single, static number (the enemy). *Final Fantasy XIII* is a game that eschews grinding, adaptive difficulty, and a difficulty slider. Instead, it argues that the traditional subsystems of treasure hunting, weapon upgrading, and shopping should exist only to help players with lesser skill. Anyone who lets the game teach her how it works needs none of these. Its possibility space is narrow, as much a series of puzzles as it is a game. But it's a good series of puzzles.

“

*The Alice of this game
is older than the character
in the novels, and has
suffered much tragedy
in her life.*

”

MATTHEW SAKEY

AND IF YOU GO CHASING RABBITS THE INNER DEMONS OF AMERICAN MCGEE'S ALICE

In 1884, Sarah Winchester – heir to the Winchester Firearms fortune – undertook a most peculiar construction project. She had been advised by a medium that her family was haunted by the spirits of those killed by Winchester guns, and in order to keep the angry ghosts at bay, she must build a house... and never stop building it. As such construction on the Winchester House went on 24 hours a day without interruption until Sarah Winchester died in 1922. It followed no strict plan and is full of meandering corridors, sudden dead ends, irrelevant wings and unexpected places.¹⁷

The Winchester House is an excellent allegory for the human mind, which also rarely follows a predictable pattern of growth, and evolves throughout our lifetimes. Everyone's mental Winchester House is their own, and only they know intimately the vast grounds, labyrinthine corridors, and layout of rooms. As individuals, we know our way around our own imaginations, recognizing the "good" and "bad" places, where we keep our dreams and thoughts and fears. And amongst the bright and airy, the well-lit and pleasant, there are without exception places in the human mind that are dark and dangerous, where terrible things go on. No matter how saintly a person may be, even they have cruel, deviant, monstrous playgrounds deep in the landscape of their imaginations. The mind is private. Unless willingly shared, no one can ever truly know what is going on in someone else's head. Most people only ever reveal surface thoughts, keeping the gates to the deep parts of their psyches closed and locked.

If you were granted an all-access pass to the mind of another person, you'd be horrified – just as that other person would be horrified to see the full activity of your mind. Consider all the terrible thoughts you think in the course of even a single day.

The casual cruelties you never verbalize, the vicious, inappropriate, shocking things you think about other people... people you've just met, people you love, people you hate, people you've known for decades. The alligator thoughts of despising the person ahead of you in the grocery checkout because he's arguing with the cashier over a thirty cent coupon, the flare of hatred for a person driving too slowly on the expressway. The sudden, instinctive emotional response upon seeing someone. Reflect on some of the sexual thoughts you've had but never revealed. From fantasies of "oh Hell yeah" (or Hell no) to reactions to strangers, to elaborately planned and imagined carnalities suitable for the *120 Days of Sodom*.¹⁸ The Marquis de Sade was less unique in his thoughts than in that he chose to share them. Yes, our own individual minds contain and generate shocking things regularly, thoughts we would never act on or even vocalize. But they are there.

Each of us is singular unto ourselves, and we know it. The innate interiority of the mental dialogue means that people are perfectly assured sharing their darkness with themselves, but know they need never, ever reveal the darkness to another soul. The mind is the ultimate secure facility, and naturally enough, its darkest aspects: meanness, self-loathing, desire to harm; they take up residence in the darkest corners of the mind.

What if someone lost control of their mind, and became trapped in one of those dark corners, cut off from hope, from joy, from optimism, from the positive fountains and playgrounds in the imagination's architecture?

While plenty of games put you "in" a character's head in the casual sense, very few have ever actually put you in someone's head in the more literal way. *Psychonauts*¹⁹ comes to mind; as a psychic detective trainee, you spend much of the game exploring other people's imaginations, which are by turns hilarious and shocking. *American McGee's Alice*²⁰ is another. This towering, underappreciated masterpiece of character-driven narrative went largely misunderstood by gamers and outsiders alike. People shortsightedly saw *Alice* as a twitch title, a third-person platformer with odd visuals, heavy on moodiness and lacking in depth. But the jumping puzzle-based play and lavish Quake 3 powered graphics were just a gilded and occasionally frustrating frame to the game's true strengths.

Beware the Jubjub Bird, and Shun the Frumious Bandersnatch

Set entirely in the catatonic mind of the former Wonderland explorer,^{21,22} now teenaged and institutionalized, *Alice* guides us through the deepest corners of a sexually maturing girl's imaginings. *Alice* is a patchwork nightmare that illuminates in rich strokes the precarious constitution of sanity and the secret shape of guilt. Like some of the great novels, it is a story about regret, estrangement and tragedy;

with the added layer of interactivity allowing the player to experience these emotions as no reader can. Hers is a mind consumed by misery and doubt, by natural hormones and unnatural self-hatred, where impish companions of the past manifest in adolescence as horrifying allegories of guilt and loss. Alice's old friends have reinvented themselves within her mind, using memories and traumas as grist from which their identities spring. From a deeply disturbed Cheshire Cat to a terrifying clockwork Jabberwock, they are now ghoulish, dementia-fueled metaphors for everything Alice has ever done wrong, everything she hates most about herself, and everything that drove her to madness.

Thematically, *Alice* existed on a whole other level than most games, particularly from what we tended to see in 2001. If you think gravel-voiced space marines with biceps like Christmas hams are commonplace now, travel back in time and get a load of the sort of crap we endured back then. Thoughtful, slow-paced shooter/platformers were uncommon to say the least. This was long before the brilliance of *Prince of Persia: The Sands of Time*²³ would reawaken in gamers and developers the knowledge that action-oriented games could be about more than just saving the world and the girl (*Sands of Time*, ironically, is about both of those, but in a very introspective sort of way). *Alice* blazed a trail – while it offered a fair amount of white-knuckled combat action and maddeningly devious jumping puzzles, the game also offered slow, thoughtful experiences in which there was nothing to do but think about Alice and the predicament that got her here, trapped in this madness of her own creation.

The game was unique in other ways as well. *Alice* gave us a protagonist who was female, teenaged, insane, sexually immature, completely unhooked from reality, and very possibly a parricide. Almost no actual background setting up the storyline of *Alice* is provided, aside from a doctor's journal included with the original release. The Alice of this game is older than the character in the novels, and has suffered much tragedy in her life; a fire at her home killed her parents and sister, while she slept upstairs. Her survival and escape are not chronicled, leading inevitably to a slim suspicion: a nagging doubt that maybe Alice herself had set the fire while playing. The possibility of her implication in the death of her family is not actually brought up during the game, but that tiny unscratchable question is there.

That she feels guilt for the deaths of her loved ones is unquestioned – not necessarily because she set the fire, since the game never brings it up – but because she was asleep and unable to help them. One of the game's key villains is quick to point out her culpability in their demise even if she wasn't the one who started the fire. "You were having tea with your friends while they burned," sneers the Jabberwock, its hissing inflection all that's necessary to drill home its cruel point: playing with matches or no, scatterbrained Alice was asleep and dreaming, happily lost in Wonderland, hanging out with the Dormouse and the Rabbit and all her imaginary chums, too much involved in her phantasmagoric tea parties to hear the screams of her real family as they died.

Themes like this pervade *Alice*. The girl is institutionalized after the fire; catatonic, either unable or unwilling to communicate. Her mind is active, but not in this world: rather than being a willing visitor, Alice is now trapped in Wonderland. And Wonderland has become a place quite different than the one she remembers. This Wonderland has gone to the dark corners of Alice's mind. The idyllic croquet games and tea parties are a thing of the past.

The Queen of Hearts has tightened her fist on the realm, enslaving some inhabitants while torturing and murdering others who stand against her. Many of Alice's old playmates – the Mad Hatter, the Duchess, the Tweedles, and plenty of others – have gone over to the Queen's side, while those few who remain to fight for freedom in Wonderland are either enslaved and subject to ghastly experiments, on the run, or disconcertingly changed from their youthful incarnations. Of course, the key to remember here is that Wonderland, even this warped and twisted version of it, exists only in Alice's head. The characters are like this because her mind made them that way; they are the gremlins of her id. The Jabberwock's cruel accusation is, when laid bare, self-reproach.

It begins, as one might imagine, by chasing the White Rabbit down a hole. Mr. Rabbit is definitely in quite a hurry to get somewhere, and Alice is intent on finding him. But navigation in Wonderland, never particularly easy, is even more challenging now because of the Queen's vicious Card Guards and similarly dangerous servants. We later learn that the White Rabbit is trying to lead Alice to the Caterpillar, but can't communicate with her as directly as he'd like. The Caterpillar, yet another transformed character from the novels, in turn has information necessary to destroy the Queen of Hearts, information without which Alice can't possibly hope to repair her shattered mind.

Alice's quest, therefore, is one of both self-redemption and self-healing. Her journey through this dark and terrible Wonderland, and her battles with the Queen's subjects, are part of her own mind's attempt to rebuild itself. Just like dreams often make no sense in a waking context, but are nonetheless necessary for the retention of sanity, *Alice* is rich in symbolism we needn't always understand. The mind is a complex place, and it uses complex imagery and experiences to represent other concepts. Being genuinely, as-if-you-were-awake, lucid in a nightmare (but not realizing it was a dream) would be strange indeed. Even understanding what's going on around you would be a challenge, and safely navigating the experience might border on the impossible. What we recognize as "real" here in the "real" world, the things we take for granted as physical and natural laws; they have no bearing on the world of dreams – which, when all is said and done, Wonderland is.

Thus Alice has to ready herself for a bizarre and surreal journey. Since she's already been to Wonderland she has a general idea what to expect, but this new dark mirror of the place adds a sinister tone that never existed before. She needs to be armed, and she needs allies. As befits a gothic lolita who may have murdered her parents, Alice comes equipped with a bloody butcher knife that she can swing and hurl with deadly efficiency. This weapon is the most important one you'll find throughout the game, though our heroine does come upon other ordnance, almost all of which are toys: jacks, playing cards, a flamingo in croquet mallet form. It's one of the many subtle disjunctions you'll see throughout your adventures in Alice. Children's playthings tend to be the most dangerous items, and places such as schools represent some of the most menacing and hazardous environments. The juxtaposition of youthful follies and very horrible adult concepts such as torture and slavery are part of what make the game so disturbing.

Because Alice is not a child any more. She's a teenager, with all the angst and raging hormones and general confusion associated with that species. But only a sublimely ignorant and insensitive person would see this as some kind of sexual fantasy. Popping Alice into a pair of S&M boots and clipping a skull onto her apron tie do not a sexually appealing character make. Alice's costuming is just the outward manifestation of her inner ghoul. Her clothing and demeanor match the disordered and unhealthy nature of her mind. The game is so adept at conjuring the reality of Wonderland that it's easy to forget that the whole thing is taking place in a mad person's fever dream. The fundamental difference between sane people and insane people is that the former can manage the flow and organization of their thoughts, while the latter are in thrall to the same. So long as the Queen of Hearts rules Wonderland, Alice cannot, and her mind is not under her control. Boots or no, there's nothing sexy about Alice; she is broken and very sick. She's someone players pity and worry for but aren't likely to find attractive.

Another interesting contradiction of *Alice*: typically, mature gamers are going to admire female characters that are strong, independent, and willful. Alice is certainly all of these, but I at least was not attracted to her even from a perspective of camaraderie or identification. She's not the kind of person you want to be around. She's crazy. "Crazy" in movies and TV is often presented as either blindly murderous or funny and inconvenient, but not necessarily all that bad. Real crazy is tragedy and broken families, real crazy is helplessly watching as someone you knew turns into something they aren't; real crazy is self-mutilation and voices and nightmares emerging into reality. Alice is real crazy, not cute crazy, and it's frightening. But because we are in Wonderland, "real crazy" is on the outside, the environments and creatures, rather than internal to her. Alice herself is quite rational in the game, because she's in her mind, and so what we see around us is what quantifies her insanity. Evil queens, enslaved gnomes, Mengele-like experiments performed on

March Hares and Dormice, broken clocks and moving floors. It is her relationships, and how the creatures and places in her mind have changed to reflect her madness, that define the themes of *Alice*.

If You've Gotta Go, Go with a Smile

The most important man in Alice's life is the Cheshire Cat, that grinning feline who told her flat out long ago that she was mad ("How do you know I'm mad?" asked Alice. "You must be," said the Cat, "or you wouldn't have come here")²⁴. He's right, of course, though Alice didn't go mad when Lewis Carroll seemed to think. That came later, and ironically enough, this time around the Cat never bothers (or maybe is too kind) to tell her the truth about her mental state.

The Cheshire Cat is useless throughout Alice's entire adventure. You can summon him for worthless, plauditory suggestions that almost never apply to the challenge at hand ("As knowing where you're going is preferable to being lost, ask"). But he is with her almost until the bitter end; invisible most of the time, appearing only when you summon him to emit one of those pointless lozenges of advice, or in the 'tween mission cutscenes, when he actually has information of some value to dispense.

I admit, during the first of my many playthroughs of *Alice*, this one back in 2001, I was fairly certain the Cheshire Cat would turn out to be a villain. After all, she'd been betrayed by others she'd felt close to. Even the Mad Hatter – never really a friend to Alice in Carroll's stories, but certainly no ally to the Queen of Hearts – quickly turned, as has Tweedledee, Tweedledum, and the entire Red side of the chessboard in Looking Glass Land. But despite his demonic countenance and attitude, despite his almost gleeful ineffectuality, the Cat is indeed your friend, the one friend who survives almost – almost – to the very end of the game. Like a real cat he doesn't actually contribute much besides companionship, but he is a good kitty.

The Cheshire Cat, though, is a remote figure of masculinity, and undefined by his gender. Since he's one of the first creatures Alice encounters on this trip to Wonderland, his startlingly different appearance serves to give both Alice and the player a warning of what's to come ("You've gone rather mangy, Cat," she says, "But your grin's a comfort"). His male-ness is insignificant to Alice's growth; like the creature in the novels, he is nothing but a smile, a talisman rather than a true character. It is only when she loses him that Alice realizes how much he'd meant to her.

Much more interesting from an Alice-as-maturing-teenage-girl perspective is Gryphon, who turns up about midway through the story, needing rescue from one of the Queen's prisons. His role in Alice is as her staunchest, bravest ally, and the one most dedicated to helping her free Wonderland. While the White Rabbit flees,

and the Cheshire Cat vanishes, and the Mock Turtle pleads for help, and Humpty Dumpty does nothing at all, Gryphon fights, he fights right alongside her and is a key player in the uprising against the forces that would keep her mind from being put together again. He is what little remains of her sanity and inherent goodness, returning again and again to save her when she seems doomed. Gryphon is very much the classic white knight of the tale (the actual White Knight, interestingly, doesn't appear in *Alice*, though many of the other White pieces do), and he's idealized by her in a very specific and natural way. Gryphon is bold, righteous, strong, and kind. He's also kind of a bad boy... just on the good side. He has no interest in joining with the Queen.

Teenage girls dig personalities like this, and since Alice is all a mental exercise, Gryphon doesn't need to have any of the flaws or weaknesses that human hero-figures inevitably do. His death at the claws of the Jabberwock is a blow to Alice for many reasons, not least of which because he sacrificed himself to save her; but more significant is the constant realization that the Jabberwock didn't actually kill Gryphon... Alice did. She created Wonderland and the creatures that inhabit it. She created this fearsome monster, this Jabberwock 2.0, with its clockwork innards and its laser beams and its scythe-like talons, and she created a Gryphon too weak to defeat him.

The death of loved ones is, obviously enough, such a pervasive current in *Alice* that by the end it's become the core theme. One by one her friends are cut down, unexpectedly and often quite gruesomely. Alice has little time to grieve when Gryphon falls, because she must immediately deal with the Jabberwock or be killed herself in one of the most challenging boss battles ever coded into a game.

If Gryphon is the fingernails of sanity still holding on, the Jabberwock is the madness that seeks to overtake her mind. The Queen of Hearts, though the final villain and the core of the disease that has inhabited Wonderland, is a distant figure who does not present herself until the endgame. The Jabberwock, meanwhile, torments Alice often, and their final confrontation comes at the perfect moment for him: a moment when Alice has lost her strongest ally and truest friend.

An interesting aspect of all *Alice in Wonderland* and *Through the Looking-Glass* reimaginings is the role – actually even the presence – of the Jabberwock. It figures prominently in most of the movies, cartoons, and television series devoted to Alice, and it figures prominently here. This is ironic because the creature never actually appears in either of Carroll's novels – the Jabberwock is mentioned, briefly, in a nonsense poem Alice reads in *Through the Looking-Glass*,²⁵ but it's not a character in the stories. It has become in modern adaptations Alice's key antagonist, a representation of her fears, of her failures... and most writers get it wrong even trying to use it as symbolism. First and foremost the creature is a Jabberwock, not

a “Jabberwocky;” that’s the name of the poem. Nor are we given to believe (in the novels) that it’s the only one of its kind. In *Through the Looking-Glass*, Alice reads the poem, declares it “pretty” without understanding it,²⁶ and moves on. The fell creatures described therein – the Slithy Toves, the Jabberwock, the Jubjub Bird, the Frumious Bandersnatch – never appear again in the narrative.

American McGee and his design team first deserve credit for bothering to read the books carefully enough to recognize the difference between the title of a poem and the name of a monster (Odyssey/Odysseus); but also for creating a Jabberwock that genuinely matches some of Carroll’s ideas regarding the beast – its “eyes of flame” transformed here into laser beams that rake the landscape, searing anything they touch, for example. Moreover we see the Jabberwock’s inherent cruelty. It does not simply attack Alice; it engages her in several conversations, taunting her about her madness, the loss of her family, and finally the loss of Gryphon. Only when it feels it has tortured her sufficiently does it try to kill her.

You’re Nothing but a Pack of Cards

Alice does defeat the Jabberwock, though, and is granted a moment to sob for Gryphon before the quest again takes the fore. At this point the Queen of Hearts is near, and Alice knows that by destroying her, she will regain control of what’s left of her mind. Still, though, the theme of loss is a crucial one in *Alice*, and the game has not yet stopped handing out defeats.

When the Queen finally manages to off-with-his-head the Cheshire Cat at the doorstep of her palace, it all becomes too much. Alice finally breaks down, lamenting that all who’ve tried to help her have died, and that she must go on alone. This is very Hero’s Journey. I don’t really support overzealous application of Joseph Campbell’s theories²⁷ to game experiences. First of all I think the entire concept of the Hero’s Journey is obvious, lacking subtlety or nuance, and qualifies as the sort of “well duh” knowledge that didn’t really need to be turned into a book to be validated. And I think that in order to validate it, Campbell inserted unnecessary specificity into something that should be much more fluid, creating an almost mathematical set of rules to define what is and is not an acceptable rite of passage for heroic growth. I also don’t like the sexism implicit in much of the monomyth philosophy – stuff like the “woman as temptress” and overall masculine bias of the hero. Heroes can be girls, and girls can be heroes. It works here largely for narratological reasons: like Harry Potter and Luke Skywalker, Alice must eventually face the danger by herself or risk cheapening the victory.

One thing that has always interested me about this game is the presentation of Wonderland as an individual’s private, fully-realized mental space. A dark part of that space, to be sure, but one as real as the streets and buildings of waking

reality. It's a place that Alice can enter, leaving this world behind. Of course, that this leads to tragedy is an important part of the game, but the concept of a completely immersive imaginary world has always appealed to me. Like the Winchester House, Alice's mind didn't grow according to some master architectural plan. Rooms and towers and wings were added as she matured. And one day she found herself locked somewhere inside the very house her mind had built.

That Alice does eventually triumph over her demons and gets released from the asylum is a victory of sorts, but even as she encounters and apparently adopts a stray cat upon exiting the hospital (during the only few seconds of the game that take place in the real world) there's a sense of loss. Alice defeated the Queen and saved Wonderland, but in so doing she had to abandon it and certain aspects of herself. The child locked in a teenager's body has been replaced with a mentally healthy young woman, and the ease with which she was able to shift into imaginary worlds has, with maturity, diminished. The price of that, of course, is the loss of those places and friends she once held dear. Though they always were just figments of her imagination, we get the sense that Alice is unable to resurrect the Cheshire Cat, the White Rabbit, Gryphon, and the others. We get the sense that Wonderland itself may be lost to her. Growing up doesn't necessarily mean that we must sacrifice imagination, but recovering from trauma, such as what Alice experienced, requires that she reinvent herself in a way that demands she let go of certain once-cherished things.

Of course, even as of this writing, *Alice: Madness Returns* has been announced by publisher EA and will likely be available by the time of this essay's publication. Due ten years after the appearance of McGee's first title, he has again been tapped to helm the next. It will be interesting indeed to see whether his team is able to accommodate Alice's healing process in their new game. By defeating her demons, Alice got better. Will new demons arise to recreate Wonderland? Or was Alice so unhinged by her earlier trauma that she never got better at all? Only time will tell.

Feed Your Head

Among its many themes, *Alice* is a rumination on insanity, and on the human capacity to use its own brain in odd ways to recover from terrible experiences. Dissociative disorders, fugue states, catatonia; these are the **In Case Of Emergency Break Glass** last-resort tools that a damaged mind can use to correct its course. Naturally, such tools are dangerous and don't always work, but they're better than nothing. It might be argued that being "driven mad" – versus suffering a documented illness like schizophrenia – is actually like having a fever. When the body is sick, it turns up the furnace to weaken and kill the invader; sometimes it loses control of the thermostat and winds up doing more harm than good. Alice's retreat into Wonderland was just a way to come to grips with the tragedies in her life.

The Wonderland of *Alice* reminds me of a similar concept presented in Sam Kieth's *The Maxx*²⁸ comics, which suggests that everyone has a private mental place called an Outback, literally in the back of your mind where it's safest. You can go to your Outback to hide or recover from traumatic events, though in *The Maxx* it can be dangerous to stay too long. Those who linger in their Outback may have difficulty differentiating it from reality, a risky situation that can lead to all kinds of problems. In both *Alice* and *The Maxx*, these mental shelters are intensely real to their occupants, but bizarre and dreamlike to viewers, which can be off-putting if you go in not knowing what to expect.

It's interesting, but back in 2001 publisher EA kind of expected that *Alice* would be a barrier-breaker for the industry, bringing in nongamers and vastly expanding the medium's playership. I don't know what planet they were on when they came up with this idea; presumably they figured that a tie-in to a popular children's story would be enough to draw grandmas and cheerleaders into gaming. But setting this sort of goal and then handing creation of the game to a mind as blighted as American McGee's is the gameic equivalent of hiring Terry Gilliam to direct a remake of *Winnie-the-Pooh*. If any nongamers did buy *Alice*, they were probably so horrified by what they saw that we've lost them forever.

McGee started at id Software, working on *DOOM* and *Quake*; after his unwilling exit *Alice* became his first post-id project. It was in this game that he firmly established his vision, and, to be blunt, he's been unable to recreate it since. His post-*Alice* work has ranged from merely bad to disastrous, leading many to wonder how much of *Alice*'s brilliance was actually McGee's doing and how much was someone else's. EA's recent announcement that there's to be a sequel at all, and that McGee will be leading it, is surprising, and cause for both ebullient hope and a little concern. Assuming American McGee was the creative steam shovel behind the original game, *Madness Returns* could be all we hope it will be. If he was not, however, it's very possible that the *Alice* sequel comes off more like McGee's famously dreadful²⁹ *Bad Day L.A.* than the rich, moody, and layered experience for which we're all hoping.

Alice stands out in game design as an early attempt to build a character-driven narrative around a true rite of passage, and it succeeds because it is able to effectively evolve the protagonist and weave the mechanics of gameplay into its themes without either one overshadowing the other. Because it did little to engage the player in the narrative, preferring instead to allow the environments and characters to speak for themselves, a lot of people didn't get it, seeing the game as just a fairy tale laced heavily with fear and loathing. To be honest, I sometimes wonder if American McGee and his team saw in *Alice* what the actual game turned out to be: a thing of incredible delicacy and beauty, as much a cautionary tale about the fragility of the soul as it was a piece of entertainment.

“

*At the end, of course,
he finds her. Bawl.*

”

ALICE TAYLOR

LIMBO

Limbo, the game that made me cry.

The game that made me cry: “games that make you cry” is a stone-cold cliché in game circles now, the gauntlet from the olden media that games will never be a true art form until games can make us cry. Why *cry*, game designers ask, per se? Will Wright, eminent games designer and creator of The Sims, wondered out loud what this obsession with crying was about, when games can invoke any number of other emotions that non-interactive media can’t.

Like guilt, in torturing your creature in Black & White.

Maybe film or theatre can make you feel guilt?

What about responsibility? I’ve felt responsibility, as defense in Quake.

Ruefulness, when I probably shouldn’t have blown all my money on

a perfectly-symmetrical train network until I had enough residents in Sim City.

Triumph, in any number of games. Accomplishment, ditto.

But, so, crying.

I cried at the end of *Limbo*. It might be in part because *Limbo* is so hard to play, maybe it was crying with relief: on reading the Wikipedia entry, its creators call the play style “trial and death”. It might be though because I’d done a bit of browsing beforehand, on the run-up to its release, and I already knew that the game was about a little boy searching for his dead sister.

Dead siblings or children always makes me cry. Is his sister really dead, or is it a dream? Actually, we don’t really ever know, but the name of the game suggests perhaps they’re dead. Or she’s dead and he’s not. Such nuance. At the end, of course, he finds her. Bawl.



Limbo is a black and white, side-scrolling, platform puzzler game. Which is to say, it's in light and shadow; you move left and right, you can jump up, down, and hang, and there are puzzles to solve before you can progress.

Puzzles like, how to get past the giant, quite terrifying spider with deadly stabbing legs. How to cross the electrified neon sign in the rain without being electrocuted. How to get across a ravine, by means of a rope swing, when there are open bear traps about. That kind of thing. For every single puzzle, you discover how it works by dying, a lot.

I'm not very good at dying. In all the games I like to play, I like to stay *alive*, to preserve my life and the life of my pals. In *Left 4 Dead* it's all about survival, and do I like to survive, I gravitate towards scenarios of helping people as part of a team, taking part together to survive and overcome. Parties of 5 in *World of Warcraft* where we will toil for 3 hours in a row to take down a creature.

Limbo had me die instantly, pretty much in the opening minute. Twice, three times. I went straight to Twitter: wait, what, why am I dying so much? What on earth, is this supposed to be fun? I'm going for the walkthrough!



There was a mixed response, divided into two camps: those who thought using a walkthrough would mean a diminished sense of accomplishment at the end (undoubtedly true), and those who thought the raised blood pressure, and time constraints of the working day, would mean a walkthrough is the only way to be able to complete a game like *Limbo*.

I went for the walkthrough. I'm short on time, and low on patience: maybe I could learn to use a game like *Limbo* as a form of patience meditation, but – of course - I don't have time for that.

Anyway, I want to get to the end, have some closure, learn what happens to these characters in this world. The walkthrough meant that after three deaths at each puzzle point – and they were mere inches apart in some cases – I probably finished the game after a few solid hours of gameplay. In reality, it was stretched over about a week. *Limbo* week.



Limbo is beautiful.

Haunting, melodious, atmospheric, sweet.

Still somewhat macho too, though, so as not to get too syrupy about it.

The deaths are very brutal. The ragdoll physics of the little boy's body

as he's hurled away by a monster, or cut into pieces by an advancing woodsaw, or snapped into mush by a bear trap. It makes you physically wince.

But then you respawn, and on you go.

What does this teach us? Try, try, try again. Keep trying, failure is simply a learning experience, not the end of the world. But *you* don't progress if you die.

That's true, I'm sure.

I steered the little boy along, past the puzzles. Through inverted gravity, across fields, through forests of giant spiders and humanesque enemies who shot arrows or otherwise attempted to stop my progress.

I was never told why, or who these people might be. Why are they shooting at me? Why did I not give up? Dying over and over is painful; I'm not sure why I didn't give up: probably because I wanted to see what was going to happen at the end, I felt riveted, and I found the whole experience to be gently satisfying, cosy somehow.

Solitary, but that's okay for such a thing, I knew the end was in sight. I knew I was *having a meaningful experience*. Somehow. I noticed the log's shadow is the shape of a wolf's head, and guessed it didn't mean anything but was a simple flourish. I liked that.



Eventually, after a set of particularly awful, world-shifting gravity puzzles, which told me the end had to be near – it couldn't go harder than this, that wouldn't *work* – my little boy burst out through a pane of glass, and landed again in the clearing in the woods where he started. But there's no buried body with flies buzzing here anymore: just a girl with her back to me, picking a flower.

Why are we at the beginning again, where's the buried body, am I even in the same place? She's startled by the crashing, and stiffens, and the game screen goes black. The End.

It's quite a shock, as endings go. I didn't realise I wouldn't be told what happens next, that it was over, and I found myself inhaling sharply, and happy for the little boy – he found his sister! – and having a good, sudden, short cry. What a sweet game! What relief!

But suddenly I also felt somewhat infuriated, who was the girl, was she alive, what did I miss? I certainly didn't get all the achievements or apparently play every corner of the game, my "percentage complete" score – and it measured me against my friends too, in a traditionally challenging way – was 83%. Higher than most, less than some. 83%? But I finished the game? I must have missed something in there.

I started it over again.

In retrospect, I can't say what *Limbo* means, or what it was designed to mean. There's plenty of discussion on the subject across the nets, and a lengthy Wikipedia entry. But I do know well that it meant something to me: I value those two hours of play over many ordinary things, as I appear to remember them very clearly. I tangibly remember the sense of curiosity, the tiptoeing, the fear of the next death. I remember the crying, and I remember it with a sense of peacefulness and accomplishment.

“

As with a classic silent movie, sight gags, slapstick and pratfalls abound.

”

STEPHEN JACOBS

THE NEVERHOOD

A DIFFERENT KIND OF NEVER NEVER LAND

YOU HAD ME AT CLAYMATION

Pity me, for I bear the dreaded Trifecta of Geekdom; obsessions with animation, science-fiction and computer games.

Animation came first, of course. Not just the Warner Brothers of hallowed Saturday mornings and the inevitable Rudolph and other Christmas puppets, but anything animatronic; display window shoemaker elves, dead presidents chattering away in Disneyland, you name it. In the 90's, I almost completed an MFA in computer animation, but that's another tale for another time

Science-Fiction came soon after, with vivid memories of getting to stay up late on a road trip to watch the "Spock's Brain" episode and getting "I, Robot" from the book rack in the hotel to read. I was about eight then and this vice led to years in high school working at the long defunct "Chaos Unlimited" used SF and Mystery bookstore in DC. The proprietor was the boyfriend of one of my physics teacher's Dungeons and Dragons buddies. We high school lab assistants played this middle-aged posse of educators and Interpol agents (I did say DC, right) in church basement campaigns on weekend evenings (just get's worse, doesn't it?).

Computers entered my life, as a middle-schooler in the 70s, as tools for communication. As I was stunningly dysgraphic (think of dyslexia for handwriting.) My mother of blessed memory typed all my homework for me until the Apple IIe arrived in my home with a word processor. (Those of you who missed typewriters, correction tape and fluid, and the pure hell of retyping the same damn thing over and over again for a clean copy of a final draft have no idea of how blessed you are.) Computer games came immediately afterward. Particularly story-based adventure games, since games at that time tended to be two polar opposites; long text-adventures with deep story or simpler space, arcade and platform type games. The latter were less popular with me as they generally required better hand-eye coordination than your average dysgraphic had.

So decades later, when Dreamworks Interactive released an adventure game set in an alternate universe built entirely in clay and animated via traditional stop-motion techniques, there was no way I could pass it by. I had to have *The Neverhood* (sometimes also written as *NeverhoOd* but *TNH* from hereon)

Outstanding in its Klayfield

TNH was, and is, a critical standout in the history of the adventure game genre. [IGN](#) gave it a 10, [Moby Games'](#) Moby Rank (an aggregation and average of numerous reviews) is 85/100 and the player community gives it a 4.1 out of 5.

TNH's design and gameplay are not only classic adventure game, but owe much to *Myst*. While the world of *TNH* is not as empty as the *Myst* island, it's sparsely populated. Like *Myst*, many of the puzzles to be solved involve the player using some control that actually affects something far away. The only indication of an action's result is often a sound effect off in the distance. *TNH's* back story isn't communicated in books, a la *Myst*, but in "video discs" scattered around the island and literally written on the walls in the game.

In *Myst* the game is played in first person perspective, without an avatar. *TNH* has a lead character, Klaymen, who speaks only once in the entire game, and near the end at that. Both games make a lot of use of ambient sound and sound effects, though some places in the world of *TNH* have rich acoustic music playing, rooted in traditional forms like blues and jazz but more surrealistic, matching the look of the game. If a given song has vocals, the lyrics are often difficult to make out, or make no sense at all. It's as if they're sung by the love child of Tom Waits and Leon Redbone who's deep in his cups and scat-singing along to the music.

What *TNH* has in spades over *Myst*, is a sense of humor that doesn't quit. The creative team (also called The Neverhood) was led by Doug TenNapel; a renaissance-man artist and writer. TenNapel's career output spans games, television, graphic novels and film. His creations best-known to gamers are the iconic *Earthworm Jim* games and television show. The look and feel of *TNH* was drawn from a 1988 exhibition of 17 of TenNapel's paintings called "A Beautiful Day in the Neverhood."

TNH came about after TenNapel and his team left Shiny and ended up, according to the "making of" video that comes with the game, pitching Steven Spielberg in his house on a new game. As a result of that pitch session, *TNH* was the first videogame title from Dreamworks Interactive, the joint venture formed between Dreamworks, SKG and Microsoft, with the latter acting as the game's distributor.

Though Klaymen is silent, that doesn't keep *TNH* from being a story-driven game. All 25,000 words of back-story are written into the walls in the Hall of Records; a 38 screen long hallway the player must traverse at one point to collect a video disc. This history on the walls is not crucial to the game, but the one on the video discs is. They tell the story of the current crisis of *TNH*, the one that Klaymen must solve if *TNH* is to survive.

Feats of Klaymen

After a seemingly random opening title sequence (viewing it again after the game is played shows that it actually gives you a first peek at key items in the game) , the first thing we see is a Pepto-Pink clay room with a baby-blue, off-kilter window frame, a lever, a button and a door with a giant mallet suspended above it. A Dixielandish theme plays, full of horns, banjo and tuba. Sleeping on the floor in the corner between the lever and the door is our hero, Klaymen. Klaymen has a white humanoid body with a red duck's beak for a mouth, two vertical slashes for eyes and a brown tuft on his head. He wears a bright red tunic with white ball accents and some small brown shorts. His hands and feet are large and the fingers on his right hand are brown. A click of the mouse pointer, which looks like it's also made of clay, brings the sleepy and loose-limbed Klaymen to his feet. Click again and Klaymen will move in the direction of the click. His basic walk cycle is reminiscent of a "truckin" Robert Crumb character and he comes to a stop with a slightly stomping shuffle.

A press of the button opens the window. Click on the open window and the game's camera shifts from 3rd person to first person POV, something that is a regular feature of *TNH*, as this switch will happen often, especially when you're looking around and navigating a space vs. getting Klaymen to interact with something. When we look out the window, we see a landscape of light and dark green spiraled grass, trees with spindly, twisted brown trunks topped by mushroom-shaped caps or Tootsie-Pop round balls, all in variegated greens, with reddish-brown mesa-colored mountains in the distance.

Pulling the lever once will bring the giant mallet slamming into the blue door panel, denting the heck out of it. Two more pulls blows it off the hinges and Klaymen can make his way into the next room.

The next room is blue with pink accents. Klaymen walks out onto a lofted platform near the ceiling with a ladder to the floor. Suspended from the ceiling are five brass rings suspended by ropes. Underneath the platform is a large, round Avocado-colored plant with maws like a Venus Fly-Trap. Across the room is a door.

Jumping straight off the balcony lands Klaymen into the maws of the plant, which spits him out after a few moments. Klaymen will be battered, bruised and mangled throughout the game, but being made out of clay has its advantages, he just bounces back or reassembles.

In fact, there's only one place in the entire game that Klaymen can die and if that happens the player has to restart the game. At one point Klaymen will need to descend into a drained lake (actually several times, but a player is only likely to do the forbidden act the first time they explore) and will come across the actual drain. It is well marked with three signs that say "Danger! Don't Jump In The Drain! You Will Die! Of course most gamers will do it anyway just to see what happens. Telling what happens would be cheating, but if you're going to try it you'd better save your game first.

Learning that Klaymen is invulnerable (for all intents and purposes) frees you up to explore *TNH* and try anything that comes to mind. This is important when a game is as unusual as this one is, because you'll need to really experiment to prevail.

Walking Klaymen over to the door and pushing the button next to it will get Klaymen punched so hard by a hidden boxing glove on a spring that it knocks him through the air, all rectangular and hard-edged for a moment, before he bounces gently on the floor.

On the floor of the room, Klaymen can jump up and grasp the rings, pulling them down with his weight. Doing so may or may not activate something in the room or elsewhere. The fourth ring from the platform will actually hold the door open, but only as long as Klaymen holds it and his weight counterbalances the door. As soon as he lets go to leave, the door slams shut.

Traveling down the ladder will take Klaymen to a platform under the house with a mailbox and a trash can. Music in *TNH* is localized to places, and many of them have no music in the background. So as we descend the ladder below the house we descend to silence as well. Obvious hints (and less obvious ones) will manifest themselves as letters in the mailbox.

Since, Klaymen awakes newly born, without any knowledge of himself or his world, he (and the player) must rely on the mysterious Willie Trombone. Willie communicates to Klaymen through hints in those letters in the mailbox. (so sometimes if you're stuck you need to trek back home to get your hint) Willie also stars in the 20 video discs scattered throughout the game world. Klaymen will need to collect those video discs and take them to consoles scattered around *TNH* to play back. The videos show Willie in a manner not unlike animated line drawings in clay as he tells story of *TNH*. Though the player may watch them as they are collected, he'll need to watch them again all the way through to collect a crucial game item.

The first letter from Willie is a rather clear hint...

“Dear Klaymen,

Please feed my pet flytrap.

He eats ring food.

I do not.

Love, Willie.”

After reading any letter, the tidy Klaymen will deposit it in the waste bin.

Others letters are less clear, such as...

“Dear Klaymen,

You may have already won two bricks of Klay!!!

Love, Willie”

*This one refers to the video discs you must collect throughout the game,
or perhaps not*

Some are not useful at all...

“Dear Klaymen,

Send this letter to three friends or you will fall ill.

Willie Dewan”

At a later point in the game, Klaymen’s nemesis, the Evil Klog will begin to send him letters as well.

Heading back up the ladder to the house, you can have Klaymen take advantage of the first hint by shoving the plant under the fourth ring. When the ring is pulled down within range, the flytrap will jump up and swallow it, holding the door open for Klaymen to leave.

When Klaymen leaves the house the camera POV shifts and we can look 360 around the environment. The music has stopped and we hear the wind and some spooky environmental sound effects as we pan around the immediate area. It’s a courtyard-like space and across it, and a little to the left from the house where Klaymen was sleeping is the Hall of Records. Entering the Hall kicks us back into third-person perspective. A new musical piece with a deep-voiced singer belting out unintelligible lyrics plays while a large overhead fan squeaks its blades in circles.

On the wall is a slider puzzle with a rune-like character displayed in a jumble. Next to the puzzle is the doorway and there's something on the floor in front of Klaymen. Clicking on that item on the floor (our first video disc) will get Klaymen to walk over to it and pick it up. Once he's got it he'll press one of the balls on his chest, open a hatch door in his torso and pop the item inside. Arranging the sliders in the right sequence to unscramble the rune opens the door.

The next room has a console-like device against the wall, another video disc on the floor and a solid wall with a mouse hole across from the door Klaymen has just walked through. Click on the console and Klaymen will retrieve as many disks from his chest as he's currently holding and insert them into the player. They'll appear under the screen in the order they're meant to play in. These first two are numbers one and two, but as you collect them through the game they won't always be in sequence like these are. There will also be other consoles along the way and any of them can take any of the disks and you can view all of them from any device.

"Um...

Hello!

Me Willie.

Me Willie Trombone!

These disks tell a story. Story about good. Story about bad.

These disks are all that are left of the TRUE story...

True story of the closing of the third age.

Willie know that once you know this truth, then you know what to do.

This, I tell you."

At this point, about 15 minutes into gameplay depending on how quickly you've solved the first puzzles and headed to the House of Records, you've pretty much learned to do most of what needs to be done, without any dry, formulaic training, cuz its just that simple to navigate and interact in *TNH*. You're also likely well-hooked, as I was, though the fun was just beginning. Nor was I alone. Jeffery Adam Young, from PC World, in an interview that was part of the [Video Press Kit from Dreamworks](#) said,

"I put the disk in thinking, oh this is kinda cute, and the intro was good enough. I started playing it and it seemed quirky at first and... uh, I didn't put it down. I played it eight and a half hours* straight. (laughs) I played the entire game in one setting."

Quirky it is. At one point Klaymen will enter a room where the puzzle is solved by building a Klaymen-like effigy made out of Dynamite. And outside of this room is another courtyard, open and with a large-sized, mushroom-shaped, berry bush. Click on the bush and Klaymen will pop a berry into his mouth and chew it with greatly exaggerated facial expressions, swallow it and burp. Second berry, bigger burp. Third berry, a burp that goes on for roughly 2-3 minutes.

Touring around the space will lead Klaymen to a vaguely crab-shaped icon on the wall that reveals some monstrous activity when clicked. More exploration will reveal a jack-in-the-box style music box that plays most of "Pop Goes the Weasel" and then stops just before the final punch-line of the song. There's a brief pause, the sound of large feet charging forward, a basso "Pop Goes The Weasel" staff line plays and a giant green crab-like "Weasel" burst through the wall to chase the Klaymen around the belch-berry bush. A quick application of the dynamite Klaymen effigy saves the day.

Like a silent film comedian, Klaymen's facial expressions, body language and physical movements make him an engaging protagonist. He projects the same kind of innocence and naïveté that a Chaplin or Keaton would to connect to their audience. That the game works as well as it does speaks to the skill of the animation team that brought him and his companions to life. As with a classic silent movie, sight gags, slapstick and pratfalls abound.

As the player progresses through the game, other adventure game staples make their appearance. Teleport booths to get Klaymen from place-to-place, item collection and inventory are at the heart of the game, but the inventory is manageable and items from it apply themselves appropriately, without the player having to puzzle them out. And like the old text adventures, pencil and paper are required. Several puzzles will require code breaking using runes and glyphs so you'll need to write them down, along with the sequence they appear in. In other places you'll come across vials of liquid filled to various levels, or need to listen to, and replicate, sound sequences. Noting these down for future reference can be helpful as well

Other, less traditional challenges and techniques in the game involve Klaymen shrinking and growing like Alice in Wonderland, blowing a hole in a lake with a Howitzer to drain it and motivating a giant, teddy bear loving robot to do his bidding, just to name a few.

The story that eventually emerges from the discs has a familiar, biblical ring to it. Hoborg, a being of infinite power and creativity, creates *TNH* and begins to populate it. Finding it lonely, he decides to create a being that is almost his equal, Klog. But Klog covets Hoborg's crown and the creative powers that it instills in the wearer. He steals it, putting Hoborg in a mystical coma. If *TNH* is to be saved, Klaymen must revive Hoborg and defy Klog. But will he? You'll have to play it through (or watch the youtube walk through video clips) to find out.

TNH and Klaymen, post-release

Though the game was a critical success, it wasn't a financial one, selling 41-42K copies according to several industry sales sources. *TNH* was released in Japan as "Klaymen Klaymen," and the Japanese market responded well enough to spawn some sequels. The first, "Skullmonkeys," a kind-of sequel platformer that takes Klog and Klaymen to another world, was released in 1998 for Sony's PlayStation. It did less well in the states than *TNH* did, but also fared well in Japan, where it, received the appropriate name "Klaymen Klaymen 2." A Japanese only PlayStation game set in *The Neverhood* universe called "Klaymen Gun-Hockey" came after that. It did have some of the *TNH* characters but wasn't a claymation game, nor was it developed by the *TNH* team; instead, it was developed by the Japanese game company Riverhill. The Neverhood, Inc. company, went on to develop the PlayStation game *Boombots*, and Klaymen appeared in it as a secret fighter. After *Boombots*, The Neverhood, Inc. closed up shop.

And yet, *TNH* and Klaymen just won't go quietly into the good night. In 2007, media company Frederator, inc. (best known for the cartoon shows *Fairly Odd Parents* and *Adventure Time*) announced Federator Films in 2007 with a slate of films (as yet unproduced) with *TNH* being one of them. Little more has been heard since (about *TNH*) but Frederator Films announced their first film in production in 2009, a feature length Samurai Jack production, with hints about more to come. IMDB lists the *TNH* film as in production with a 2011 release.

Type "The Neverhood" into YouTube and one of the first videos to come up is a Spore creature version of Klaymen. A fan game, "[Klaymen](#)" was produced in 2008. The soundtrack CD is still [available](#) new for \$20, and the copies of *TNH* can be found on [eBay](#) for \$40-\$100 depending on condition. Recently *TNH* was selected by "Microsoft at Home" as one of "[5 Cool Underrated Games.](#)"

In a landscape full of bloated, bloody action games, copy-cat titles and "financially safe" innovation-challenged game-of-the-movie titles, it's worthy to look back at games like *TNH* that dared to be different. I hope that Frederator Films does get a *TNH* movie out the door and Klaymen, Willie, Hoborg and the rest of the crew will be awakened from their slumber with a new crown on their collective heads.

* While today's hard core gamers often throw a shoe when confronted with games that have less than 30-40 hours of gameplay, in the case of this game one has to remember that it often takes 2-3 years to create 90 minutes of stop motion film. *TNH*'s 50,000 frames calculates out at about an hour of stop-motion animation utilized in the game.

List of links and resources for *The Neverhood*

http://en.wikipedia.org/wiki/The_Neverhood (General Overview)

<http://www.microsoft.com/athome/students/5coolgames.aspx> (recent plug)

<http://www.neverhood.se/olde/nev/index.html> (Archived site for the game)

<http://doo.nomoretangerines.com/nevhood/allabout.htm> (Collected Mail, Hall of Records, maps, etc)

<http://tennapel.com/> Home on the web of *TNH*'s gifted creative lead

<http://www.youtube.com/watch?v=Lt9Kldsjsx&feature=fvw> (Spore Klaymen)

<http://klaymengame.blogspot.com/> (Fan Game, not played by this author so do so at your own risk)

<http://www.youtube.com/watch?v=C1nMoiNw42s&feature=related> ("Making of" video from the game, part #1)

<http://www.youtube.com/watch?v=PXHeCQb7lx0&feature=related> ("Making of" video from the game, part #1)

http://www.archive.org/details/dreamworks_neverhood_1996 (Dreamworks' video press kit for the release)

<http://www.danielamos.com/store/index.html> (On-line store for the Soundtrack)

http://shop.ebay.com/i.html?_trkparms=65%253A12%257C66%253A2%257C39%253A1%257C72%253A4026&_nkw=the+neverhood&_dmpt=Video_Games_Games&_sop=1&_trksid=p3286.c0.m14 (eBay link for *TNH* search)

“

*It wasn't something I
wanted to do. It wasn't
something I intended to do.
It just, happened.
It was a mistake.*

”

JOSÉ P. ZAGAL

HEAVY RAIN – HOW I LEARNED TO TRUST THE DESIGNER

Heavy Rain is a videogame developed by Quantic Dream and originally released for the Playstation 3 platform in 2010. The game, the brainchild of its director David Cage, was described in promotional materials as an interactive drama. The game features four main playable characters who are all involved, in some way or another, in the mystery of the Origami killer: a serial killer whose modus operandi is to kidnap a child during the rainy season and trap them such that they'll drown due to the continued accumulation of rainfall. The children are later found in a remote location with an origami figure in their hands and an orchid on their chest.

Heavy Rain first came to my attention after hearing about how its technological breakthroughs, such as highly realistic facial animation and modeling, would be used to provide an “adult emotional thriller” told “not through cutscenes but directly through the character’s actions: you don’t watch the story, you actually play it” (David Cage as quoted in Edge 2008). According to Cage, in *Heavy Rain* you play “with a story almost in the physical sense, changing it, twisting it, discovering it, making it unique, making it yours” (David Cage as quoted in Chester 2009). I confess I was both excited and skeptical. The game industry is no stranger to marketing and hype, and Cage’s earlier games, *Omikron: The Nomad Soul* and *Fahrenheit*,³⁰ only briefly caught my attention as they seemed to have received a mixture of praise and derision from the press. The idea of a fully realized interactive storyworld represents a sort of holy grail of gaming (e.g. Murray 1997; Crawford 2004) and it is something that David Cage, the game’s director, has arguably been interested in for some time. *Fahrenheit* (Quantic Dream 2005), was noted “for its inventive storytelling and immersive techniques” (Sheffield 2008), and was an attempt to push the boundaries of the medium of videogames by “remaining true to its still-young traditions and sometimes by breaking away from them” (Cage 2006). *Fahrenheit* experimented with new directions for the integration of narratives and interaction previously explored in the now-infamous game genre referred to as interactive movies (Lessard 2009). *Fahrenheit* was a bold experiment hampered, in part, due to the immature implementation of its action sequences and poor story (Cage 2006). Would things be different this time around? Mateas and Stern’s *Façade* (2005) had been released recently to much critical acclaim providing an example of what could be achieved on a shoestring budget. What could be done with a budget and team orders of magnitude greater? Could a fully realized interactive storyworld with mature themes and high production values finally be realized? *Heavy Rain* sounded like an answer to that question.

My nervousness, as I began playing, was unusual. I've certainly been excited, even thrilled, about playing a new game. Never before had I been nervous. Was I complicit in the hype, wanting to believe this game would "blow my mind"? Had I set myself up for an ultimate disappointment? Or, perhaps the worst outcome of them all, would I find the experience unremarkable?

As a games researcher, these are issues I've had to deal with before. What I think a particular game is, and what others seem to say when they talk about it, invariably shapes my understanding of a game. It also affects how I experience them. The questions I bring with me, together with preconceptions, and, of course, the social and cultural context in which the game is created all play a role. The question is what role is it, how do I articulate it, possibly disentangle it, and ensure that I come at the game from multiple angles and perspectives in order to really dig deeply?

Much has been written about the role of the player in creating an experience. Oftentimes that is how we describe games when comparing them to other media. Games are special because you, the audience, participate in the creation of an experience. Similarly, we talk about game design as 2nd order design (e.g. Fullerton, Swain et al. 2004; Salen and Zimmerman 2004). You do not design an interaction, rather you design a system so that someone else has an interaction. This rhetoric places the player in the center, largely disconnected from the designer. How you interact with the game, what you make of it, how it should be experienced, are all placed squarely in the hands of the player. We talk of empowering our audiences via games, of providing agency, personalizing their experiences, and so on. The magic circle, as it were, is only for the players. But is that really the case? In this day and age, we, the players, have an incredible amount of access to the thoughts, feelings, and ideas that game designers have. Their voices, in particular when they talk about their games, shape how we approach them, play them, and also understand them. *Heavy Rain* is no exception. As I will discuss later, *Heavy Rain* also complicates things.

A few months prior to the release of *Heavy Rain*, Cage wrote for a weblog hosted by IGN³¹. His blog covered a variety of topics providing insight into the development process of the game and his fears and concerns regarding the games' reception. More importantly, his blog (together with interviews and articles in other venues and publications) served to craft a contract between the designer and myself, the player. Cage was, sometimes explicitly and other times indirectly, asking me to trust him. Asking me, the player, to let go of my fears, to play along, to suspend my disbelief. To stop being a typical gamer. In return, he would offer an experience unlike any I've had before. Something new, something different.

We often talk about the language of games, about the difficulty of developing this language, of the challenges that people who don't play games face when first playing them, and so on. If we believe the hypothesis that the language we know

shapes how we act, understand and think about the world³², it should hold that being games literate does the same. Games literacy shapes how we think (Gee 2003). In order for this game to work, Cage was asking me to undo that. He seemed to ask that I become games illiterate. What follows is a reflection of the issues I dealt with as a player. These issues highlight some of the things we take for granted about games, and illustrates how *Heavy Rain* challenges them in interesting ways.

Meaningful Choices

As a player, the phrase “meaningful choices” is either a tired cliché or a conundrum. When is a choice in a game meaningful? As players we have become incredibly adept at recognizing the kinds of choices we make in games and the impact we expect these to have on our overall experience. We are well-versed in discriminating and categorizing the choices we are presented with, and then deciding, which choices we want to make, when and how. Thanks to increasingly more effective signposting by game designers, we distinguish between those choices that matter, and those that do not.

As players, we know that not all choices matter in the same way. That is why we distinguish between side-quests and missions that are required for making progress in a game. Similarly, in games in which we collect things, we discriminate between collecting items that are essential (I need the key to open the door), those that are useful (I found some healing potions), and those that are not (I found a collectable sticker, now I just need 4 more to have them all). We understand how some choices may affect gameplay, some may affect a game’s narrative, and also how the choices we might make now, imply a different set of choices available later on. Thanks in part to how gameplay is segmented, we even understand which things can be “undone” and which cannot. When we can go back and redo, and when we can’t. Sometimes we know this explicitly: *Starcraft II*’s campaign mode warns the player when deciding how to spend research points investigating new technologies, that choosing one option will make the other unavailable (Blizzard Entertainment 2010). In other games, such as *Jedi Knight*, the narrative context of the game helps players understand that choosing to join the Dark side of the Force closes the doors to using the Light side powers of the force (LucasArts 1997).

Heavy Rain’s premise is that all choices matter because they affect how the narrative develops and unfolds. As a gamer, surely this cannot be true, but how do I know? Most (if not all), story-driven games are just that, driven by their narratives. The player understands that certain things must occur in order for the story to advance, and that others may or may not occur, because they’re not relevant. *Heavy Rain* upends that, and as a player, I found myself continually second-guessing myself, wondering if I had missed something important or if a seemingly innocuous decision

would have far-reaching effects. In the opening scene of the game, does it matter if I don't look at the bird in its cage or if I choose not to work in my office and goof-off instead?

While the pressure of the uncertainty was initially overwhelming, it ultimately became liberating. I began to assume that everything mattered, somehow, and that I should take care with everything I did in the game, focusing on what I felt was right over what I felt the game's designer may have chosen to be "right". I had to trust the designer. Cage promised that regardless of what I did, the game would move on and provide a coherent, and hopefully compelling, experience.

Action as the driving force

Try as we might to think about games in terms of stories, worlds, and choices, in the end we always end up talking about action. As Crawford has noted, verbs are the vehicle of choice in games. "Whenever we make a choice, we are choosing between verbs. We don't choose between Door #1, Door #2, and Door #3; we choose between *going through* Door #1, *going through* Door #2, and *going through* Door #3" (Crawford 2003). Perhaps more importantly, for the player, one of the pleasures of playing videogames comes from witnessing the tangible results of the actions taken based on the choices we've made. As Murray describes, "agency is the satisfying power to take meaningful action and see the results of our decisions and choices" (pg. 126, Murray 1997). As players, we are keenly aware of the importance of action. Nowadays, we expect to learn how to play a game by experimenting with it directly. We are no longer content to read the manual in order to learn how to play, rather we wonder what each of the buttons does, and what happens when we press them.

Crawford argues that videogames (and interactive storytelling more specifically) are hamstrung by the limited diversity of verbs (actions) used. *Heavy Rain's* director notes how "when you look at most of the games you see today, they are based on patterns, on loops; you always do the same things, whether you shoot, drive, or jump on platforms. They've been based on the same rules for 25 years" (David Cage as quoted in MacDonald 2010). *Heavy Rain* is unusual because, although at any given moment there may be only three or four possible actions available, over the course of the entire game the player can perform hundreds of different actions. Players can "toss a boomerang, rock a baby or stove in heads with a wide selection of electrical appliances. *Heavy Rain* is a point and-click adventure with a massive verb sheet; new actions are as much a twist as the narrative reveals they prompt." (Edge 2010) "Rather than making large choices every hour or so, the game has you

constantly choosing every minute detail of these people's lives. Every action, every step is entirely up to you. Of course, there has to be a finite number of options, but the way Quantic Dream presents them, they can often feel limitless." (Orca 2010)

The combination of the sheer variety of actions and the certainty that, in some way or another, all of them matter, results in an experience that is not only intensely personal, but also meaningful. While it may not matter in the grand scheme of things whether I turned on the radio or not, it matters to me because I made that deliberate choice.

In addition to providing a wide spectrum of actions, *Heavy Rain* does something perhaps more interesting: it highlights how action (or acting) isn't the only driving force or motivator for gameplay. In other words, it creates agency from inaction or non-action. *Heavy Rain* features moments when inaction or passivity, perhaps the anti-thesis of gameplay, is not only a valid choice, but may even be the preferred one. For example, towards the end of the prologue, Ethan can play with his kids out in the yard. One of the activities is a mock fight with toy swords. Success at this fight requires that the player match a series of timed-button presses to prompts that appear on-screen. Doing so correctly results in Ethan either gently hitting his son or successfully blocking his son's attack. In this case, should the player try to do her best and not miss any of the cues, yet soundly defeat the child or, should she purposefully miss some of the cues in order to let Ethan's son win? Sicart, in his description of the virtuous player, describes *achieving* as a virtue "present in those players who compete fairly against the challenges of the game and against other players, respecting social norms and rules, and for whom victory is a desirable state in the game but not the most desirable- for that would be enjoying the game, alone or with others" (Sicart 2009). By Sicart's definition, the virtuous player (and father) should let the son win. However, in order to do so the player must resist the temptation to follow the game's on-screen's directions. The player must decide not to act instead of reacting.

The meaning and agency that results from these non-actions isn't necessarily acknowledged by the game. Rather, it results from the player's interpretation and understanding of who the characters are, and what they should be doing. The third chapter of the game, "Father and Son", takes place two years after the prologue. Jason, Ethan's eldest son, died in a car accident (played earlier). The tragedy has had serious consequences on Ethan's life. Ethan no longer lives in a beautiful house, his marriage has apparently disintegrated, and Ethan, now shabby and unkempt, has failed to deal with his role in his oldest son's death. As its title implies, this chapter focuses on Ethan's current relationship with his surviving son, Shaun. After picking up Shaun at school, Ethan takes him home. A detailed schedule posted on the wall provides a framework for what Ethan should do next: snack, homework, dinner, and bed. Although there is no need to rush through each of the tasks, there really isn't

enough time to look around or explore. Bogost describes the sequence in which Ethan makes dinner for Shaun, “Ethan sits as Shaun eats, his pallid face staring at nothing. Time seems to pass, but the player must end the task by pressing up on the controller to raise Ethan from his chair. The silent time between sitting and standing offers one of the only emotionally powerful moments in the entire game.” (Bogost 2010) This moment of silent contemplation only occurs because the player chooses not to act, to ignore the prompt that appears on the screen. It is a powerful and meaningful moment because of all that is left unsaid. Sticking to Shaun’s schedule is simply going through the motions, what the player wants is for Ethan to somehow repair their relationship. To try something. Shaun’s relationship with Ethan is so awkward and strained that the player desperately seeks a father-and-son moment that provides some hope for the future. “The game would clearly like the player to believe that this chapter will allow the player to alter the game’s narrative based on decisions made on behalf of Ethan.” (Bogost 2010) Perhaps Shaun will warm up to Ethan if he simply accompanies him? Maybe if they both sit on the couch together watching TV? Perhaps if Ethan cuts Shaun some slack with the strict schedule letting him stay up later than usual? All of these moments are examples of consciously choosing to ignore the prompts and instructions on the screen, in order to create meaning for the player from the character’s circumstances. What would a good parent do? Efficiently shuffle his child through a schedule, or try to create time together hoping to recover a relationship that was once close and loving? Inaction in *Heavy Rain* shifts the player’s responsibility from simply choosing the right action from a pre-determined set to one in which the player must additionally contemplate whether or not the set of actions makes sense.

Discomfort and Ambiguity

I felt uncomfortable playing *Heavy Rain*. In and of itself, this isn’t a new thing for me (Zagal 2010). *Heavy Rain* has a fair share of intense and dramatic moments. It features scenes in which the characters are under an incredible amount of stress and tension because of the situation they’re in. It’s hard not to be affected hearing characters sob, cry, moan, or doubt themselves. It’s perhaps harder to understand how, thanks to the game’s novel interface, the discomfort the character’s face is projected upon the player.

In terms of gameplay, the player can interact with the game in several ways³³. These include:

- moving the main character around the environment;
- pressing a button to select different camera viewing angles;

- responding to onscreen cues. Some cues appear suddenly, while others are triggered contextually based on the character's location or current situation. Responding to these cues usually involves pressing buttons, moving the Dualshock controller's right analog stick in a specific manner, or moving the entire motion-sensitive controller in a certain way, or;
- pressing a button to see what thoughts the character is currently having on certain topics or issues (these constantly change throughout the game). Pressing an additional button (depending on the thought selected) allows the player to hear an internal monologue on that thought.

Additionally, some actions may lead to additional actions that also need to be completed. These additional cues are "chained"; they must all be accomplished in order to fully complete the action. The additional onscreen cues appear alongside the earlier ones in the chain. Also, some actions must be executed slowly while others must be completed in a certain time limit. The cues for which buttons must be pressed, which controller actions must be taken, and what thoughts the character currently has, all appear in different places onscreen (e.g. floating around the characters' head, next to an item in the scene).

The interface also provides insight on, and takes account of, the character's emotional state. Having access to the character's thoughts allows the player to better understand what the character is going through, as well as understand what potential options are available. For example, towards the end of the chapter called "Jayden Blues"³⁴, FBI agent Norman Jayden has a panic attack. He mumbles, "Triptocaine... The tube is on the bedside table... All I need is... to take some... and the pain will go away." He continues, "I should resist. This is going to kill me. I know I can resist. I just need to stay in control and do something until it goes away." Four icons float around his head: *Tripto*, *Withdrawal*, *Temptation*, and *Calm down*. From the player's perspective, it is not entirely clear what Jayden will do (or think) if *Temptation* is selected. Will Jayden give in and consume the drug on the bedside table? Will he think something about how hard it is to resist the temptation? Similarly with the environment cues, "the cues make clear what can be interacted with, but not necessarily how". (Edge 2010) If you were an addicted drug addict experiencing withdrawal symptoms, are you sure you'd be able to control your impulses and not give in to the temptation? Furthermore, there is additional pressure on the player because he's not sure what happens if no action is selected, does Jayden break down and consume the drug? Is this something that will happen if the player does not intervene? If so, how much time is there before that happens?

There is an additional complication, when a character is stressed or emotionally affected in some way (e.g. angry, scared, etc.), the floating icons shake, shift, and move around. The effect is unsettling because it makes the icons hard to read and figure out. The challenge the character faces (I'm stressed and I can't think clearly,

what should I do?) is passed on to the player who can't easily figure out what the available options are, making it more likely that she will make a mistake or do something she'll later regret. It makes it harder to make a choice, it is uncomfortable to watch, and because of these things, is ultimately effective in creating meaningful experiences.

Additionally, the shaky icons nicely simulates how, in the heat of the moment, things oftentimes can, and do, go wrong. It also facilitates role-taking by literally forcing the player to suffer as the character is suffering. There is a scene where Norman Jayden and a detective are interrogating a suspect. Things quickly get out of hand and the suspect draws a gun on the detective who in turn yells at Norman to shoot the suspect. Almost immediately, multiple icons appear and begin rapidly circling Norman's head. All of them, except for the one labeled R1 (with no accompanying text) flit in and out of view. This last one simply wobbles next to Jayden's head. It is hard to read what the icons that circle around Jayden's head say. While this happens, the detective continues yell and insist that Jayden shoot the suspect. Under this pressure, it is easy to simply press R1 (e.g. Short 2010). Dawdling while trying to figure out the other options might take too long and the suspect, clearly emotional, might shoot the detective. Pressing R1 results in Jayden firing his weapon, instantly killing the suspect. It is obviously the wrong choice, but it's understandable, perhaps even forgivable, given the dramatic tension of the moment.

I was surprised when I shot the suspect. It wasn't something I wanted to do. It wasn't something I intended to do. It just, happened. It was a mistake. However, by this point in the game I realized that it was a mistake I was willing to live with. Not willing in the sense of, "oh, it doesn't really matter, just move on". I was willing to live with it because it stood for my experience. I had to trust the designer that, yes, it is ok to make a mistake. Don't worry, the game moves on. When I realized that I could trust the designer, I was able to come to terms with my mistake. It made me uncomfortable and I regretted having shot the suspect, but it was meaningful.

Shaky icons aren't the only interesting thing about the game's interface. "During some of the more strenuous tasks, [the player] may need to hold down four or five [buttons] at once, twisting [their] fingers into a knot. It is hard to describe how much more immersive this technique is than a flashing icon in the middle of the screen, or a black bar at the top of the frame listing all your possible choices." (Orca 2010) In this case, an extended action consisting of multiple button presses is chained together in such a way as to physically strain the player who must maintain an awkward and uncomfortable hand position that in some way reflects the discomfort the character is experiencing on the screen.

The idea that a game's designer might choose to intentionally abuse its players has been explored as a way of spotlighting the relation between the player and its designer (Wilson and Sicart 2010). In the case of *Heavy Rain*, however, I argue that it is done to create meaningful experiences. It brings out the difficulty of the actions in the game into the player's realm of experience, thus resulting in a greater sense of personal investment in the game.

Conclusions

Can you have a deep reading after only one play through? In his introduction to this series, Davidson notes how this series consists of multiple "in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game (Davidson 2009)." The series' title, *Well Played*, means two things: looking closely at the experience of playing a game and looking at a game in terms of how well it is designed and developed. I feel that these are both things that I have done in this chapter. However, I cannot ignore whether or not I should have played the game again.

I don't want to play the game again. It's not just about "spoiling the experience" as we understand it when we nostalgically talk about certain games we may have played. I don't want to play the game again because I feel that I will diminish the meaning and value of the game I played. It will make my experience less personal, less unique. Less special. All those things I saw, those things I did, the things that went wrong, my mistakes as well as my triumphs, all of that will mean less to me if I play the game again. I won't be able to ignore the alternatives. I won't be able to avoid peeking behind the curtain to see which choices mattered, how things could have turned out differently, or not. I don't want MY experience to compete with all the other possible experiences I could have had. I don't want to regret how I played, or second guess myself.

This is perhaps *Heavy Rain's* greatest contribution to the medium. As a player, I've been given the choice of replayability: there are probably millions of possible playthroughs. As a player, however, I choose to reject the game's replayability not because the game isn't worth playing, rather because it IS. "I would like people to play it once ... because that's life. Life you can only play once ... I would like people to have this experience that way," explains Cage. "I'm fine with [people reloading saves to avoid bad endings], but the right way to enjoy *Heavy Rain* is really to make one thing because it's going to be your story. It's going to be unique to you. It's really the story you decided to write ... I think playing it several times is also a way to kill the magic of it" (Cage, as quoted in Berghammer 2009).

Once again, the designer was right.

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Fallout 3 becomes a space full of opportunity to explore not only its world, but ourselves and what it means to be human.

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ALEX GAMES

FALLOUT 3: HOW RELATIONSHIP-RELEVANT DECISIONS CRAFT IDENTITIES THAT KEEP BRINGING US BACK TO ENJOY THE HORRORS OF THE NUCLEAR WASTELAND

Whenever I've had a hard day due during my roles as father, husband, or professor, all I need to do to make myself feel better is spend some time admiring the dystopian world of the *Fallout 3* nuclear wasteland. Right after, all I can do is think, yes, things could always be worse!

Indeed *Fallout 3* depicts a reality so grim that it parallels (or should I say is based on) the rich and nightmarish post nuclear catastrophe world depicted in Harlan Ellison's *A Boy and his Dog* or movies with similar themes like *The Day After*, and *Mad Max*. The realities depicted in these works are so harsh that I can remember shuddering at the thought of experiencing the destruction of nature and civilization, as well as the reduction of mankind to an animal-like state.

The horrors associated to fantasies of mass radiation, deformed bodies, charred landscapes, and near starvation, all come to life in this game of the year winner that is so carefully and painstakingly detailed that it undoubtedly deserves the title.

However, what is most remarkable about *Fallout 3* in my opinion, is that even given it's portrayal of a dismal reality, people love to come back again and again to play in it's world. *Fallout* is one of the most successful game franchises of all time, with three instantiations of the game having been released over the past two decades (four if you count *Wasteland*, EA/Interplay's original post-apocalyptic RPG game concept), and the franchise has sold millions of copies worldwide. It would then be reasonable for one to ask, "Why would anyone want to play in such a world, let alone keep coming back to it?"

In this piece, I try to give one of what I believe are many possible answers to this question, given the richness and depth of *Fallout 3*. I do so by reflecting on my experiences playing the game, and on my appreciation of one aspect of it's design

that is so carefully orchestrated that it manages to instill in its players a desire not only to tolerate exploring a world devastated by nuclear war...but to keep coming for the enjoyment it brings to them.

Narrative and Emotional Conflict

I have to admit that though I have been playing and designing games for nearly three decades and have seen nearly everything there is to see under the sun in this medium, playing the *Fallout* series -and *Fallout 3* in particular - I have found myself in a state of emotional conflict so intense that I can't remember any other game theme producing it. In this game, one plays the role of a dweller of an underground vault (Vault 101), a descendant of survivors of a thermonuclear war between the U.S. and China that took place two hundred years before the game begins.

The world of the game depicts an alternate reality to ours, where technology advanced much faster, but society remained stuck in the first half of the twentieth century, creating a world that feels like a future that would have been imagined by a science fiction writer in the fifties. The vault, as one can imagine, feels sterile, enclosed, suffocating. Spaces are small and crowded, and stainless steel illuminated by electric light is the only landscape one can see around. Life in the Vault is controlled by the overseer, a paternalistic and dictatorial character obsessed with controlling every aspect of the orderly life that vault citizens have experienced for two centuries, from their life long jobs, to their very thoughts.

While the earliest game stages introduce you to basic game control elements such as moving your character and picking up objects, the storyline in the game already begins giving you hints as to what the most fundamental play mechanic of the game will be. Just like in the "choose your own adventure" books of the eighties and nineties, *Fallout* follows on a long tradition of computer role-playing games where choices between multiple courses of action, shape the path that the players will follow as they progress through the game. These choices begin with choosing your character's gender, it's appearance, and it's S.P.E.C.I.A.L attributes (an acronym from values representing your character's strength, perception, endurance, charisma, intelligence, agility, and luck), which in conjunction will define the results of different interactions your character will have with the world (e.g. a more agile character will be more dexterous and likely to pick a locked door). Here, you will also learn to interact with game characters by selecting responses to their statements or actions using multiple choices from a branching dialog. One of the most remarkable features of *Fallout 3* however, is that unlike other RPG's, even these very early decisions are framed within social situations involving family and close friends. This begins with the death of your mother at birth, right after you have just finished creating your character, and continues throughout different mini passages that depict your life

during infancy, childhood, adolescence and early adulthood. During these phases, the game narrative takes care to show your father's care towards you, as well as the friendship you have with the overseer's daughter, Amata.

Your interactions with these characters become your earliest experiences with what I consider the most innovative and remarkable aspect in *Fallout 3*, the Karma system. This system works so that every action you take to help or hurt others will subsequently affect their disposition and actions toward you. More importantly perhaps, it will also affect the attitude of that character's "social network" and thus the attitude toward you that characters you may not have even seen before will take. In this way, if you affect a character in a positive way, their friends may also have a positive disposition toward you, and be willing to help you later, or if you hurt the character, they might do the same to you.

For example, during your 10th birthday party, Amata organizes a surprise birthday party for you where a variety of people are invited. In this group are included people like the overseer, people who are friendly to you, such as his wife and Amata, and people who are unfriendly to you, such as Butch, the local bully. When you interact with Butch, he tries to bully you into giving him your birthday present, to which you can respond either by giving it to him, by rejecting to do so, or by playing a trick on him. If you take the first path, he will make fun of you and leave you alone, if you take the second, he will threaten you, and if you take the third, he will challenge you to a fistfight. Should you take this last path, you will have made enemies not only with Butch, but with his gang as well.

Make no mistake, the fact that the game lets you choose your actions in different situations does not mean that *Fallout's* designer will show you a "better" or "worse" way to play the game, as it happens in most other RPG's. Rather, it is precisely the dynamic way in which the virtual world adjusts to your decisions as players that makes the game so interesting and one important aspect to why I believe people keep coming back to it's horrors. Taking an action, whether positive or negative towards a character in such a highly detailed virtual world renders it meaningful in the same way that an action we take in the world is rendered meaningful: through consequence. In *Fallout 3*, consequence is made visible to you in a myriad of modes, from the physical (your character could be maimed, scarred, or even experience mutations), to the social (your character may become famous or infamous, and attract resentment or praise from different groups). In this way the game lets the player enter a highly immersive experience, and in my case, this experience led me to project something about my real identity as a person into the virtual identity that I was playing in the game (a psychological phenomenon that James Paul Gee, in *What Videogames Have to Teach Us About Learning and Literacy*, has called the Projective Identity).

Very commonly, when people talk about immersion in virtual worlds such as the one presented in *Fallout 3*, they tend to place quite an emphasis on the graphic and physical simulation nuances that can be found in them. While I also believe these to be important, the sort of detail and immersion elicited in this game is special because it has less to do with them, and more to do with something as difficult (some would argue more difficult) to accomplish in games: character depth.

Bethesda accomplished this in *Fallout* through an orchestration of many things including physical locations, textures and visual effects, but primarily through a painstakingly detailed and interconnected system of dialog choices through which players explore the content of conversations and interactions different characters in the world of *Fallout*.

In my play experience I found that exploring the virtual world through these interactions, led me to a degree of awareness about the deep implications that a thermonuclear holocaust could have on our human condition in a way that graphics simply can't convey. For in these interactions, one gets to explore the mental life of people for whom the traditional institutional, social, physical, and even mental structures that one would associate with "civilized society" have been obliterated, and new ones are desperately being sought and built from the radioactive ashes. In this way, *Fallout 3* becomes a space full of opportunity to explore not only its world, but ourselves and what it means to be human.

Fallout 3 allows this in many ways, which I think will resonate with different audiences in a variety of manners. Beginning with the simple fact that one could choose to play the game as the most vicious of creatures, dealing with characters in the most selfish and violent manner possible should one wish to do so. In this scenario, the player could mimic a breed of player characters that the game calls raiders, who move around the world attacking the unaware and/or weak, doing all manner of atrocities to them (some of which I will let the kind reader explore on his/her own, for I do not mean to hurt sensibilities), taking what they want from them. And this would be close to the identities that post apocalyptic stories like *A Boy and His Dog* and *Mad Max* have imagined for humans living in such a hellish world.

However, this is not the only way that one can play the game, for there are many other identities that one could develop. And here I am not talking about the well-known role of the hero who, like in numerous other titles, travels around the wasteland saving oppressed people (which can be done). Rather, what is interesting about *Fallout 3* is that it allows one to choose at any moment from a spectrum of possible responses from the civilized to the violent, and in the process to examine some of the deep complexities that underlie human ethics and moral behavior. To explain what I'm describing, I will refer to an experience I had with a part of the game where I was asked by a girl in a town I visited if I could deliver a note to her brother, who was living in a town settled on the top of a ruined freeway. Upon getting there,

I discovered that the few settlers living there were in constant fear of a sinister group called "The Family". In talking to the settlers, one would get the sense that The Family is a group very similar to the raiders, but with a very peculiar custom, they come to towns at night and knock on people's doors. When the unfortunate inhabitants happen to respond to the call, they are taken away and never seen again.

They begged me to help them find one of their groups, a young man, who apparently was taken a few nights before. The young man, by the way, happened to be the person to whom I was supposed to give the note.

Upon accepting the quest, I visited the young man's house, only to find his parents dead inside, the blood drained out of their bodies. Following the trail of The Family led me to encounter a series of sites where I found dead creatures that had suffered the same fate, and this led me to immediately associate the Family with vampires. After searching the area for a long time, I was finally able to find The Family's hideout, and one of the most interesting exchanges with non-player characters I have found in any game.

Upon entering the hideout, I found several characters roaming its underground rooms, as well as several computer terminals with information about them. I learned that they only would come out at night, and look for people in the wasteland on which to feast. This made me think that the young man I was looking for was probably dead, as these monsters would undoubtedly have feasted on him. However, upon talking to The Family members I found, I learned that their leader, Vance, had actually "adopted" them, brought them to live with him, and introduced them to "the ways" of the Family.

I decided to go find this Vance, since I was convinced that, being a vampire, he had probably taken the young man to suck his blood and convert him into a vampire like himself. I was ready for a fight, "knowing", like we all do, that vampires are evil, and wanting to make them pay for what they did to the poor young man and his family. I was completely surprised when I found a well-dressed and well-mannered fellow (at least compared to the rough folk one can commonly find in the wasteland), and was even more surprised at the dialog options I found when I engaged him in conversation. First, he told me that this place, which he called Meresti, was the last bastion of hope for the downtrodden and misunderstood. He claimed he had brought all the people with him in order to save them, and teach them his ways. Not the sort of response I would have expected from a vampire, but I still thought what he said meant he was converting people to vampirism, like him. I confirmed this and felt repulsed when he said: "Men of science would call us cannibals, eaters of human flesh. Society labels us as monsters, demons and the unclean."

At this point, my first dialog choices became available. My first choice would have been to stop him from talking and attacking him. I must admit that I was very tempted to take this choice, since I felt that what these people were doing was terribly wrong. While destroying vampires is an act that I would have normally executed without much thought in any other game, the eloquence with which Vance presented his description compelled me to choose my second option, to give him the benefit of the doubt, and let him continue to learn more information.

What followed completely threw me off, for I did not expect a monster to say this. He said “I think of my teachings as more of an improvement, a way to transcend our cannibalistic nature”, and this sparked something in me that is so purely human, and so powerful that it made me forget that I was talking to a potential enemy: curiosity.

In the dialog that followed, I was given the choice of doing a thought experiment, by saying “If I accept that you’re no longer cannibals, what do I call you?” to which he appeared genuinely surprised, and responded that he found my open mindedness rare and fascinating. He then went on to explain to me that every day, The Family held a ceremony, in which every member had to speak one of the laws. That member was then responsible for remembering that law, and enforcing it upon herself and the others if she wanted to remain in the Family and not go back to living like an animal in the wasteland, for he saw The Family as the last remnant of civilized society. He then said that before telling me more about the young man I was looking for, I had to learn about each one of the laws, and then come back to him, for in this way I would understand what The Family really was.

I must admit that by this point I was fascinated, for I had never considered that a cannibal or a vampire in a game would be presented with such sophisticated a view of himself. But more than this, I was fascinated by the fact that Bethesda would have designed into *Fallout 3* –either deliberately or not, I do not know- a quest that in the real world would have closely mimicked a mini-ethnographic study of the cultural norms of a people. I decided to play along with Vance’s request out of curiosity of the level of depth and sophistication that Bethesda could have given to this code of laws, half expecting it to be a simple set of sentences regurgitating vampire clichés. What I found could not have been more different, as each member told me about his or her respective law, and as a whole I came to realize the sophisticated system of conduct they represented. They were:

**The First Law “Feast not on the flesh; consume only the blood.
This is our strength.**

We do not eat the flesh of those we kill for food. We will only drink of their blood and leave the body intact. The consumption of flesh is filthy and unclean. This action is what causes the humans to treat us like animals. We are not animals, we are The Family.

**The Second Law “Bear not the child; welcome only the exile.
This is our fate.**

Because we carry the stain of our past in our bodies, we can never let it pass to our offspring who would in turn carry out those foul actions beginning the cycle anew. The Family must seek the Wasteland for others of its kind in order to maintain itself. That is our fate.

**The Third Law “Feed not for pleasure; partake only to nourish.
This is our dignity.**

We only kill the humans when we are hungry or when we must defend ourselves, we never hunt for sport or pleasure. We do not prey on children for they are not yet tainted by society’s view of us. The Family will not tolerate murder.

**The Fourth Law “Seek not the sun’s light; embrace only the shadows.
This is our refuge.**

Because we are creatures of the night, we must not set foot in daylight. We move silently across the ground only under the watchful eye of the moon above. At the rising of the sun, we must seek the embrace of the shadows and never again gaze at its brilliance. The Family seeks the dark as its refuge.

**The Fifth Law “Kill not our kindred; slay only the enemy.
This is our justice.**

Above all, no member of The Family will ever take the life of another member without the consent of the current leader. Anyone disobeying this action, the most heinous of all our crimes, will be exiled from this place forever. We must not let our own inner demons cause us to fight amongst ourselves. We number only in the few, and we cannot risk extinction.

A perspective began to form in my head upon learning about these principles. Was this Vance just a cannibalistic lunatic trying to pretend to be some sort of twisted, vampire messiah? And if he wasn’t, what had they done to the young man? Had he brought him and others to indoctrinate them to become like him? I decided to go back and ask him about it, to demand that he release the one I was looking for. Surprisingly, after hearing that I had learned the principles, he said that I was welcome to talk to the young man, that he had never been held against his will, and that if he was isolated from the others it was because he was in a moment of reflection. This was not the answer I expected, since I thought from the beginning that the young man had been taken away.

What happened next made me realize and appreciate the level of sophistication and complexity of the relationship between narrative, dialog, and the social relationship mechanisms in *Fallout 3*. When I reached the young man's room, I found him sitting alone, silent, thinking. I told him who I was and that I had come for him, to take him back home. He responded he didn't want to leave cause he felt so ashamed of what he had done, and that this place was the only one where he felt "normal". I probed further, and he decided to tell me his story, which went something along these lines: Long ago, when he was just a boy, he and his sister had been out in the wasteland tending to their animals, and were being harassed by a scavenger. When Ian tried to stop him, the scavenger pushed him and he hit his head on a rock. At that moment, something powerful came over him; something that had lain dormant inside of him took over. Before he knew it, he had jumped to the assailant's throat and torn his throat open with his teeth. It was all his sister could do to pull him off, and she made him swear they would keep the incident a secret. However, the hunger remained dormant in him, waiting to come out in a cannibalistic frenzy. He was able to control it until his sister decided to leave for another town, and then, one night, the hunger came back, took over him, and he killed his parents.

And here, another decision moment that would shape my projective identity came into play, for at hearing the horrible thing this young man did, conflicting emotions filled my soul. On one hand, the man in front of me had murdered two people who had cared for him. On the other one, the fact that he had come to The Family gave me a realization that not only did he do it purposefully, but that as with many other horrors of the wasteland, he was just a product of the circumstances in which he had grown up, and an unfortunate victim of something he could not control. At this moment, the genius of the design in *Fallout 3* became clear as the light of day to me, for at this moment I could shape not only the future of this young man's identity in the virtual world, but also my own future both in and out of the game, through an awareness of the complexities that underlie the surface of the human condition. In the end, this second perspective touched not my projective identity, but my real one as a person, I felt truly sad for this kid, and decided to give him the note from his sister. In it, he read that she missed him, and wanted him to come back to his town to meet her and be a family once more. The young man, who had come to the colony of vampires to seek shelter in the night, had now found a glimmer of hope, hope of redemption in love.

Is feeling sad for a virtual cannibal proof of the power that *Fallout's* design brings into its play experience? Perhaps some would disagree, and for some others it might be just one more narrative trick used to produce emotions in players. For me, the mixture of storyline, interaction, environments, and episodes like this one, produced an experience of self-reflection and reflection on what it means to be human, and like all great art, allowed me to explore within myself, what lies beneath the surface of the human condition.

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We try to use techniques that are both narrative and interactive to set up and pay off situations that deepen and enrich the world of the game.

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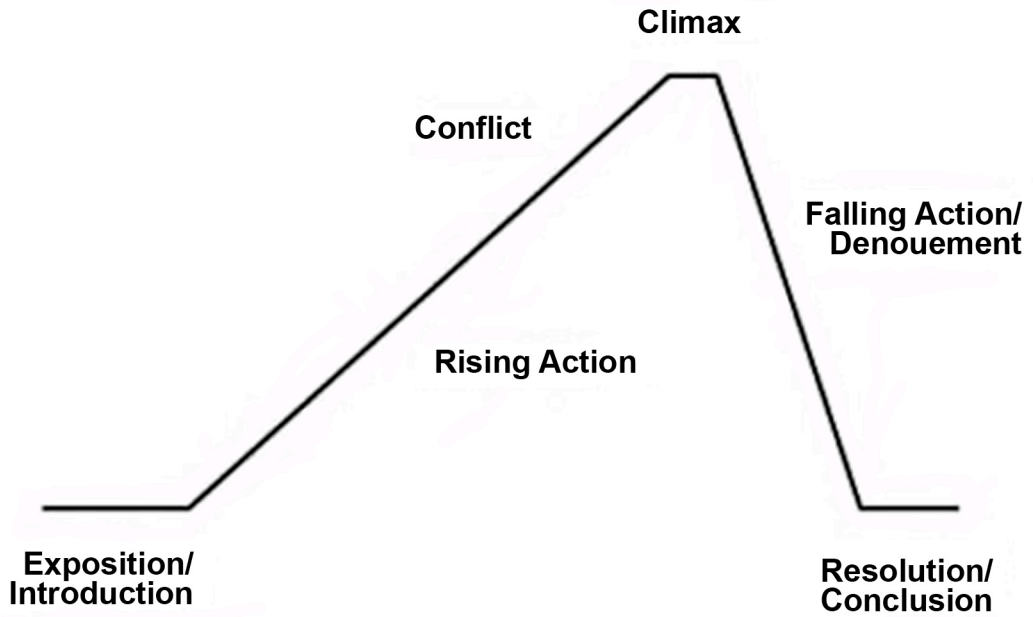
**DREW DAVIDSON
& RICHARD LEMARCHAND**

UNCHARTED 2: AMONG THIEVES - BECOMING A HERO

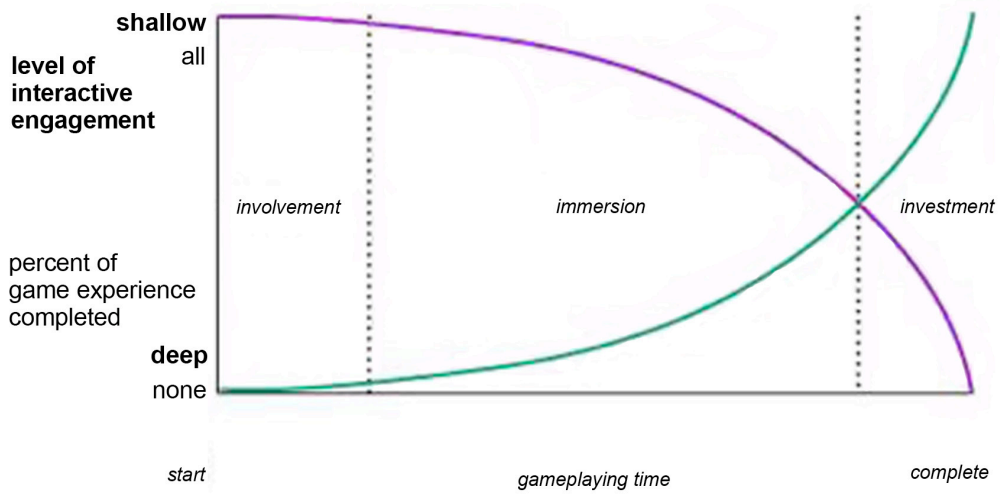
With this essay, we're going to unpack how the design of a game (*Uncharted 2: Among Thieves*) can offer players the chance to explore and learn all the possibilities within the playing experience. In other words, a good game can teach you how to play it through the very act of playing it. And players can develop a literacy of games as they learn through the playing of a variety of games.

With that in mind, Richard Lemarchand (Lead Game Designer at Naughty Dog and Co-Lead Game Designer of *Uncharted 2: Among Thieves*) and I are going to explore the making and playing of the game. We're going to analyze sequences in the 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. With this paper, I wrote a complete first pass unpacking my gameplaying experience (which included some discussions with Richard). Richard then added in his thoughts and responses to my analysis, to which I, in turn, replied. So, the bulk of the paper is from my perspective, but we've called out specific comments from Richard and my replies. Throughout, we've tried to capture the range of dialogue we've had around and about the game.

From a gameplay experience perspective, we're going to walk through how the game design and narrative development unfold. To help track this process, we'll refer to two diagrams. The first diagram used is a classic literary plot diagram.



Using this diagram, we can follow the story of *Uncharted 2* as it develops across key moments in the game. Next, we'll use a diagram illustrating the stages of interactivity.



This interactive diagram was developed in a previous paper (Davidson 2005) and outlines the interactive experience of playing a game. Briefly, the experience is posited to have 3 stages: involvement – being initially introduced into the game; immersion – becoming engaged with the gameplay and the gameworld; and investment – feeling compelled to successfully complete the game. The interactive diagram illustrates these three stages. The x-axis shows the relationship of the time spent playing the game, from start to completion. The y-axis shows both the level of interactive engagement, down from shallow to deep, and the percentage of game experienced, up from none to all.

Comparing the results from both of the above diagrams helps to illustrate the relationship between a game’s story and its gameplay and how they can fit together to create a satisfying and engaging interactive experience. Of course, this approach wouldn’t necessarily be the most apt for analyzing all the different genres and types of games, but we think it works well for *Uncharted 2*.

One method that isn’t directly explored is the procedural, computational nature of how this experience is created. Michael Mateas (2005) and Ian Bogost (2007) have written on the importance of procedural literacy, but for the purposes of this interpretation, the focus is kept more on a gaming literacy (GameLab Institute of Play 2007) and an exploration of the gameplay and narrative. Also, James Paul Gee (2007) has written on thirty-six learning principles associated with games, which illustrate how a game teaches us to play. And in performing this interpretation, Bogost’s (2007) ideas on “unit operations,” as an analytical methodology in which the parts of an experience are viewed as various units that procedurally inter-relate together to create the experience as a whole, are not explicated in detail, but combined with Gee’s ideas of learning principles, inspire an exploration of how the gameplay and story can be seen as learning units of meaning that inter-relate in a variety of ways and lead us to a literacy and mastery through the playing experience (Davidson, Well Played, 2008).

Needless to say, this article is full of spoilers on *Uncharted 2* (and some for the first *Uncharted*) so consider this your fair warning. While it’s not necessary, we encourage you to play the game(s) before you read on. A goal of this article is to help develop and define a literacy of games as well as a sense of their value as an experience. Video games are a complex medium that merits careful interpretation and insightful analysis. By looking closely at a specific video game and the experience of playing it, we hope to clearly show how a game can be well played.

Introduction

Uncharted 2: Among Thieves is the sequel to the hit game, *Uncharted: Drake's Fortune*. Released in the Fall of 2009 for the Sony Playstation 3 (PS3), it garnered critical acclaim (with a 96 MetaCritic score) and many game of the year awards (plus it often came close to sweeping many award shows across all categories). Within the world of the game, it develops on the experiences of the first *Uncharted* as we join the new adventures of Nathan Drake, the player character from both games. For the scope of this paper, we won't delve too deeply into details about the first game, just enough to help explain any events and characters that span both games.

Before we dive into the game in detail, let's start with a more high-level overview. Naughty Dog was known initially for their Crash Bandicoot and Jak & Daxter series of games, and is a subsidiary development studio of Sony Computer Entertainment. As a Sony subsidiary, all their titles are exclusive releases on Sony platforms (currently the PS3). In 2007, they branched out with a new title, *Uncharted: Drake's Fortune*. The game was a 3rd person action-adventure game that drew favorable comparisons to the Tomb Raider video game franchise in terms of gameplay and gameworld, and Raiders of the Lost Ark in terms of story and cinematic presentation, and it was the sleeper hit of 2007. It should be noted that Richard was the lead game designer on both of the *Uncharted* games (sharing lead design with Neil Druckmann on the second).

In *Uncharted: Drake's Fortune*, players play as Nathan (Nate) Drake, a contemporary fortune hunter, and they join in an adventure to find the lost treasure of Sir Francis Drake. This adventure leads to a forgotten island in the Pacific, and Nate and his companions discover clues, secrets, maps and more, that help them unravel the mystery and find the treasure. Gameplay consisted of plenty of combat (hand-to-hand and gunplay) as well as a lot of exploratory platforming as they work their way through the exotic environments.

Uncharted 2: Among Thieves picks up after the events of the first game. Drake is tempted back into this next adventure with a new group of mercenary companions. Characters from the previous game come to play a role in this adventure as well. Unlike the first game, which takes place primarily on one island, this adventure takes Drake to exotic locales all over the world on the search for the legendary Himalayan valley of Shambhala.

Richard Lemarchand: When Drew invited me to add some remarks to a paper he was writing about *Uncharted 2: Among Thieves*, I was immediately interested in having the opportunity to look at the game through a different lens – that of an analytical review. Of course, since *Uncharted 2* was released, my friends at

work and I have been studying the reviews that both critics and fans have written, looking for insight into where we had been successful with the game, and where there was room for improvement.

I have become increasingly interested in game criticism in past years, as my understanding of how film and literary criticism works has expanded, and I now see that a robust professional and academic critical context is an important adjunct to the creative culture that produces games, and that advancement in a form is rarely possible without it. I thought that *Well Played 1.0*, the book that Drew edited and partly authored, offered fresh and interesting takes on the games that it looked at, and I was curious as to what we would uncover if we looked at our game in a new way.

My personal experience of *Uncharted 2* had been intense and rewarding. The game took 22 months to conceive and create, and I was involved in the process from before the beginning, as we began to discuss ideas for a sequel during the closing stages of the first game in the Uncharted series, *Uncharted: Drake's Fortune*.

We had always imagined Uncharted as a series of games, and our contemporary reinvention of pulp adventure tropes gave us lots of potentially rich subject matter. Our decision to push both cinematic gameplay and character-driven storytelling beyond anything seen in videogames before provided many challenges, but also the singularly most rewarding and satisfying game development experience of my career. I'm excited to have an opportunity to share a glimpse behind the scenes of the process in the course of Drew's narrative.

Full Disclosure from Drew Davidson

In case it's not apparent, I should share that Richard and I are friends, and that helped spur the idea for writing this paper together. In the past, I've approached the analysis of a game mostly from my perspective as a player. Although, I recently did an analysis of *World of Goo*, and knowing Kyle Gabler (game designer) enabled me to participate in the beta testing of the game as well as to ask a lot of questions. And last year at Games + Learning + Society 5.0, I did a live play and analysis of 2008's *Prince of Persia* with James Paul Gee and Francois Emery, the lead level designer on the game. Francois and I were introduced by a mutual colleague, and we prepared through email, but we first met the morning of the presentation. The session went very well, with a lot of shared details coming out during the playthrough in front of the crowd. In fact, it led to an invitation to do a similar presentation for the Games + Learning + Society 6.0 Keynote. I thought of asking Richard about doing the keynote together, because I was excited about playing *Uncharted 2*, which in turn has led to our writing this essay.

At the time of this writing, I've only played through *Uncharted* about 1/4 to 1/3 of way through twice now. I started playing it during the winter holidays of 2007, and was enjoying it, but ran into the start of spring semester classes, and had to put it aside, and just didn't get a chance to pick it back up at the time. When *Uncharted 2* came out in 2009, I had the idea that I should go back and revisit the first game before I jumped into the second, but on discussing this with Richard, he encouraged me to play *Uncharted 2* first to enjoy all the new content and gameplay improvements they were able to put into the second game.

Taking Richard's advice, I played through *Uncharted 2* and completed it two times, while also playing some specific sections several times (I have yet to take advantage of the multiplayer gameplay). I then thought about starting the first game over again for the sake of being thorough, but only got a little further along in the game before getting too frustrated with the gameplay controls of the first game as compared to the improved controls of the second game (more on this below). During my playthroughs, I visited GameFAQs from time to time to double check to make sure I didn't miss anything major (although both games are fairly linear in their experience, so this wasn't too much of an issue). Finally, I should note that *Uncharted 2* is one of the rare games that my wife enjoyed watching me play from start to finish, as long as I was playing on the "Easy" setting (and more on this below as well).

Narrative & Gameplay Analysis

Now let's do a close analysis of the game. It's such a large experience, that I'm not going to cover everything that happens in great detail, but I do want to highlight key points and sequences in the game that contributed to the overall experience of playing.

Uncharted 2 starts with a bang that sets the tone for the pacing of the story and gameplay, and how the two are blended in the game through the use of what Naughty Dog calls IGCs (standing for In-Game Cut-scenes). IGCs are intricate moments that combine real-time interactivity (or briefly non-interactive but real-time rendered moments) with techniques from the language of cinema. In a lot of games there are Quick Time Events (QTEs) that are extended interactive cut-scenes in which a player has to press a button at key moments in order to advance through the cut-scene event successfully. Naughty Dog came up with IGCs as a term in order to help emphasize how the in-game cut-scenes in *Uncharted 2* are more seamlessly interactive and integrated into the gameplay than a normal QTE.



In the first moments of *Uncharted 2*, we find ourselves as Drake, coming to consciousness, wounded and bleeding, alone in a train car hanging precariously from a mountain in a roaring blizzard. You then gain control over Drake as you try to climb out of the train to safety. Throughout this initial sequence are several IGCs that help introduce players to a highly polished cinematic perspective meshed with integrated interactive gameplay moments. So you have very short periods where you actually don't have control of Drake, but you watch sudden events happen and then immediately gain control again. In this instance, the action comes to a climax with the train jerking and sliding off the cliff, while you race to get out before it does. You start getting a good sense of how the platforming gameplay works as you jump, swing and climb. Climbing out of the train gives you a good introduction to all the platforming mechanics. You work your way up and out, climbing the interior and exterior as stuff falls on you, handholds break, and you finally make a leaping run onto solid ground as the train goes crashing away below you.

Drake then loses consciousness, and this leads to a more traditional and extended flashback cut-scene that you get to watch. In this scene, Drake is at a beach bar and is met by an old acquaintance, Harry Flynn, along with a femme fatale, Chloe

Frazer. They have a job (presumably the reason Drake is currently unconscious on a snowy mountainside) and they want to rope Drake into joining them. This job has something to do with some lost treasure related to Marco Polo and his travels, and Drake is uniquely qualified as he is the only person to have pulled off this particular heist. Drake resists at first, but slowly gets tempted into helping out, the scene ends with them toasting to the adventure, and Drake saying, “What could possibly go wrong?”

Richard Lemarchand: I was glad to see your remark, that the job that Chloe and Flynn are offering in Drake is presumably the reason that he’s now passed out in the snow in the Himalayas, because that was exactly the kind of thing we wanted the player to think during the cutscene.

By showing Drake in a dangerous situation and an inhospitable environment at the very start of the game, our normally empathetic, curious audience starts to ask how Drake came to be in such a situation – even if they’ve never seen him before. By making our flashback cutscene start to tell the story of a chain of events that might lead to Drake’s disastrous circumstances, we naturally grab and hold our audience’s attention, right from the very beginning of the game.

This definitely worked on me as a player, as I was instantly drawn into the action (and what the heck has happened?). What could go wrong indeed. You wake up in control of Drake again, back on the icy cliffs in the middle of a blizzard. And now you get your first sense of the combat gameplay. Like the climb out of the train, this section of gameplay briefly introduces you to the combat mechanics as you get a sense of how to use various weapons that are strewn all around in the wreckage of the rest of the train along with some soldiers who appear to be after Drake. As you work your way through the wreckage from carriage to carriage, there are also explosions that rock you around, and Drake loses consciousness again.



Which cues up another cutscene that you get to watch. This one shows Drake and Chloe together. There are hints that Flynn is actually onto something real, and there seems to be a love triangle brewing, and some trust issues amongst the three of them. The scene ends with Drake regaining consciousness on the icy mountainside.

RL: In fact, as Drake regains consciousness we seized the opportunity to add an interactive moment. When control returns to the player after the cutscene, Drake appears to still be unconscious. He is lying prone in a smashed train car, with one arm slightly swinging, and his eyes closed. Only when the player touches the analog stick will he start to stir and then stand up.

It's one of those chances for us to give the player one of those "oh cool, I'm back in control" moments. It might be a little fourth-wall-breaking, but players generally remark positively on that moment of revelation as at least novel, and I think that we can probably leverage that type of experience towards both gameplay and storytelling ends in the future.

Interestingly, I didn't pick up on this initially, but did notice it after the fact. For me, I was eager to get Drake back up and on his feet and start actively playing the game. As you stumble back out into the blizzard, you come upon a unique looking dagger. One that shows up spinning every time a scene loads in the game. So, this dagger must be important (and in some way the reason behind all the catastrophe on this mountainside). As Drake cradles the dagger, the scene fades out, and then a new scene fades in, as you're told that it is four months earlier in Istanbul.

RL: One more comment about your not noticing that interactive moment when Drake regains consciousness: we've found that it's often the case with this kind of interactive finesse: many players will never notice it. Some game developers will use "hardly anyone will notice that" as a reason not to put something in a game, and of course, you have to draw the line somewhere. But when an opportunity, like this one, takes relatively little effort to put into the game and doesn't require the creation of new assets, I always jump at the chance to make our game even a little richer. Players also love the feeling that they've discovered a secret.

I'd also like to grab this opportunity to mention that *Uncharted 2*, like all of Naughty Dog's games since *Crash Bandicoot*, streams data from the disc so that players only have to experience load times at the start of a play session, and never during the flow of the game's action and story. This is very important for us, in maintaining the pacing we've carefully constructed, which is so critical to our creation of a cinematic experience that players get caught up in.

And this definitely helps to create a more seamless experience of the gameworld and story. So, you leave Drake on the mountainside, and back in time, you find him in Istanbul with Harry and Chloe ready to run the heist they were discussing in the

first extended cutscene. Before I get into the details of this first heist, I want to take the time to comment on the cinematic storytelling that has been used to introduce you to this gameworld. On a high level, in terms of the plot diagram, we're still getting some great introductory exposition, but also with hints of things having all gone awry (that's a huge mess on the mountainside). And I'd like to note that the game story is broken up into 26 titled chapters (so far, everything discussed has been in Chapter 1: "A Rock and a Hard Place.") To help with orientation, I'll refer to these chapters as we move through the analysis of the game. Considering the interactive diagram, we're still firmly in the involvement stage, we've had some initial practice with the platforming and combat, and have also been introduced to how the IGCs work.

But that doesn't quite do justice to the highly polished craft in which all of this is seamlessly blended together into an amazingly engaging and gripping experience. The IGCs are used to great effect, and you're able to watch and play your way into this gameworld. Naughty Dog has crafted the videogame equivalent of a thrilling action adventure movie. Pushing this comparison deeper, they've used the narrative conventions of these types of movies to help shape the story beats as they play out across the game (which I believe helps make it such a watchable experience). Story beats are the smallest units of a story, like an exchange between characters in a scene, that advance the narrative, and this initial sequence really does drop you right into the action. You then have some flashbacks to help break up the tense action, but also to start filling in some backstory on how it all started and how wrong things went awry. Simultaneously, you're gaining a sense of how the gameplay mechanics work as you play through the scenes, establishing how you, as Drake, are able to survive the straits laid out before you. The game pulls you into the story by requiring you to play through it successfully (as the hero in a movie would do as well).

And now you're back in Istanbul four months prior, at the start of it all. From here, the high-rolling, globe-trotting adventure kicks into gear. You're here to steal an artifact from a museum that should provide you with a clue to the ultimate treasure you're seeking. Chloe is the driver for the escape post-heist, and Harry and Drake go through the sewers to enter the museum from below. This is the beginning of Chapter 2: "Breaking and Entering," as you make your way through the museum to the artifact. There are some interesting dynamics to this chapter that again blend gameplay and storytelling well. For instance, Drake makes it clear that he doesn't want guns involved so as not to risk accidentally killing the innocent museum guards. This gives you some sense of Drake's character and motivations, while also setting up a level that is more about sneaking around than shooting it out. Harry has brought two tranquilizer guns though, so you can shoot some, but your focus is more about traversing through the museum while remaining undetected.

That said, there is a contradictory moment in this level where it appears that Drake actually kills a guard. He is hanging from a ledge high up on the roof of the museum, and a guard walks by, and the game prompts you to hit a certain button, which causes Drake to grab the guard and toss him off the roof to his apparent death. I've seen online that this moment disturbed players in terms of their sense of who Drake is and what he would, and wouldn't, do (Wardrip-Fruin, 2010).

RL: We were, of course, very focused on preserving the idea that Drake didn't want to take any innocent life during his time in the Museum. When the level's layout offered us the opportunity to showcase our "pull an enemy off a roof" stealth mechanic (one of a number of new "action-stealth" moves that we'd added to *Uncharted 2*) we couldn't resist seizing it, but we still didn't want Drake to appear inconsistent.

So we made sure that there was water below the roof for the guard to fall into, and even went so far as to create an animation that showed the guard swimming to safety, having survived the fall, and clambering onto a nearby rock to recover.

However, we now realize, based on what we've read on the Internet, that many players don't notice that the guard survives the fall, and they think that Drake has suddenly stopped caring about whether the guards get hurt. It's just one of those times where we have to realize that what we added doesn't "sell" or "read" – it's not completely, transparently obvious to nearly every player – and we just have to chalk this one up to experience and try not to make the same mistake next time!

To be honest, this moment didn't register strongly with me at the time I played through it, but I can see how players may not have "read" Drake's intentions. Moving on, Drake and Harry continue through the museum. Before we get to the treasure, I want to unpack how this buddy system works on two levels. In terms of story, you get to listen to the two characters banter back and forth while they're together, so it helps to establish their relationship for the player. In terms of Drake and Harry, you get the sense that while they don't fully trust one another, they do have a camaraderie in which they joke with each other. The dialogue pulls you into the characters in terms of content, but also in terms of delivery. The voice acting behind the characters is excellent and it's obvious Naughty Dog took great care in making sure the characters come across in the voices. Granted, often their dialogue is reminiscent of Hollywood blockbuster action movies, but that is the genre they're emulating, so it fits fairly well to the adventure in which you find yourself as Drake. And on a gameplay level, the buddy system is used to help keep you on the right track. Throughout the game, you're almost always with a companion (here it's Harry) and this buddy often is able to serve informally as a guide to lead the way so that you don't spend too much time getting lost, and also to give hints when you're

trying to solve environmental puzzles that always seem to require two people (like boosting Harry up to grab a ladder that he can then drop down to you). Once again, Naughty Dog is working with a high level of integration throughout the experience.

Drake and Flynn get to the treasure (and ancient oil lamp) that has a resin the burns blue and enables them to read a scrap of paper from the lamp, that tells of a tsunami that left Marco Polo shipwrecked in Borneo and the first hints that Polo may have found Shambhala (Shangri-La) with the help of a cursed Cintamani Stone (that may actually still be on a prominent mountain in Borneo).

So now they know roughly where in the world they need to go next on this adventure. But here the subtitle of the game (Among Thieves) really comes to the fore as Harry double-crosses Drake, leaving him stuck in the museum while also setting off all the alarms. So now you have to try to find some other way to escape, and you can manage to get out of the museum through the sewers, but when you exit you find yourself surrounded by armed guards.

RL: The characters that accompany Drake through the game are crucially important for creating an emotional reality for the player, and we think that it's this emotional reality that makes our game engaging. We use the characters that Drake interacts with to show different sides of his (often conflicted) character, and we work hard at every stage of the process – from their character designs, to our scriptwriting and performance capture processes, to the implementation of the characters in gameplay – to make sure that the people in our game are believable and nuanced in their characterization. We try to use techniques that are both narrative and interactive to set up and pay off situations that deepen and enrich the world of the game.

And I found the character interactions definitely helped flesh out the world and where you thought Drake stood within it. Three months later, you find that Drake is (still) in jail. Victor Sullivan (Sully) shows up to spring Drake. Sully is Drake's friend from the first game. Their friendship was called into question throughout that earlier adventure, but it all turned out to be a misunderstanding, and Sully is one of the few people Drake trusts.

RL: We think that Nate probably mostly trusts Sullivan, but I don't think he trusts him completely. The world that Drake and Sully exist in rarely allows for certainty about anything, and we try and use that to our advantage whenever possible, to heighten the mystery, wonder and romance of our game's world.

This is definitely taken advantage of as the reunion is complicated by the fact that Chloe is with Sully. As they dance around regaining some trust, it is revealed that Harry and his client (Lazarevic) have found Marco Polo's lost boats in Borneo, but have yet to find the Cintamani Stone. So, Sully, Chloe and Drake team up to try to go to Borneo to sneak the Stone right out from under Flynn and Lazarevic.

Off to the jungles of “Borneo” (Chapter 3), and in this part of the adventure you partner up with Sully. As you work your way into the jungle toward the camp, the stakes are raised as you now get into more deadly firefights with Lazarevic’s men. This is where you really get familiar with the combat gameplay mechanics with multiple encounters and a variety of weapons from which to use. At the same time, you’re also becoming more adept at traversing through the territory in which you find yourself. Chloe is acting as a double agent getting in close to help create a diversion and give Drake and Sully an opportunity to get access to all of Lazarevic’s notes, journals and plans (in Chapter 4, “The Dig”). This helps them realize that Lazarevic is off track in looking for the treasure. So, they have a chance to find it, as soon as they shoot their way out of the camp.

Stepping back for a second, this is where the story really aligns with action adventure movie blockbusters from the past, particularly *Raiders of the Lost Ark*. You can definitely see the similarities quite clearly, but it also helps you fall into the role of Drake. The familiar story beats give you a direction of how you should act if Drake is indeed the hero of this adventure. This in turn, aligns with your game goals as you play your way through the experience.

Back in the game, Drake, Sully and Chloe manage to find the resting place of the ancient survivors deeper in the jungle. They don’t find the Cintamani Stone though, instead they find the unique dagger (a Phurba) from the earlier scene on the mountain, which appears to be some sort of key to Shambhala which they now figure out is in Nepal. And then Chloe fulfills her double agent role twice. First it appears she turns Drake and Sully over to Flynn, but then it becomes clear that it was to help save them and gives them a chance to escape. And as they flee, we get a scene straight from *Butch Cassidy and the Sundance Kid* as Drake and Sully leap from a cliff into a raging river below and float away free and clear.

RL: We hope that we don’t draw on any preexisting narrative too much, and we are always walking a fine line between appealing to adventure stories from the past, whether it’s the more recent past of 80s action movies or the distant past of Robert Louis Stephenson, and approaching everything with a fresh eye that invigorates the characters and prevents them from feeling like clichés or types. It’s always a compliment to be compared to films as beloved as *Raiders of the Lost Ark* or *Butch and Sundance*, though!

From my perspective as a player, the familiarity of the story conventions helped draw me into my (or Drake’s) role within the adventure. Speaking of which, now it’s off to Nepal to try and find Chloe and the Cintamani Stone. At this point, we’re solidly into some rising action on the plot diagram with the major conflict coming into better focus (although I’m still not sure who I can trust or not). And we’re getting solidly immersed in the interactive experience. The last escapade gave you a lot practice

in gameplay (both combat and platforming) and at this point I've noticed I'm much better at both. I'm more accurate with my gunplay, and more strategic about taking cover. And I've learned to adjust the camera view to search around my environment to help find my way when I need to jump around and climb.

The experiences in Nepal last for several game chapters as we start with Chapter 5, "Urban Warfare," and it lives up to its title right away. As Drake is driving through the war-torn streets, it's apparent that the city is overrun with fighting. And we get to see a classic Naughty Dog gameplay sequence in which the perspective shifts and you have to run toward the screen. This is something they've done across many of the different games they created. It adds a unique control moment as everything is reversed, which adds an intensity to the gameplay as you have to adjust to the backward perspective and controls on the fly. In this case, Drake ends up running down an alley with a large military truck barreling after him. You have to run forward while shooting backward in order to cause the truck to crash as you flee from the wreckage in the alley. The switch of perspective makes it a challenging gameplay experience that adds to the cinematic action of watching as a truck comes bearing down on you. It's another great sequence that makes you feel like a hero when you survive (although truth be told it took me several tries before I did).

There are some other interesting gameplay twists that happen in Nepal. Right after the alley sequence, you're on your own for a bit before you find Chloe. So for almost the first time in the game, you're not buddied up with someone. This increases your immersion as you have to find your way on your own. Once you meet up with Chloe, the two of you work your way through the war torn city, traversing alleys and up and down buildings. There is a nice mix of platforming and combat as many of the buildings have been bombed or damaged, and there are soldiers and guerillas all around.

There's also an interesting story moment on the roof of a hotel that happens to have a pool. You're up there to scout for the right temple in this city full of temples, but you can have Drake jump into the pool, where he goofs around and jokes about playing the Marco Polo game. This shows a great level of attention to detail by the developers. Unlike many of the more sandbox, emergent games (like the *Grand Theft Auto* franchise) where players have an open world to wander around in, *Uncharted 2* is linear in progression, so you're always moving forward through the experience. But little moments like the pool scene open up the gameworld and make it feel fully fleshed out, and you're just moving through it on your adventure.

RL: It's always very satisfying when players call out this moment as enjoyable, because it was a particular labor of love for a number of us, including the actors who partly improvised the dialog and the game designer who carefully added the dialog to the game and made this implementation interactive – there are different

dialogue flows dependent on whether the player keeps Drake in the pool for a while or makes him climb out quickly. We even went so far as to re-jig our Trophy scheme at the eleventh hour, adding two Bronze Trophies: one for when Drake first jumps in the pool and yells “Marco”, and another one for the player who keeps Drake in the pool long enough for him to get Chloe to say “Polo”!

I’ve enjoyed how trophy schemes have developed to help track a variety of player achievements across a game, this provides players with another level of motivation to fully explore a game. And I really like how there are trophies for little narrative moments like these. It encourages me, as a player, to explore the world some more, which resonates well with the theme of game overall. And so, shortly after the pool, Lazarevic finds out that Drake is in the city, and sends out attack helicopters to deal with Drake. This leads to an amazingly cinematic gameplay sequence. You and Chloe are trapped high up in a building with soldiers chasing you from floor to floor, when a helicopter joins in the fight and starts shooting missiles at the building. As a player it was a confusing experience. I was in an office room using a desk as cover as soldiers entered the room, when the perspective started shifting and all the furniture and people started tumbling across the room as the building tilted. I wasn’t sure what was going on, but noticed I was sliding toward a window and could see that we were crashing toward the building next door. It all felt crazy, but I made a run for it with Chloe and we jumped through the window, landing in the adjacent building. And then it jumps to a quick IGC as Nate and Chloe turn back and watch the other building collapse completely. This is definitely an intense moment that made me feel like a hero. I was psyched to have survived (and actually managed to do it on my first try) and was impressed by how the designers created the gameplay sequence to line up with the story beats and enable me to perform like an action adventure hero.

RL: This sequence was very important for us – it was among the first of our major cinematic set pieces that we polished, and it showed off a system that represented an important technical leap forward for us: our Dynamic Object Traversal System. This system let Drake, and all his enemies and allies, use all of their moves on any arbitrary moving object in the world, and without it we couldn’t have realized either this collapsing hotel, or other emblematic sequences like the Train level. A system like this is pretty much the Holy Grail for character-action game designers, since it lets us do things we’d only previously been able to dream about, and it was incredibly difficult to implement, causing our programmers to change or touch almost every core system in the game. We felt that the sequence was very successful, and it inspired us to push ourselves ever further with our set pieces. It certainly seems to make an impact on players, and it was planned to punctuate the peak of action that this part of the game reaches.

What's important to consider is how seamless the playing experience was. It makes me realize that the technical challenges going into the Dynamic Object Traversal System paid off as I didn't even notice them (which meant I felt like I was able to play the set piece (and feel like a hero) even in the chaos of a collapsing building. Staying with this concept of being a hero, shortly after escaping the collapsing building, Drake and Chloe run into Elena Fisher and a cameraman (Jeff). Elena is a gutsy reporter from the first *Uncharted*, and through those earlier adventures Elena and Drake developed complicated feelings for one another. Chloe argues to leave them on their own, and Elena and Jeff seem a bit wary of joining Drake and Chloe. Based on previous experience, Elena assumes that Drake is up to something (and most likely it's no good). Drake insists that they could use their help, so he talks everyone into sticking together. What I liked about having this short story experience shortly after feeling like such a hero jumping from a collapsing building, is that it underlined for me that being a hero isn't just about those feats of derring-do, it's also about doing the right thing. And you see Drake stepping more into the role as a hero in this moment.

So, you now have a party of four, deep in a city surrounded by enemies out to get you. As you make your way through the violence around you, Elena reveals that Lazarevic is a psychopathic war criminal, and she's here to expose his war crimes to the world (so now you know who you're up against). The group works its way to the right temple, and then there is some amazing environment puzzle solving within in the temple that requires a lot of platforming by Drake as he uses his trusty notebook and works to unlock the clues found within and beneath the temple (Chapters 8 and 9). Once you successfully negotiate the puzzle platforming, and use the Phurba as a key, you're shown the location of Shambhala deep in the Himalayas.



Of course, Lazarevic's men find you, and you have to fight your way out. In the ensuing firefight, Jeff's get wounded pretty bad, and Drake has to help carry him away. This adds a gameplay wrinkle as well since Jeff really slows you down, so you have to work at a much slower pace. Again, this is combined with a story element as Chloe argues to leave Jeff, but Drake insists on carrying him. And once again, it looks like Chloe turns on you, as Flynn shows up, and we finally get to meet Lazarevic. Although it looks like Lazarevic suspects Chloe and has her taken her away to the train. He then kills Jeff and threatens Elena in order to get Drake to share what he's discovered. Once he has the information, Lazarevic leaves and asks Flynn to kill them. Elena and Drake manage to get away and head to the trainyard to rescue Chloe from Lazarevic.

RL: I'm not sure that I agree with your characterization of Drake at the meeting with Elena and Jeff as heroic, at least not at the start, but this scene is certainly a pivotal one for him. We use this moment to reset the rhythm of the action, and we do it somewhat at Drake's expense (and perhaps partly to his credit).

For a start, Elena openly challenges Drake about the nature of his quest, saying, "So let me get this straight: you're competing with a psychopathic war criminal for a mythological gemstone?" In a single sentence we say everything we need to about the breakdown of any romantic relationship that may have formed between Nate and Elena at the end of the first *Uncharted* game, and we characterize Nate, rather negatively, as both a criminal and a dreamer. We've grounded our story in the context of the real world (or at least, a real world) and we've moved both Drake and Elena's characters forward a step in their relationship.

Secondly, this is the first time that Elena, a woman for whom Nate may have had deep feelings, meets Chloe, Nate's sexy sort-of current lover. Amy Hennig, our Creative Director and head writer, says that this scene was one of the most difficult to write in the whole game, and commentators have paid us the compliment of remarking that many games – indeed, many films – would have played this scene badly, perhaps showing Drake as swaggering or cocky as his conquests past and present cross paths, and leaving all the characters stuck playing out banal stereotypes that do nothing to honor them.

But instead Drake seems awkward and embarrassed – it betrays a kind of vulnerability that I think is appealing, and also indicates that he's not just a regular Joe in terms of his sloppy fighting style and frequent clumsiness: he can be conflicted and self-conscious, just like the rest of us. The women are confident and funny in counterpoint to Drake, and even seem to rather like each other, even in the midst of a difficult situation.

So I think that the scene works tremendously well, not just to tamp down the pace of the game after such an intense crescendo of action (and before a relatively sedate sequence of exploration and puzzle solving in the Temple complex), but also to shed some new light on the characters and the relationships between them, and to bond the player to Nathan Drake as a likable guy with some serious flaws.

I would agree, that within this scene Drake isn't necessarily heroic. But for me, having him being awkward also read as a moment where he was having to assess what he's doing and why he's doing it, and that got me thinking that in order for Drake to become a hero, he has to figure out how to do the right thing. We're now at Chapter 12, and looking at the plot diagram, we're well into the conflict of rising action, so this mirrors the conflict Drake is displaying in this scene as well. I'm feeling empathy with the characters and want Drake to help thwart Lazarevic and save the day. In terms of interactivity, I'm solidly immersed in the gameplay. I'm at the point where I don't even have to think about what buttons to push. For the most part, I'm able to maneuver Drake as I need to, and now the designers do a nice job throwing another wrinkle into the mix.

With Elena's help, and a lot of improvising with many different vehicles, you're able to get onto the train for a thrilling extended action sequence in Chapter 13. Plus if you recall, the game began on a wrecked train on a snowy mountainside, so even though you're down in the valley, this very well might be that train since Lazarevic knows Shambhala is up in the mountains. Now Drake has to work his way through, under, over and around the train as he makes his way forward toward Lazarevic, Flynn and Chloe. The train is a limited spatial environment so you have to be careful (plus you can fall or get knocked off). And this train is loaded for war; there are soldiers, weapons, tanks and helicopters. This is one of the longest combat sequences, although because your goal is to get to the front of the train, there is a lot of platforming as well. And the combat is mixed up as well, as you have to take on soldiers in train carriages, on top of the train, on the sides of the train as well as helicopters flying beside the train. Plus the environment the train is moving through comes into play. You have to watch out for, and avoid, signs near the side of the train and also for signals above the train. And then the next thing you know you're in a long tunnel and you come out in the mountains (uh-oh).



Drake finally finds Chloe, who asks him to leave. As they argue, Drake gets shot by Flynn. Then Chloe starts arguing with Flynn and Drake is able to run to another carriage followed by some soldiers. Wounded and trapped, Drake takes aim and shoots some propane tanks, setting off some huge explosions, and causing a massive train wreck.

We're now back at the same sequence that started the game. Recall, the game up to this point has essentially been an extended flashback from the start of the game. And once again, we have to climb Drake back out of the train again. And then fight your way through the exploding wreckage and surviving soldiers out to get you. You manage to get out and away, but now you're basically wounded and lost in a blizzard on a mountain. Drake collapses in the snow and someone walks up to him as he loses consciousness (again).

RL: It's good to read your remarks, here. It was easy for even us on the team to forget that nearly the first half of our game takes place in flashback (when viewed in a certain context, at least).

Non-linear temporal flow is a hallmark of some of my favorite films, from *Rashomon* to *Lola rennt* to *Memento*. Indeed, discontinuity of space and time, bridged by the edit, is a character of nearly all film.

I think that, partly because of pragmatic issues to do with camera control in third-person character-action video games, and partly because we perceive a relationship between digital games and digital simulations, both developers and players are somewhat over-focused on maintaining temporal and spatial continuity in narrative video games.

Few games have taken advantage of the opportunities offered by thinking about time and space as the plastic, collapsible continua that they are in cinema. When we remember that games are different from simulations, new creative possibilities open up, and I'm happy that the talented team members that came up with the temporal sequencing of our game did so.

As a player, the non-linear way the story is revealed created a more complex set of expectations in terms of how I was experiencing the set pieces across time and places. In the back of mind, I always had this feeling that I was heading for a catastrophe on the side of the mountain, so I was paying attention to the choices and consequences of Drake's actions. Moving forward, Drake comes to in a small hut with a small girl looking at him, and the man who rescued him. The man speaks to Drake in Tibetan, which Drake doesn't understand, but he notices that his wounds have healed. We're now in Chapter 16, it feels like we're both literally and metaphorically getting close to reaching the climatic moment in the story. And I'm starting to feel invested in the gameplay experience. I want to find Shambhala and keep Lazarevic from ruining it.

The Tibetan man beckons Drake to follow him out of the hut. Which starts a short sequence that has a similar effect to the earlier game of Marco Polo in the pool. As Drake exits the hut he finds himself in a Tibetan village, he can follow after the Tibetan rescuer, or walk around and play soccer with some kids and pet a yak. Again, what's nice about these little moments is that you don't have to do any of them, but if you do, you can feel more of the world in which you find yourself. Also, in talking with Richard, he related how they designed these particular moments so that players couldn't go around and punch the villagers. Instead, those familiar button presses lead to Drake offering handshakes or waves of hello since Drake doesn't speak Tibetan.

RL: Indeed, the idea for those hand-shaking interactions emerged directly from playtesting. I was in charge of the "Peaceful Village" level, and I noticed that about half of our playtesters ran straight up to the villagers and threw a punch at them when they arrived in the Village for the first time. By talking to them afterwards I worked out that they weren't really trying to hurt the villagers – they wanted to test the bounds of our system, by attempting an interaction with the world.

Experimentation of this kind is a fundamental aspect of the way that players relate to video games – they make hypotheses about the game and then test them out, and by doing so they learn the rules of the game and how to succeed. Video game players are a lot like scientists investigating a world in this regard.

We'd initially set up the villagers so that if Drake threw a punch at them, nothing happened. Games that reward experimentation on the part of the player with reactions that are interesting or entertaining are generally considered better

than those that don't, and so we decided to make the extra effort to add a set of animations to show Drake and the villagers shaking hands or waving to each other, should the player try to throw a punch at a villager. I'm still very grateful to the animators and programmers who expended elbow grease on this.

It's a moving experience whenever I hear that a player was delighted when they found themselves shaking an old man's hand or patting a yak on the nose. It feels like the realization of a playful dialog between the player and me, the designer.

And building on the earlier scene with the pool, players have been encouraged to explore, so it's likely that they'll encounter these unique interactions, which again enhances and expands the feeling of the world in the game. Back in the village, the Tibetan rescuer leads you into a house, and lo and behold, there's Elena (who speaks Tibetan to boot!). She followed the tracks from the train wreck and found Drake. Elena introduces Drake to Karl Schafer, an older man who went on an earlier expedition to find Shambhala. Schafer introduces Tenzin (the man who rescued Drake) and shares some advice and warnings learned from his experiences, and lets Drake know that the phurba is the key to Shambhala, so Lazarevic is going to be coming for it. He also relates how the Cintamani Stone will give Lazarevic great power to rule the world. During this conversation, Drake wavers about doing anything more, he feels like it's all been a big mess and actually says that he's through playing the hero. Elena argues that they should try and stop Lazarevic, and Schafer offers to show Drake proof by having Tenzin take Drake into the mountains to the remains of Schafer's earlier expedition.

RL: In terms of Joseph Campbell's monomyth as reconfigured by Chris Vogler in his screenwriting book, *The Writer's Journey*, this is a moment where Drake makes his final and most emphatic refusal of the call to adventure. It's a low point for Drake's character, and an important point for us, as it helps us show that Drake isn't a straightforwardly crusading altruist. He doesn't want to get killed in the service of some abstract, even ridiculous-seeming, quest. His world is a serious, dangerous place – just like ours – and he's a sensible guy – someone just like us. Having Drake pass through this moment – where he simply can't accept that he's a hero – grounds his character in reality and helps us to relate to him.

This underscored how Drake really struggled with doing the right thing (which is more important than "playing the hero"). So, Drake now buddies up with Tenzin and heads off into the mountains for Chapters 17 and 18. You make your way into a mountain cave system, where you start finding some of the dead men from Schafer's expedition. There is a lot of platforming gameplay here with Tenzin as you make your way through the icy cave system. You also start getting hints that there is some sort of monster in the caves with you, and then you're attacked by a ferocious yeti. Together with Tenzin, you are able to fend off the beast, and continue deeper

into the caves. Soon you come upon a huge underground area with large statues. This leads to another intense sequence of puzzle platforming as you work your way through the environment with Tenzin. They then discover more dead men, and find out they were Nazis after the Tree of Life and immortality. And it's apparent that Schafer killed the Nazis to prevent them from succeeding in their quest.



This discovery significantly raises the stakes of our current adventure, and it is followed with an attack by a bunch of the yetis. So Tenzin and Drake have to fight them off and escape by activating an ancient elevator that gets them above ground away from the monsters. From their perch in the mountains, they can see that Tenzin's village is being attacked.

So they rush down into the village and into Chapters 19 and 20. They find Elena, who confirms that Lazarevic has found them. Tenzin is worried about his daughter and Elena tells them that she is hiding with Schafer, before telling Drake that this terrible destruction that has been brought down on the Village is all their fault – people are dying because of Drake and Elena. Drake and Tenzin head out to find Schafer and Tenzin's daughter, only to run into a tank, which then pursues them through the village. This leads to an out-of-control action sequence as you and Tenzin play cat and mouse with the tank. One moment stands out in particular for me, it reminds me of the scene in the *Bourne Ultimatum* in which Bourne is chasing an assassin through the medina in Tangiers. Except in this game scene, I'm running with Tenzin, trying to keep some houses between us and the tank. And there's this intense moment, when the tank actually crashes through the walls of the house that we're running through.

In this moment, a quick (all of a couple of seconds) IGC shows Drake getting bowled over by crashing tank, but the camera angle during the IGC is such that I'm instinctively trying to guide Drake out of the room, so when I do regain play

control, I'm already heading in the right direction. This is some very clever design as it makes me feel as if I'm playing through the short IGC, while also using the IGC to up the intensity of the moment. I've talked to some friends who wondered if they were actually in control at all or not, but for me, it all lined up. Yet another moment where I felt heroic in performing some crazy feat of action.



Drake is able to take care of the tank finally, and Tenzin finds his daughter, but Lazarevic's men have taken Schafer away with them in a convoy of trucks. Drake and Elena manage to hijack the last truck and take off in pursuit and into Chapter 21. This leads to a gameplay sequence somewhat like the train, but ramped up a level, as you now have combat while also jumping from truck to truck across crazy terrain.

RL: This long sequence, leading from the peaceful village to the ice caves to the frozen temple and then back to the now-besieged village is a pivotal section of the game. As you've identified, there's a lot going on there, in terms of cinematic gameplay – sequences where complex set pieces play out almost entirely in gameplay, with the player directly in control of Drake nearly all the time.

We switch things up a few times, using moments of constrained gameplay in a narrative way – like the climax of the first encounter with the 'yeti' – and we pull out every single trick in our bag to guide and sometimes push the player from A to B to C, using 'characters' like the tank or the transformed village to effect moment-to-moment emotional change in the player. We even sucker-punch the player a second time, having already brought Drake low by his near-refusal to continue with the quest, by having Elena blame him for the awful transformation of the formerly idyllic community.

But Tenzin occupies the heart of this sequence, of course. Drake and Tenzin do not share a common language, and that gives us an opportunity not only for a few gags, but also for the player to become bonded to this unusual, dynamic character almost entirely through their collaborative gameplay actions. As Tenzin sets up ropes for Drake to swing on, boosts him up to otherwise inaccessible ledges, and catches him as he is about to fall to his death, we hope that a connection is slowly growing between Tenzin and the player (or Drake, by proxy) in a way that the player barely notices.

When Tenzin's village comes under attack – and his small daughter's safety is in doubt – we hope that the groundwork we've carefully laid gets activated, and that the experience of fighting through the war-torn village is charged beyond what might expect from even the most epic, awesome battle scene in another video game.

Interestingly, I really wasn't thinking about Tenzin specifically during this (he was just another buddy as I was playing) but I really felt the responsibility of causing the attack on the village and putting everyone's lives, especially Tenzin's daughter, at risk.

RL: I should be clear in saying that the effect we were trying to have wasn't one that the player would, or should notice, and it is interesting that you weren't really thinking about Tenzin during this sequence. Either we did our job really well, or what we did with Tenzin didn't make much difference! I do think this sequence would have had far less – or perhaps just different – emotional impact if you'd played through the Ice Cave with Chloe or Elena.

I would agree that playing through with Tenzin gave it a better context in which to have that emotional impact. Again, I felt like I needed to step up and do the right thing. Back in the game, Drake and Elena end up getting forced off the pass and over a cliff. The soldiers assume they've died, but Drake and Elena (of course) survive and climb up and follow the convoy on foot to a monastery. Spying from afar, they see the Lazarevic has Schafer. So now in Chapter 22, they sneak into the monastery to rescue Schafer and stop Lazarevic. This requires a lot of combat and platforming, as Drake and Elena work their way through the monastery, fighting off soldiers as they go. They get to Schafer in Chapter 23, but they're too late. Schafer has been shot and left for dead, and Lazarevic has the phurba and is off to find Shambhala. Schafer tells them that the monastery hides the entrance to Shambhala, and as he dies, he implores Drake and Elena to stop Lazarevic.

This further underscores how high the stakes are in this adventure. So Drake and Elena decide they've got to find a way to save the day. As they try to pull together some sort of plan, they notice that there are yetis loose in the monastery as well, adding to the challenges ahead of them. They split up so Drake can get the Phurba

and Elena can find the secret entrance. Drake manages to find Chloe with the Phurba (with Lazarevic and Flynn nearby). Using the Phurba and his notes, Drake is able to solve a tricky environmental puzzle to find the secret entrance which is cleverly hidden in plain sight.

They manage to sneak into the entrance and into Chapter 24. Of course, Lazarevic manages to trap them in the entryway. Lazarevic threatens to kill Chloe and Elena if Drake doesn't help him. Under this coercion, Drake solves the puzzle that opens the entrance and leads to some puzzle platforming with Flynn and some combat with some yetis as well. Lazarevic enters and kills the yetis just as they're about to kill Drake and Flynn, and in looking at the corpses they discover that they're actually men, guardians of Shambhala (granted really strong men who are extremely hard to kill). They now finally enter Shambhala, which is a large ancient city overrun with greenery, and they're immediately attacked by more guardians.

RL: Chapter 24 gave us an opportunity to do something we hadn't ever done before: a sequence of play where Drake is accompanied by someone with whom he is in an antagonistic relationship. Drake and Flynn still need to cooperate to complete the sequence, but we had a lot of fun with the banter between them as they travel through the area, and we hope it is another technique that helps raise the emotional stakes as we race towards the game's climax. We also took the opportunity to add in another bit of finesse interactivity, as anyone who decides to take a swing to Flynn's irritating grin will discover.

It does add a tension having to work with Flynn in this scenario (although I didn't take a swing until you mentioned it and I played through the sequence again). In the following confusion of entering Shambhala, Drake, Elena and Chloe escape into Chapter 25. Here you have combat with both soldiers and guardians as they try to beat Lazarevic to the Cintamani Stone. Drake is now adamant about setting things right (and saving the world). He's become a hero, and it's up to you to succeed and save the day. As they make their way through the ruins of the city, they notice more of the blue resin on trees, and when it's shot it explodes. This becomes a way to clear a path as well as a weapon to use against others. They work their way to a temple, and solve some puzzle platforming which leads them to the Cintamani Stone which is embedded in the Tree of Life. Drake starts worrying that something is not right. He then figures out that the Stone isn't a gem, but is made of resin, that can be eaten to gain immortality (or at least you're pretty near invincible).

They then spot Lazarevic by the tree, but before they can go, Flynn shows up, mortally wounded and holding a grenade with the pin pulled. He sets off the grenade, killing himself, leaving Drake and Chloe woozy, but severely wounding Elena. Chloe ends up carrying Elena, while Drake goes to stop Lazarevic, and into the final Chapter of the game.

At this point in the plot diagram, we are firmly in the climax of the story, we're out to stop the villain or die trying. Which gives you a clear sense of where we are in the interactive diagram, deeply invested and committed to successfully finishing this experience.

Drake moves toward the Tree of Life and see Lazarevic drinking from the pool of sap. Drake shoots at Lazarevic, but the bullets don't see to have any effect, and he now comes after Drake. In gameplay terms, we're in the final boss battle, the climax of the story. You then have to figure out how to kill Lazarevic (hint, use the exploding blue tree sap) and once you've managed to catch him in enough explosions, he weakens and falls.

Drake approaches Lazarevic, and Lazarevic calls him out on how similar they are (look at how many people Drake has killed, just today even). But in the end, Drake doesn't kill Lazarevic in cold blood: he leaves him for the guardians. In this moment, Drake makes the right choice and acts as a hero. And now, of course, the whole city starts collapsing. So, Drake goes and finds Chloe and Elena, and they manage to narrowly escape. You have a great scene where the perspective shifts again, and you're running toward the screen on a bridge while everything collapses around you. This is another effective use of the perspective as you really get to see the chaos all around you as you try to stay just ahead of it at all and escape (to be honest it took me a couple of tries) as we fade to black with Drake holding Elena, hoping she'll survive.

And now we're in the denouement, the active gameplay is over (we won!) as we return to the village and see Drake standing over a grave, at first it's not clear if this is Elena's grave, but it turns out she did survive. Chloe says her goodbye (they joke about playing the hero) and she encourages Drake to tell Elena about his feelings for her, and Sully shows up to help with the recovery. The scene, and the game, comes to an end with Drake and Elena joking about how much he cares about her, as the boy (might actually) get the girl.

Meaning and Mastery

With that, we've completed the narrative experience of *Uncharted 2*. There is the multiplayer gameplay (which I have yet to experience) but I want to discuss how the gameplay controls improved in this game as compared to the first *Uncharted*. As I mentioned at the start of this essay, I actually played a bit of the first game initially, then played through all of the second, and then I tried to go back to finish the first. But Naughty Dog didn't rest on their laurels between the two games. The gameplay controls have been refined and improved (in terms of responsiveness and accuracy in both combat and platforming). So after playing all the way through the second

game, it was hard to go back to the first game with the older controls. Interestingly, in talking with Richard about this, he noted that the development of the multiplayer portion of the second game played a big part in how they improved the controls.

RL: When we first announced that *Uncharted 2* would have a multiplayer component, some internet-posting fans of the first *Uncharted* were concerned that the single-player game of *Uncharted 2* would suffer as a result of the fact that our attention would be divided between two different parts of the game. As Drew says, it turned out that multiplayer actually *helped* our single-player game.

In order to make the online multiplayer game as on-the-button responsive as a great multiplayer game needs to be, we had to tighten up our player mechanics and make them even snappier than they'd been in *Uncharted: Drake's Fortune*, and this fed back directly into a better feel for single-player, which used the same executable (i.e. the same game code).

And this made for a more playable game from my perspective, as I felt that I had better control of Drake's actions throughout the game. At this point, I want to take a step back to discuss how the meaning of the game came through a mastering of the gameplay mechanics across the experience of the story. In a well-designed game, the experience is kept pleasurably frustrating; it's not too easy, nor is it too hard. Ideally you get increasing challenges followed by a reward, and possibly increased abilities that make it a little less challenging for a bit, but then soon ramps up again.

Crawford (1984) refers to this as a smooth learning curve in which a player is enabled to successfully advance through the game. Costikyan (2001) notes that "play is how we learn" and move from one stage to the next in a game. Csikszentmihalyi's (1991) notion of flow, in which a person achieves an optimal experience with a high degree of focus and enjoyment, is an apt method for discussing this process as well. And Gee (2004) notes that well designed games teach us how to play them through rhythmic, repeating structures that enable a player to master how to play the game. In terms of unit operations, the units are being juxtaposed well so that the meaning and mastery builds as you play. I believe this creates an aesthetic performative experience unique to games.

In *Uncharted 2*, the developers do a nice job of striking this balance, on three levels. First of all, the game has a fairly even mix of the two major types of gameplay (combat and platforming) so that you are continually doing one or the other (and often both) throughout the game. Second, there is a good flow to the increasing level of difficulty across the game. It builds on your successes, offering more daunting challenges. And finally, it blends the narrative and gameplay quite seamlessly. The clever use of IGCs throughout the game helps create the feeling of being an integral part of an amazing action adventure. Combined together, the overall effect is one in which you start out as a bit of a bumbling ne'er-do-well and as you play through this experience you become a hero who saves the day.

RL: Thanks very much for the kind words, Drew, and for the favorable comparisons to the academic work around this subject. We worked hard to create a structure for our game where the peaks and valleys of its respective narrative and gameplay rhythms would be well-aligned, creating synergistic effects for our audience of players.

We tried to create patterns of rhythms that would be irregular enough to avoid the repetitive feelings that some games suffer from. We feel like we did pretty well in this regard, with the exception of a sequence of gameplay in the Monastery that doesn't have quite enough story beats to support the ongoing gunplay action, and where the pace of the game starts to flag a little.

We also worked hard to introduce the game's mechanics in a way that would allow the player to learn about them without ever feeling like they were being taught something. Our usual technique was to couch the 'tutorial' in terms of an action sequence, the opening train wreck 'climbing lesson' being a good example. This fed into a ramp of action where we offered successively more complex challenges, building on the player's previous experiences and the skills they'd acquired from them.

We do our best to plan these things in advance, but there's also a good deal of iteration and trial-and-error involved. We try to constantly put ourselves in the mindset of someone who has never seen the game, and we do a lot of playtesting with people who haven't played before, to help us find and fix problems.

In truth, we use a lot of gut instinct, too. As well as the conscious approach we try and take to these issues, there's also a little bit of something intangible and unpredictable involved. So for me, when everything comes together – as it did for *Uncharted 2: Among Thieves* - it makes the creative process all the more satisfying.

Now that you mention the Monastery, that actually still sticks out in my mind as the longest gunfight (and I recall my wife mentioning it as well). This leads us into some ideas on what good game design can do to create an engaging experience.

Ludic Narrans

A good game can and should teach players what they need to know and do in order to succeed. Ideally, the very act of playing the game should enable players to master the gameplaying units of the gaming situation so they can successfully master the rising challenges and complete the experience. If a game gets too hard, too easy, too confusing, or if it just is too long and seems never-ending, players may not finish. For these reasons and more, players can reach a point where they

drop off the curve and lose their sense of engagement, becoming bored, frustrated and tired of playing the game. But if a game enables players to stay on course and continues to hold their attention, players will advance to a point where their immersion develops into an investment in which they truly want to successfully complete the game experience. And when there is a lack in the balance of the interactivity, the story can actually help keep the player engaged in order to move from involvement, through immersion to investment and successfully complete the game (Davidson, 2008).

RL: We've noticed from the online data that we gather that about half our players complete the single-player, narrative part of *Uncharted 2*. This figure is quite high for a contemporary video game, which famously have poor completion ratios. We'd like to drive this number higher though, in future.

This gets me thinking about the various reasons people play games (since completion rates are normally low) and how some games are designed in such a way to help make this happen. *Uncharted 2* is an example of how a game can combine gameplay and story together in a resonant manner. As I mentioned at the start of this essay, my wife actually enjoyed watching me play through the whole game because she engaged with the story experience, but only if I were playing on the "Easy" difficulty level (the levels are Very Easy, Easy, Normal, Hard and Crushing). I usually play games on normal, but I sometimes switch to easy depending on how a game fits my skill level as well as the amount of time I have to devote to playing games. Similarly, I will sometimes use GameFAQs when I get stuck for a while (again, this depends on the amount of time I have to play the game). What was interesting about *Uncharted 2* was that I started on normal and was doing fine, but the firefights took me long enough (due to the number of enemies or the number of times I would die) that my wife would lose interest in watching as she lost the thread of the narrative, and didn't have fun watching the seemingly endless firefight. But if I set it on "Easy" this enabled me to advance through firefights more readily, which kept the story beats coming at a pace that was enjoyable for her to watch.



In talking with other colleagues and Richard, it seems that a lot of people enjoy watching people play this game. I think this says a lot about how well it does blend the two together, and how games are becoming an even more performative medium, akin to theatre or sports. *Rock Band* and games on the Nintendo Wii are other examples of games that are fun to watch. It seems as if designers are becoming more cognizant about creating games that enable performative experiences that are fun to play and to view.

I think it has been useful to consider this game (and games in general) from a variety of perspectives. In doing so we can, as Marie-Laure Ryan (2001) notes, observe features that remain invisible from other perspectives. Engaging this medium of videogames, we tell our stories of the game as we relate the varied and visceral experience of the games we play. Noah Falstein (2004) discusses the “natural funativity” of games, how they are activities that help us live in the world. And stories are how we stitch together a continuity of our experiences. They are our “mystories,” our stories that enable us to understand the world (Ulmer, 1989). Narratives are how we convey the perspective of our experiences (Meadows, 2002). So, we are both *homo ludens* and *homo narrans*, or as Greg Costikyan (2001) states, “Play is how we learn; stories are how we integrate what we’ve learned, and how we teach others the things we’ve learned ourselves through play.”

Now, in following the idea that humans begin life in a pre-linguistic consciousness as babies, it seems that we start solely as *homo ludens*. We literally learn everything through play as we interact with the world. And then we learn language, and a new phase of consciousness begins, one that dominates, shapes, and constrains our worldview for the rest of our lives (Huizinga, 1950). We are now *homo narrans*, we discursively talk about what we play, what we learn, what we feel, believe, think, etc. (Schank, 1995). But being *homo narrans* does not erase our foundational *homo ludens* character; we are always already *homo ludens*, it’s just now we talk about it.

I believe that games are an interesting medium, because there are definite para-linguistic activities involved, meaning is conveyed through gesture, space, color, sound and activity and agency. And these all can combine into engaging aesthetic experiences. I think one of the reasons these experiences are so compelling is that they enable us to tap more directly into our pre-linguistic *homo ludens* consciousness as we play them. Of course, we then step back and talk about it, which engages our discursive *homo narrans* consciousness. Hence, ludic narrans, playful stories (Davidson, stories in between, 2008). I bring this up because I believe *Uncharted 2* is a good example of a playful story.

Playing Well

On reflection, I think the dual approach of analyzing the narrative plot and interactive levels enabled me to show the moments in this game in which units of both elements were working together to truly engage me in the experience. It was also a useful method for exploring moments throughout the experience that didn't work as well as they could have. Overall, the story development and the rhythmic gameplay help players understand the gaming situation, the "combination of ends, means, rules, equipment, and manipulative action" required to play through the game (Eskelinen 2001). That said, I kept my analysis with both diagrams at a general, high-level progression of the plot and the stages of interactivity. I think this was useful, but I also believe it could be interesting to get even more granular with both diagrams and really dig into units that show the details of the diversity of peaks and valleys of interest curve in the development of the plot of the story as well as the moments of engagement, disengagement and reengagement that occur during the progressive stages of interactivity. I think both macro and micro perspectives would be worthwhile to pursue in analyzing and interpreting interactive experiences.

RL: As we create and playtest our games we gather metric data about how long our playtesters take to travel between the game's automatic save points, and the numbers of attempts - how many times each player dies and restarts - in each of these intervals. We look at the maximum, minimum and median values for these data, and doing so helps us to discover potential problems with the game - places where some aspect of the game is making it arbitrarily or needlessly too difficult (or, more rarely, too easy).

These data can also be viewed as a kind of intensity chart for the game, with peaking median attempt counts denoting places where the game reaches a crescendo of challenge. It's a crude method of visualizing the data, but it does help us ensure that the plans we've laid, in terms of the rhythms of play we've attempted to present to the player, are bearing the right kind of fruit.

As new technologies appear that gather biometric data, like pulse rate, galvanic skin response, and even EEG activity, to interrogate the player's biological state and attempt to make inferences about their emotional state from that data, we will have even more opportunities to confirm that the experience we've crafted is having the affect on players that we intended.

However, planning and designing an experience like that of *Uncharted 2* will probably remain a craft that relies partly on our experience as designers and players, partly on our skill as craftspeople and storytellers, and partly on what our gut instinct tells us, for the foreseeable future.

This helps summarize what we've been exploring in this paper, how the meaning of playing a game is designed and experienced, and how a game can be well played in two senses (Davidson, *Well Played*, 2008). Lev Manovich (2001) notes, when engaging new media (or playing a game), we oscillate "between illusionary segments and interactive segments" that force us to "switch between different mental sets" demanding from us a "cognitive multitasking" that requires "intellectual problem solving, systematic experimentation, and the quick learning of new tasks." Together, an aesthetics is formed out of the game design and the experience of playing through it. So, when the units of story are effectively intertwined with the units of gameplay, the rising action of the plot can parallel the rising challenges of the gameplay, and enable us to have a compellingly engaging experience. Overall, *Uncharted 2* does an elegant job of combining its narrative and gameplay to provide a well played and fulfilling interactive experience.

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*The answer for me was,
of course, both.*

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MATT MCLEAN

MASS EFFECT: LEVERAGING A SCIENCE FICTION CHILDHOOD

In 2007, video game developer BioWare released *Mass Effect*, a science fiction action game that went on to garner a number of top game awards for its absorbing storytelling and cinematic gameplay. Its successor, *Mass Effect 2*, was released early in 2010 to rave reviews, making its way to the top of many game-of-the-year lists. As a fan of science fiction, I was immediately intrigued by *Mass Effect* and its promise of an interactive space opera.

At the time of this writing, I've played at least two hundred hours of *Mass Effect* across both of its video game incarnations. As a gamemaker, I was intrigued by my own behavior in that I'd often pass up playing another game – even that shiny new purchase - in favor of putting more time towards *Mass Effect*, a series of games I'd already played thoroughly. One reason I did this was because I had a limited time available to play video games and I mentally viewed the decision as a better or more satisfying way to spend that time. In general, I wanted to return to the world of *Mass Effect* on a more regular basis. I began to wonder why this was the case as there are certainly other titles out there worthy of my play time.

I've always been something of a science fiction nerd. When I think back on my childhood, it was full of detailed spaceship drawings, imaginary playground games that transformed structures into space stations and shuttlecraft, and hours spent reading novels by Arthur C. Clarke or watching episodes of *Star Trek*. I was fascinated by the idea of leaving Earth on a daring adventure to other worlds, meeting all kinds of people and creatures on the frontier of known space. At age 24, playing *Mass Effect* rendered this boyhood desire more clearly than any other interactive experience I had encountered. As Commander Shepard, I was an experienced space commando on a state-of-the-art ship, fighting or talking my way through any number of exciting situations and leading a squad of aliens and humans on a quest to save the galaxy. The game tapped directly in to the worlds that occupied my time as a kid and a teenager.

When I was younger, there were two basic tenets of my imaginary games in space: there was going to be fighting, and there was going to be exploring, which are, of course, the core experiences found in the *Mass Effect* series. The first game takes on the responsibility of introducing a large, detailed world and focuses on fostering

a sense of awe and vastness, encouraging exploration. I used to spend hours building space stations out of Legos and simulating dramatic fly-bys – a feeling that was instantly re-created in the games by the reveal of the epic Citadel space station, nestled deep within a picturesque nebula. The limitless potential for discovery and the typically expansive scope of the future of humanity had always captured my imagination as a kid, and continues to do so today. Combat was an important part of the game, but it became more so in the award-winning sequel, which by contrast was fast-paced and designed around creating intense situations. Whether I chose to be a soldier or a manipulator of *Mass Effect* fields (known as a biotic), or some combination thereof, *Mass Effect 2*'s combat was polished and exhilarating, letting me feel like the hardened space warrior I had often imagined on the playground.

One thing my imaginary experiences shared in common was the assumption that a vast universe existed in which my adventures took place. The details weren't important – the fact that I believed it to be there as a backdrop was. In the same way, the core exploratory and combat elements of *Mass Effect* are supported by the depth of a consistently visualized and interesting universe - complete with cultures, politics and technology. The player comes into contact with this world simply by virtue of moving through the game and story, but there is also a rich backdrop that the player can explore by accessing their in-game 'codex.' Containing information on everything from weapons to cultural customs, the codex is automatically updated with information throughout the game, so if, for example, a particular planet is mentioned in conversation, it's easy to refer to that entry without requiring lengthy exposition from the characters. This completes the illusion that Commander Shepard knows enough about galactic culture to get by in conversation while allowing the player to access more detailed information at their leisure. Even if the player rarely accesses the codex, it plays an important role in letting them know there is an extensive galaxy of different species, customs, technology, planets and politics that underpin their interactions. The conviction and confidence of that world perpetuates in other parts of the games, grounding the story and character interactions in something that feels quite tangible. *Mass Effect* doesn't require that the player be interested in the details, but puts forward the important effort to make sure the details are still available. Additionally, the consistency of that world makes it accessible and easy to understand.

That accessibility also extends to character interactions in the game. Shepard's squad is composed of a variety of species, and they learn to work together as a team in order to accomplish great things. By having a wide range of cultural backgrounds interacting with each other and the player, the depth of the game increases a great deal. The player now has access to the personal stories of each of the teammates, all characterized not only by their personalities but by the extra dimension of their cultural backgrounds. Indeed, prejudice between races is one of the themes of the games. While the same depth could be approached with a multi-cultural, all-

human crew, the idea of working with alien crew members taps directly into the fantasy of the space opera. Players who share an enthusiasm for science fiction adventures thusly find another, more personal means of learning about the game world. The *Mass Effect* games embed these interactions further into the world by making sure that the choices the player makes in conversation can directly affect the characters with whom they interact, allowing the player to participate in individual character arcs.

The absorbing fantasy of *Mass Effect*, perfectly attuned to my nerd frequencies, also supports a feature that many games aspire toward and often fall short of grasping: replayability. The completeness of the world and interactions foster the same experience as re-watching a favorite film or thumbing through a beloved, dog-eared copy of a book or graphic novel – the pleasant rediscovery of places, characters and scenes. In my teenage years, I would often repeatedly immerse myself in fictional worlds, consuming every bit of information I could find. As adults, we like to think that we grow out of this type of intense study when it comes to the imaginary, but television shows like *Lost* demonstrate that many of us love to explore mystery and mythology. The *Mass Effect* games take this a step further by inviting the player to participate and giving them a choice in how events unfold. This, however, is the power of interactive video games, so let's look at some less obvious ways that *Mass Effect* excels in providing replayability.

In my experiences playing the games, I experienced a certain level of attachment not only to non-player squad members, but to each iteration of Commander Shepard I created. Of course, a solid character customization system supports the feeling of 'knowing' each one, but what the games really do well in characterizing Shepard is accommodating different play styles. This is addressed in two ways: in player specialization, which pushes the skills of that particular Shepard in a particular direction, and in a morality system that helps define that Shepard's tendency toward 'good' or 'evil' behavior based on choices the player makes throughout the game. Combined, these systems afford the chance to create any number of different space heroes with varying outlooks and experiences in the context of the game – a rough-around-the-edges soldier with a heart of gold, a powerful biotic who walks the moral line, or perhaps a cold-hearted sniper with little regard for anyone or anything. Consequently, each Shepard of my creation had his or her own story throughout both games. The last Shepard I created was built in *Mass Effect 2*, without having played that character in the first game. While the experience was still of a very high quality, I felt that in some ways it was missing something, that it was like telling only half the story of "my Shepard," or that I'd missed the first movie in the series starring that character.

On that note, we can start to see how playing the games more than once is actually quite pleasurable. The player is given a lot of freedom to experiment with characters and choices in the game – the freedom of creating the same epic space

adventure story in any number of different molds, much as I did as a child using my imagination. At some point, I know I was playing more *Mass Effect* simply to take all the paths I hadn't yet wandered down, or to hear the numerous different responses my crew had in conversation. *Mass Effect 2* ratcheted this up by providing cinematic interrupts. These are choices that are only available for a few seconds, springing up during interactions with other characters. In a particularly memorable scene, Shepard and a crewmate interrogate a criminal on the Citadel. He's so irritating and full of himself, you wish you could just punch him – and up pops the Renegade action option. Shepard communicates his or her tested patience by squeezing a fist. Do you punch the guy in the face, or do you let his snide comments slide? The answer for me was, of course, both. On the other hand, the use of such an interrupt might affect the loyalty of a crew member. This is a great way to engage the player even further in the theater of *Mass Effect*.

Replayability is one way the series resembles my youthful absorption of the imaginary worlds of science fiction, but anticipation is another important aspect that *Mass Effect* does not neglect. Like all good epic stories, each game ends in an exciting cliffhanger, promising more adventures to come, but what sets the games apart – especially *Mass Effect 2* – is the regular release of high quality, downloadable updates. For players who had already completed the games, here was yet more *Mass Effect*, concentrated into episodic format. *Lair of the Shadow Broker* alone featured beautifully detailed environments (a massive ship stationed in a stormy atmosphere that stored lightning as its power source, the *Blade Runner*-esque immensity of the city of Illium) and resolved a long-standing plot thread. The little kid in me waited with bated breath as if expecting next week's episode of *Star Trek*. Of course, each additional adventure begged to be played from the perspective of each of my Shepards. Any ending reached is modifiable by more play.

On the other hand, one of the biggest issues with bringing epic science fiction stories to an end is that they have to do a lot of work to resolve narrative and character threads. In asking the audience to engage with an operatic, far-reaching story on that level of detail, the ideal ending is often created in their minds, and it's against that ending that the storytellers must compete. Not surprisingly, endings to complex science fiction tales often fall short of the expectations crafted by the fans, even if the fans themselves aren't sure of how the stories could end in a better way. Likewise, storytellers - under pressure - can stumble. Typically, when a story begins, there is an agreement between the storytellers and the fans that there is in fact an end to the story – but I feel that science fiction stories are not really meant to end. They are meant to live on, either in more installments or in our minds, inspiring us to think critically about human society and its future. In this way, video games are well-suited to the task of telling science fiction tales. There's a lot more time and space in which to create a consistent world and drive player engagement, and *Mass*

Effect uses this to put itself in an enviable position: the universe of the game exists outside of its main story. The reason my science fiction childhood still resonates with me is because the worlds in which I immersed myself continued outside of any one story. From John Carpenter's *Tripods* books to the vast and exotic galaxy of *Star Trek*, the science fiction worlds that stuck with me were the ones in which I could imagine any number of stories occurring (and of course, the ones in which I fervently hoped more stories would be told). What better anticipation than that of knowing that the door has not been closed on stories yet to come?

Certainly, my experience with the *Mass Effect* series won't directly map for others. It can't be presumed that someone without the same personal connection to the science fiction themes I valued so much as a child would experience the same level of absorption with the games. For those of us with that connection, the *Mass Effect* series takes perfect advantage of it, letting us know that it's okay to play with spaceships again. By providing a galactic playground, powerful story customization, and top-notch character interactions, the games accommodate the energetic story permutations that we once crafted as children. Whether it's an archetypal cautionary tale or musings on the future of technology and society, science fiction has always been about imagining the astounding – *Mass Effect* lets the young nerd inside of us participate in and ultimately take with us the best the genre has to offer.

“

*This game makes for a
unique experience that
encourages something
positive in real life.*

”

THERESA CHEN

THE WORLD ENDS WITH YOU

Everyone who considers themselves a gamer has heard of Square-Enix. With serial titles such as *Final Fantasy* and *Dragon Quest* taking a dominant stance in the market during each release (*Final Fantasy XIII* sold over 5.5 million copies within 3 months of its international release in 2010), it is no wonder they are often considered the masters of the J-RPG (Japanese Role-Playing Game). Their games, known for their vibrant graphics, storytelling, character designs, and battle systems, have earned them notoriety.

J-RPGs rely on creating captivating story and characters to draw in the player. Oftentimes, the J-RPGs that are most captivating are the ones that relate to something within the real world that is part of our lives, whether that means the game is set during a recent war, or has characters who are falling in love for the first time. This correlation to the real world is usually kept within the game, however. The blur between the real world and game world is usually dependent solely on our revelations and personal outreach.

J-RPGs are also generally solo-play games. One person becomes emotionally invested in a virtual world and with the virtual beings in it. The biggest outreach to the real world that a J-RPG has is the fan-base that forms around their games. Through the fans, the fanfics, fanart, cosplay, conventions, and merchandising, the general camaraderie around a game grows, but these are very dependent on the personal outreach in which the fans choose to take part, and are separate from the game experience itself.

Creating experiences where the community's interpersonal interactions are emphasized in the game has turned into a focus in today's social/casual gaming. This has become a major genre, incorporating gameplay across a person's social network that allows you to play a game and casually connect with your friends. While this has become a wide storm of tile-clicking, prize-collecting, friend-spamming, and microtransactions, before this Facebook gaming craze, Square Enix created a different kind of social game. *The World Ends With You*, a Nintendo DS title, created social connections in a more subtle and unique way. Unlike Facebook games, which utilize your social network to spread gaming, *The World Ends With You* utilized your gaming to spread socializing. It made reaching out to others the theme of its game.

The World Ends With You (*WEWY*), originally titled "Subarashiki Kono Sekai", is a Square-Enix J-RPG on the DS. Unlike Square-Enix's past trend of creating fantasy worlds, *WEWY* is set in Shibuya, the shopping district and popular meeting-location

of Tokyo. Because of its setting and the unique culture of its target audience, *WEWY* was originally intended as a Japan-only release in 2007, but, due to its success in their home country, Square-Enix decided to release it world-wide in 2008. *WEWY* has received a lot of attention for its dual-screen battle-system and its 2D anime/graffiti-cross art style. This, combined with its additional game mechanics, plot themes, and character development, enabled *WEWY* to create a uniquely subtle social gaming experience.

For its original demographic, socially reaching out was a very meaningful goal. In Japanese urban culture, reaching out and socializing with strangers is not as widely practiced as in the US. Often, if you sit on a train, it will be silent with passengers primarily on cell phones or mobile consoles playing games or texting. While this norm is a very mild form of isolation, in Japan, isolationism has been known to reach extremes among the youth culture, even causing the government to claim it as a social issue of their country. There is even a term for the extreme cases: hikikomori, which refers to people, often youths, who, for various reasons, completely isolate themselves from the world, refusing to leave their rooms for months or years. In addition to hikikomoris, there are also the otakus, who are notorious in Japan for preferring virtual companionship over real-life friends (otaku has a deeper connotation in Japan, whereas in the US it's more related to fandom in general). While these are the extreme cases of isolationist behavior, *WEWY* draws parallels to the sensation of being separated from the world to create an experience about trust and reaching out to others.

Starting with the plot, *WEWY* is set in real-world modern-day Shibuya, the shopping district and common hang-out location for Japanese youth, which already draws a parallel to the target audience. It centers around a main character named Neku, a 14-yr-old loner who is sick of the world, but still ventures out to Shibuya because of his interest in a particular street artist. It is during one of these ventures that Neku finds himself unwillingly pushed into a Reaper's game in the Underground (UG), a parallel world that co-exists with the real world, called the Realground (RG). Those in the UG know what is happening in the RG but those existing in the RG are unaware of the UG, much like a world of ghosts who live in another plane among us in the real world. The players in the Reaper's game are all youths that have died in the RG. The game is a 7-day competition for a 2nd chance at life, with the entry fee being the in-game player's most valued possession. Only one winner per game can regain their entry fee and return to the RG. The rest are "erased", or removed from the UG to whatever afterlife remains past the Reaper's Game. However, Neku, due to the circumstances of the plot, ends up repeating the Reaper's Game three times, each time giving up a new possession as the entry fee.

The user is meant to make a connection with Neku and follow him as he develops through the DS game. In order to play the Reaper's game, Neku must partner with another in-game player in order to battle and complete each day's quests, thus already drawing the first connection to the theme of creating social bonds. His first partner is Shiki, a stereotypical fashionista commonly seen roaming the streets in the shopping district of Shibuya. The second is Joshua, a boy of the RG who chose to enter the game despite not being dead, and is seemingly self-serving and arrogant with his own goals and interests. The third is Beat, a street-thug-like boy with a fiery temper who is more about action and less about thought. Each of these characters can fit into a parallel stereotype of Japanese youth, but each of them also shows Neku a side to themselves that reveals that there is more to them than meets the eye. Through his interactions with these three and other characters in the Reaper's games, Neku learns the value of people and how to trust others despite their flaws. This is shown most clearly in Neku's entry fee during each cycle of the Reaper's game. In the first cycle, when Neku is still very anti-social, Neku's entry fee is his memories, the only possession in which he could place value. In the second, it is Shiki, the one friend to whom he grew connected, which ends up having higher value in his heart than anything he had before. The third is all the players in the UG of Shibuya, meaning that what he cared about most was the lives of all the people around him.

In terms of the plot, the conclusion to the game was incomplete. To fully understand the plot, you had to replay the game and collect reports scattered in each of the cycles and get 100% completion. But in terms of the theme, the conclusion left Neku with the friends he made in the UG. Neku started the game as a loner who was tired of the world, but through his interactions with the people he met and the journey he took through each Reaper's game, he became someone who cared about others who also cared about him. The game's story teaches the user the values of reaching out to people and finding those with whom you can connect.

Considering the story, the in-game mechanics supported its theme well, especially the core battle system which required that the main character pair up with another in-game person in order to fight. In the Reaper's game, Neku could not move forward alone but always had to have someone join forces with him for the 7-day competition. When playing a battle, the player has to control both characters using the touchscreen and the d-pad of the Nintendo DS, making the two characters work together to pass a "light puck" that allowed for special items and stronger attacks. Successful chains of attacks allowed for dual-based specials. Finishing an attack in unison boosted the characters. In addition, there were specific enemies that required the player to pass attack responsibility between the two screens on the DS. The entire battle-system encompassed collaboration between virtual characters.

Through these mechanics, Neku was also obliged to pay attention to the everyday people around him. From the beginning of the game,, Neku had to scan minds in specific world maps, in order to see the Noise (enemies) and the thoughts of passing people in the UG and RG, which helped to solve puzzles, seek out battles, and find secrets. While the thoughts of the NPCs were pretty generic and mostly irrelevant to the gameplay, the concept of stopping to listen to the thoughts of those around you put focus on the idea of allowing people to show another side of themselves. Through Neku's partners, the major plot characters, and this listening-to-others mechanic, the game was able to emphasize the importance of seeing individuals through the stereotypical noise of crowds.

The rampant fashion trends and brand names was another gameplay factor that tied this game to the real world. Shibuya is the shopping district of Tokyo, and is littered with designer stores catering to multiple types of fashion interests. Many youth culture groups are represented in this game, from hip night-club fashions to sportswear and even to Lolita and gothic clothes. By selecting a fashion brand and battling Noise in specific regions of the UG's Shibuya while wearing that brand, you could influence the fashion trends of that town. NPCs in the RG will start following the "latest trend" and dress in that brand's style. Wearing the same brands of the area gave you bonus points for attacks, while wearing an opposite brand could have negative effects. Picking a fashion to represent you, and influencing an area was about creating a group around a common interest and feeding off of that group identity. Fast trend-setting and fashion-based group identification can be found in real-world Japan youth culture as well.

Further connecting *WEWY* to the real world were the game mechanics specific to being on a mobile platform. *WEWY* was designed for the DS and, thus, designed for mobility, utilizing a UI theme centered around cellphones and having Neku's main source of information be his phone. Using the Nintendo DS' mobile features, (and drawing connections to Japan's mobile phone culture) the designers incorporated some unique elements to coax players into social interaction with real people.

The entire game of *WEWY* is played within the DS, but in order to fight effectively and get the best weapons (which in *WEWY*, are pins that give special abilities), you had to use different tactics to level up, one of which was called Mingle Mode. Mingle Mode is an option accessed through Neku's cellphone that requires you to stop playing the DS game and physically move around public areas where you would be likely to encounter others who are playing on a DS and, especially, those who are also playing *WEWY*. You were given points for encountering others with an open connection enabled on their DS, and even more points for encountering someone who also had Mingle Mode for *WEWY* turned on. Like Neku playing the Reaper's game with other in-game players in the UG, which is unknown to the people of the RG, in this mechanic, you are a *WEWY* player walking around real-world Shibuya,

playing a game unknown to the majority of the people around you with only the other players of *WEWY* knowing what is really going on. This interaction creates the strongest connection between the game's message and the user's real life.

Users also had to turn off the DS in Shutdown Mode in order to level up pins. In this mode, the game literally asks you to shut down the game for up to 7 days and come back later to collect points. A game that asks you to turn off your DS is asking you to do something else besides play video games, so what *WEWY* is asking the user to do is to close the DS, look up from its dual screens, and interact with the world around them. Given the portable design of the console and the frequency that players in Japan's demographic play games in public areas (such as in transit on trains), this meant taking time to look away from their devices and notice their social surroundings.

In addition, within *WEWY* is a minigame called Tin Pin Slammer, in which the user would slide pins across a board to knock the opponent's pin off a platform. Pins were items used in battle by Neku and gave him special abilities to fight Noise. They were designed to be collected in sets and to get special pins, you had to play this game. There were a few NPCs to play against, but this mini-game was designed to be played with other *WEWY* players. Playing with others also gave you Mingle Points, a coveted and difficult-to-collect category of points. This was a direct interaction with others that *WEWY* offered. Combined with the more subtle means of connectivity *WEWY* provided through Mingle Points and taking advantage of the DS' portability, Tin Pin Slammer offered a more direct outlet for social connectivity.

Individually these elements may seem insignificant, but the layered way they were brought together in this game makes for a unique experience that encourages something positive in real life. Assume you are someone who is shy, or grew up in a culture where keeping to yourself is customary. Imagine being in a train in Tokyo, playing this game on your DS as so many people in trains often do. You've switched your game to Mingle Mode and suddenly you get a ping on your DS saying another person is nearby. Someone on that train is also playing *WEWY* too. You look (and that person may be looking too since they will have received an identical ping) and see another person with a DS in their hands. From here you could be bold and ask to play Tin Pin Slammer with this person (which would require you to speak to them in person), but if not, you've at least become aware of another who is sharing an experience as you.

The social connection in *The World Ends With You* is subtle. The indirect approach creates a more affective experience for the shyer, more isolated solo-playing audience, common to the Japanese otaku and hikikomori stereotype. It weaves the real world with the game world through interconnectivity between the in-game protagonist with his social surroundings and the player with his parallel city, creating

a meaningful experience that teaches through indirect reinforcement. *WEWY* blends its story and in-game mechanics to impart its theme to the players. Even the original title hints at the game's goal. The Japanese title, "Subarashiki Kono Sekai" translates to "How Wonderful, This World Is" or "It's A Wonderful World". *The World Ends With You* teaches you to try and trust people, to look past the noise of the crowd and see the individual, and asks you to connect and find people in your world as well.

“

*This is already looking
awesome and we
haven't even gotten
to the good part.*

”

FRANCISCO SOUKI

ANYTHING YOU CAN DO, CHRONO TRIGGER CAN DO BETTER

Back when I was 9 years old I would go with my mom, once in a long while, to the video rental store to rent VHS tapes. I had very little interest in movies back then, so I would head straight to the SNES rental section and stare at their limited selection. I have no idea why I chose that game the first time - I guess the cover art, as it used to be back in the day, caught my attention. Whatever it was, from that moment on and until someone else was smart enough to rent it and not return it (should have been me!) every time I went to the video rental store I would come out holding the same SNES cartridge: *Chrono Trigger*.

Chrono Trigger was, back when I didn't really know what an RPG was, my first JRPG (Japanese role-playing video game). I had played other, more primitive RPGs. I had played adventure games with RPG elements. I had all the pieces of the RPG puzzle lying somewhere in my head, but no game had yet put them all together. Lucky for me, *Chrono Trigger* made them fit together like instruments in a symphony.

Now, there's a catch about the video rental scenario: I would only get to play the game for a couple days at a time which meant that my save file would invariably be erased next time I rented the game. In short, I must have played through the beginning of the game dozens of times: that panning shot over Chrono's house, with the fair in the distance and the sound of seagulls, the view of the continent, the sound of Lynne's Bells - all together are stimuli that my senses associate with my childhood. Well, not only with my childhood, as I've played through *Chrono Trigger* many times.

Let's recount those quickly. Ahead is my full disclosure, it's sort of boring.

I played a lot of *Chrono Trigger* in and around 1995, when it first came out - of course I never finished it back then, as between the fact that I only had it for a couple of days at a time and my parents' emphasis on me not spending entire weekends gaming, I never got too far into the story (farther than you'd think, though...). Then later, around 2000 I finally played through it for the first time on the ZSNES emulator for the PC. Some time after that, and having skipped the PS console, I bought a PS2 and with it a copy of *Final Fantasy* Chronicles. I played through *Chrono Trigger* again, PS version this time, somewhere around 2004. That time I finished the game and found all the possible endings. I played the game again, sparingly, until 2008

when I bought a Nintendo DS just so I could play *Chrono Trigger* (though I ended up falling in love with the system, this was what pushed me to buy it). I played through the game again then, thoroughly, walkthrough in hand. I'm currently making my way through all of the endings again for the DS version.

Here's the thing about my particular experience with *Chrono Trigger*, though: give this game today to any gamer and, in the highly improbable case that they haven't heard of it yet, they will quickly recognize strong elements in it and realize how strong the design is. But present it to a nine-year-old in 1995, living in Caracas, Venezuela; have him take it by chance from a random selection of games - and you know what? Even he will identify those strong elements.

In this day and age, we very rarely have the chance anymore to discover anything for ourselves. When was the last time that you picked up a book, saw a movie or played a game that you had heard absolutely nothing about prior? Doesn't happen too often, does it? And what are the chances that you will fall madly in love with it? And then, even better, what are the chances that after falling in love with it, you start realizing that thousands of people all over the globe are also falling in love with it? It is rare for someone at this point to discover a classic before it becomes a classic, or to even discover a classic before we realize it is one. But that 9-year-old in that video rental store who just happened to like the cover and decided to give that game a shot: he had that chance and he took it.

And I'll tell you the exact moment when I knew that the game I was playing was extraordinary - I can pinpoint it because I can remember how baffled I was when it happened. At the very beginning of *Chrono Trigger* you start the game playing as Crono. There's a town fair happening not far from your house and a friend of yours is going to unveil an experiment there so you decide to check it out. You are encouraged to explore the fair for a while - with the free-roaming fair serving as a tutorial level - and as you do, you accidentally crash into a girl. You both fall to the floor, and so does a pendant she was wearing. You get the pendant, help her up, and give the pendant back. She thanks you profusely since that pendant is a family heirloom and she asks if she can tag along with you for a bit. You explore the fair together and perform simple tutorial-like tasks: she gets candy at a store (takes her a while, too), you find a girl's missing cat, you can take a guy's lunch from a table and eat it, you can buy items from a merchant that even tries to get you to convince the girl to sell him her pendant, and so on - regular RPG stuff. After a while, your friend is ready to unveil her experiment so you take the girl along to that.

Then the action begins. The girl disappears through a fluke with the experiment, and so you - a hero and a gentleman - volunteer to go find her. The game goes on for a couple hours, which have the player going through a forest and a dungeon to find the missing girl. Eventually, you rescue her and before you bring her back

home you realize that she's actually a princess. As you bring her back to her castle you get arrested: you're being charged with kidnapping her. Wait, what?! But I just saved her! - you yell at the screen. Sure you did, but the Chancellor has it in for you and so he calls a trial to determine if you're innocent or guilty. Stop right there. Think about this, now. A trial. To determine your innocence. This is already looking awesome and we haven't even gotten to the good part.

Cue establishing shot of the gorgeous courtroom and so the trial starts. At this point, my 9-years-old self is wondering what the hell is going to happen in this trial. Is this going to play out as a cutscene or what? And let's be fair, even now, more than 15 years after the game was released, one would expect no more than a cutscene to deal with this situation. Well, be it now or then, one would expect wrong.

The trial starts. Forget about the cutscene, they're asking YOU, right now, if you're after the Princess's money. Ridiculous! Of course not! you answer. Well guess what, the Chancellor calls in a witness that explains how when you and the girl crashed into each other at the fair you went to pick up her pendant instead of checking to see if she was all right. And then, as if it weren't enough already, they show a video replay of you doing exactly that. All you want to do is get up from chair and start shouting at them - Imbeciles! This is a video game! You're supposed to get the shiny things first!!! But it's helpless. Luckily, your lawyer is not a moron and he calls the little girl whose cat you rescued to testify, she agrees that you're a good person and the trial goes on. Same thing happens with four or five other actions that you took while at the fair: if you ate the guy's lunch they'll show that as proof of your bad behavior and if you asked the girl if she wanted to sell her pendant then they'll bring a witness to imply that you're after the girl's money. By the end of this sequence you're wondering what sort of twisted mind designed this. You feel confused, your concept of what a video game is is crumbling before your very eyes and in your very hands. You sit up in the couch, and get ready for whatever the game has in store for you next. You are engaged.

That is when I fell in love with *Chrono Trigger*.

But what I didn't realize at the time was the most important part: that the game was training me. See, *Chrono Trigger* is a time travel game and as such, it has you jumping from one time period to another, messing with history. The most important concept for a player to grasp in order to understand the story and flow of the game is that actions have consequences: whatever you do or change in the past will in turn change something in the future. It is important then that players become more aware of their actions so that they are not caught off guard by the consequences. The trial scene is just a reinforcement of this concept, an opportunity for the player to directly face this paradigm. It's a sort of warning of things to come. It is also a love arrow shot straight at the gamer's heart.

Now let's go back to that part where I mentioned in passing that *Chrono Trigger* is a time travel game. I am assuming that you, as a reader of this piece, have encountered and consumed some sort of time travel-themed media before - whether it's *Back to the Future*, *The Terminator*, *Heroes*, *Harry Potter and the Prisoner of Azkaban*, *Donnie Darko*, *Chrono Trigger* or *The Lake House*, starring Keanu Reeves. If you have, then you know that time travel can get messy: it's hard to explain, hard to grasp, overused as a storytelling device and often unconvincing. You will also be happy to hear that this is not the case with *Chrono Trigger's* time traveling. Here's why:

1. First of all, the pacing in *Chrono Trigger* is well designed, and its story is well-written. The characters are not expecting most of this time traveling to happen, so they are discovering this situation along with us - they are as surprised and confused as we are.
2. The time periods through which the characters travel are spaced really far apart. The party visits ancient times, the middle ages, the future - the minimum temporal gap between ages that are visited is 400 years (or 300, if you want to get really technical). This mostly eliminates the problem of the possibility of running into oneself (always confusing) and also plot points such as having to seduce your own mom.
3. Few characters have the ability to transcend time in the game, and those who do can also recognize the heroes as time travelers, so they very rarely have to explain that they are traveling through time or have to confront people that they have met in other ages.
4. Each time period that the players visit is distinctive, yet absolutely familiar. The geographical map retains most of its topology across time, so mountains, islands, forests, etc. are mostly on the same spots across the ages, making the terrain recognizable. However, each era has a very distinctive look, and they are absolutely impossible to mix up with one another. Different characters, color palettes, music, weather effects and overall style ensure this.

These are only some of the design aspects that keep the time traveling manageable, the player more often than not can easily keep track of what is going on. The effect this has on the game is that it manages to benefit from all the cleverness that a time travel-based plot usually allows for while keeping the story manageable and digestible.

Another very nice touch is that the different characters that act as party members in the game come from varied eras, as the player sort of picks them up along the way of their travels. This is extremely helpful in keeping the story close to the party,

thus helping the player relate to it through the characters he is controlling. This may sound ridiculous, as the characters in any game should most definitely be deeply involved with the story in order for it to feel important at all, but the truth is that many games have a hard time getting the player to care about the story itself rather than about the action of advancing it.

Chrono Trigger manages to do this by making the story relevant to the characters in both an overall manner (the world could end, which affects all characters) and a personal manner by involving the fate and importance of their specific time periods into the story. More often than not the story is driven not only by an overarching goal but also, and more prominently, by at least one of the characters' personal goals. And this, in the case of *Chrono Trigger*, works.

But why does it work?

The answer is simple and somewhat broad. Ok, it's very broad: because the characters are awesome. In fact, let me put it this way: the characters are so awesome that it can get confusing to analyze what makes them so awesome. Let's still give it a shot.

It starts visually. The characters were designed by Akira Toriyama (the guy who created Dragon Ball), and he did an excellent job of giving all of them a distinct look. The main part of this distinctiveness is that not only do they, when put side by side, clearly belong to different eras - they also are each aesthetically consistent with their own era. Second is that the gear they wear, their body features and their color palette, are all very reflective of their personalities.

Add to that the fact that if there's one thing that these characters do not lack is a strong personality. And by "strong" I don't mean that they are fighting for your attention, all trying to shine within the group, but rather that a lot of work clearly went into these guys' and gals' backstories and how they fit within the main storyline and around each other - and it shows. The way in which each future party member is met by the active party and ultimately ends up joining is, without exception, deeply integrated into the story. No party member feels tacked on without necessity, and there is also never the feeling that one must do specific side quests to add party members: all of them join because it makes perfect sense within the story for them to do so. This is a luxury the designers could afford since there are only 7 available party members throughout the whole game, which also allows for each party member to voice their opinions during story sequences.

Furthermore, as the game advances the player realizes that *Chrono Trigger* also made the most of their limited party size by tying the optional side quests to party members. This works brilliantly for them since it creates a decent number of relatively lengthy side quests that have the added bonus of revealing a significant backstory

element relevant to each character - an element that would otherwise have been left untold. Players are then encouraged to take on the side quests to gain extra experience, obtain new and powerful items and to get to know their party members a whole lot better. The player feels compelled to go on the different side quests almost as a favor to the characters, since most of them tackle an unresolved issue in the character's present or past that, given the party's time traveling abilities, can be dealt with now or at any time.

Ah, "at any time". This reminds me...

See, side quests are not the only part of the story that can be dealt with at any time. This might get you thinking that *Chrono Trigger* is an open story game where parts of the story can be played in any order the player wishes - but you should immediately stop that train of thought. *Chrono Trigger's* main story is absolutely linear, don't doubt this for even a millisecond. But there's a fine print to that: since the goal of the game is to defeat a being that is going to destroy the world in a specific year, you can just travel to that year, defeat it and end the game right there - at any time. From a logical point of view it makes perfect sense. And from a gaming point of view, what implications does it have? The implication of different endings, of course.

The magic of these different endings lies in the fact that they are not all parallel, alternate endings but rather (although, not quite) sequential, different endings. Imagine the course of the main storyline of a game as a straight line, with all the major plot points represented sequentially as a little marker that intersects the line. Now imagine that from each of those markers you could jump straight to the ending of the game, except that by doing so you bypass everything that would have happened in between that marker and the ending - it means that you still save the world, but you didn't do a bunch of other stuff along the way, like pick up some party members or fix specific things in long-gone eras. On top of that it also allows the player to replay the game and, at specific spots, save the progress and head straight to the final boss to experiment with the ending. It is a rare occurrence that even gives meaning to the "New Game +" feature.

The music of the game is what rounds up an incredibly solid infrastructure on top of which the main systems were built. The beautiful soundtrack that makes you forget that what you are listening to was composed for the Super Nintendo does a great job of evolving (and devolving) as the player cruises through the different eras while always remembering to hint at the epic proportions of the party's task. The soundtrack, together with the strong characters, the well-implemented time-traveling theme and a strong story told in a compelling way are what make up the foundations of this game. But what about the stuff that was built on top of it?

Perfect segue for us to get down and dirty with the battle system. *Chrono Trigger's* battles are turn-based, built upon the same foundations as most JRPGs out there. Players can choose at the beginning of the game whether they want it to be strictly

turn-based (enemies act, then you act) or somewhat real-time (enemies go again if you take too long deciding what actions to take) - but other than that there is nothing too innovative about the pacing of the battles. *Chrono Trigger's* battle system does excel at four things however: combat positions, context-sensitive battles, Team Techs and cleverness of encounter design. Let's go over those.

First up is combat positions. We should start by saying that the camera angle for the exploration areas of *Chrono Trigger* is isometric, somewhere between a top-down camera and a 3/4 one. In these exploration areas, players can initiate combat by colliding directly with roaming monsters; when combat is initiated, the three active players from the player's party take their positions in a section of the screen and all enemies present in the screen take their respective combat positions. Both enemy and player positions are of extreme importance during battles since some specific special moves (called Techs) are area-based. For example, one Tech called Slash will prompt the player to choose an enemy and hit all other enemies on a straight line between the player and the chosen enemy while a different Tech called Cyclone will hit all enemies within a specified radius. It is important to note that players cannot move the characters on the combat field, so they must adapt to the position conditions imposed by the game in order to make the most of their Techs. This is an element that, even though it's extremely common in tabletop RPGs such as Dungeons and Dragons, doesn't make an appearance in video games often enough.

Next up is what I like to call context-sensitive battles, or rather context-sensitive events. The important point to convey here is that environments in *Chrono Trigger* are often active or reactive, which can have a direct impact in specific battles. Switches in the environment can prompt a battle or directly reduce the character's Hit Points - even outside of battle. On top of that, environments are designed such that surprise battles are never left unexplained. In the future era, enemies might fly in via conveyor belts while in the Middle Ages they could jump from behind bushes or from a small cliff. In a Boss's lair a suspicious switch could cause a monster to appear as easily as it could cause a hole to open on the floor, causing the player to fall into a secret treasure chamber, and waiting for the rain in the hunting grounds will increase the chance of a special type of enemy appearing. In short, environments are not just paintings that serve as backdrop for the story, but rather living elements of the story itself.

I mentioned before that in *Chrono Trigger* the special combat abilities (like spells and such) are called Techs - and Team Techs are no more than Techs that are performed by two or three team members at the same time. I find it incredibly hard to believe that every RPG since *Chrono Trigger* has not copied this design, since in my opinion it serves the game so well. The idea is that almost every two-character combination in the game has a Double Tech that combines one Tech from each character into an extra-powerful "super" Tech. This has a positive impact on the

game in many levels. It encourages the player to level up all characters and play around with party formations to discover the different Double Techs. It also adds a new layer to the combat, since both characters need to be active at the same time to perform the Double Tech - and the time that one character has to “wait” for the other to be ready as well is essentially lost time. Furthermore, it enhances the level of camaraderie perceived by the player between the two characters, as they are acting together against their foes, rather than on their own. And last, but certainly not least, it is pretty darn cool. Emphasis on the cool for the Triple Techs, which occasionally require the player to find a special item to enable them, and which represent one of the ultimate achievements in the game: to have a band of enemies wiped out by an incredibly cool-looking move in which all party members contribute the best of their skill.

Lastly, it is imperative to mention the cleverness of the encounter design. The designers truly did a great job of identifying all of the elements they could play with to create exciting encounters and executing endless variations on them. Enemies that are immune to attacks, sets of enemies that must be defeated in a specific order, multi-part bosses that heal themselves in predictable patterns, foes that change vulnerabilities mid-battle or that get stronger as the battle goes on, enemies that counter-attack automatically, that attack with specific area-effects or that affect party status, enemies that change position during battles or that call reinforcements - all of these types, and many more, are combined to create battle after battle after battle that feel challenging but never unfair, and that require the player to equip the appropriate items as well as to think fast and strategize on their feet.

The virtues explained above have the happy consequence of making the combat in *Chrono Trigger* feel extremely organic. Turn-based RPGs have the unfortunate tendency of presenting a deep customization tree for characters but shallow encounter design, resulting in battles that are often filled with flare but rarely with excitement. *Chrono Trigger*'s combat is designed to keep the player on their toes: it is exciting, fun, clever and allows for exploration. I'm not saying that the combat is without repetition (it is a 20+ hour-long game, after all) but players will find themselves constantly challenged by boss designs, enemy immunity to specific attacks and variable enemy positions on the board. This, coupled with a Tech tree that feels rewarding, make up for a battle system as solid and exciting as I have ever seen.

At this point it should become clear that a lot of love was put into this game's complete development process. If we look at it from an exclusively design-oriented point of view we will see that the game both innovates and emulates within its genre with great success - for example it introduces new storytelling devices and perfects the turn-based combat system while at the same time keeping a traditional equipment and party system. This is taken to the next step of perfection when dressed up in a

charming and appealing way by adding great art, unforgettable music, and overall tasteful flavor to the already solid base. *Chrono Trigger* is solid from start to finish and from low to high level, looked at from afar or with a microscope almost to a fractal perfection - where uncovering further and further layers just reveals deeper levels of great design.

Somewhere within these paragraphs lies the secret of this game, the reason why I can't listen to the main theme without getting goosebumps or why I can't play through the beginning sequence without getting pumped. Or should I say that it doesn't lie up there among those paragraphs but rather down here, at the bottom, as the sum of all that has been said. The true genius of this game, the thing that sets it apart from so many other JRPGs, is the perfection with which the fine thread that binds all its elements together was woven. It's the fact that, as with a complicated sailor knot, pulling hard at one end of the game tightens the whole experience rather than bringing it apart. Battle system, grinding mechanisms, exploration, character design and development, inventory system, soundtrack, story, storytelling devices - all interwoven to create an experience that becomes more and more solid as the player tugs harder at the controller cord.

We can find examples of this all over the game. The environment design helps us get oriented in the midst of all the time traveling while also contributing to the combat design and providing player-triggered events. Character development affects the story and combat alike, opening the possibility of Team Techs and fueling the player's desire to complete the different side quests. Some special, equippable items are tied to the story and have both meaning to specific characters and special abilities when equipped. Time traveling is not only used as a storytelling device but also reinforced by (and at the same time used to reinforce) character style, player relationships and ending variations.

What it comes down to in the end is that the elements of the game seem to all have grown together as siblings in a family, affecting one another and developing a synergy that has deep roots in the design process. And just as one can see a group of brothers playing together and understand that they share a bond that is both indescribable and undeniable, one can play *Chrono Trigger* and immediately identify a similar sort of magic at play. The icing on the cake is that the last necessary element is the player himself - giving meaning to the game via interaction and connecting the live wires of the game's guts in order to get the machine going. The result is more than a game, but rather an experience that the player feels privileged to experience. Because everything that *Chrono Trigger* does, it does exactly right.

“

I'm pissed off, I don't understand what I'm doing wrong, and I'm done.

”

JASON VANDENBERGHE

THE OPPOSITE OF ACCESSIBLE: STREET FIGHTER IV

Mortal Kombat was the last fighting game that I loved.

You heard me. The first one. *Mortal Kombat One*.

The *first* fighting game that I loved, though... that was *Karate Champ*. Way back in 1984, that was.

Karate Champ was an upright arcade game - 25¢ a pop, back when games cost *blood*. It was a simple game – two joysticks for input, with different combinations of up-and-left (or right-and-right) triggering attacks. The first player to land a blow scored either ½ or 1 point per hit (depending on how *awesome* it was), and getting two points won the round. It was (as literally any fighting game that is in fact about fighting will be) all about the distance between the opponent, reaction time, and choice.

Flash forward: we are in 2008. That, dear friends, is a *long goddamn way* from 1984, especially when one is contemplating silicon-based entertainment. The fighting game genre has become the Fighting Game Genre – a legendary competitive world all its own that has spawned amazing events, championships, hundreds (thousands?) of splintered versions of dozens of different brands, and a wide array of culture, skills, experience, history, language, and design that make it a world unto itself.

In a word: *balkanized*.

Now, just so as that you all know: I have a particular audience in mind for this article. I am, in fact, writing *to* someone. Or, I suppose, someones, plural.

This article is being written to everyone in the games industry who is making fighting games. Artists, animators, designers, programmers, producers, marketers, sound peeps, anyone. If you are listening, this article is being written directly *to you*. In fact, if any of you actually receive this forlorn message in a bottle, I welcome a response (jason.vandenberghe@gmail.com).

Because I'm not fucking around. I want things to change. Here is my message:

I want to play fighting games. Yet, I cannot. I want this to end.

How can this be? Surely he is mad! Or, perhaps he is of The N00b Clan, they who can only try, complain, fail, and then blame others?

Perhaps!

Or, perhaps there is something that has been lost in the development of the Fighting Game Genre. Something that, perhaps, could serve a currently under-served segment of the market. (See what I did there? By using the ancient keyword 'market', I just got the business guys' attention, thus increasing the chances of this article reaching the desk of its intended audience. I'm clever, as a sledgehammer is subtle.)

There are many ways I could exorcise these demons. I could, for example, simply rail against the machine. Whine, complain. Better, I could make a fighting game of my very own that demonstrates my argument! Instead, I am going to write an article for publication in which I describe (in some detail) my experience as a "new user" to the fighting game genre.

(Voila, this article.)

The Word On The Street

See, one of these them thar fighting games recently got my attention. The early development of *Street Fighter IV* had some interesting hallmarks to it:

- The marketing was gorgeous. Someone thought they had a hit on their hands, and were spending nicely for the marketing campaign.
- Word on the street (oh, ye glorious games industry grapevine) was that the Street Fighter team was "trying to reach the mass market" with this one. There were two versions of this:
 - "They're gonna try to make it more accessible, yay!"
 - "They're going to ruin everything by watering it down, boo!"

Intriguing! And lo, when the game came out, there was, indeed, much bru-ha-ha about this.

"We love 2D and we love *Street Fighter III*, but the implementation of the new visual style and more accessible gameplay in *SFIV* is close to flawless.

Now, normally 'accessible' is seen a danger word in the world of videogames. Most people assume it's a synonym of 'dumbed down'. If something is accessible it can surely only be enjoyed by noobs or 'casual' players, whoever *they* are. In *Street Fighter IV*, however, accessibility is not at the expense of depth – far from it. This is a game to be played and mastered over months or years, not hours. What it *does* mean is that the game doesn't get too bogged down in technical play and precision input that only the top players will be able to enjoy. “

-- Cam Shea, IGN AU

<http://uk.xbox360.ign.com/articles/954/954036p1.html>

Awesome! That's for me!

“The decisive difference in accessibility of *SFIV* to other fighters then lies in its challenging tutorials of its new Trial Mode that goes beyond the plain teaching of move lists. For every of the 25 playable characters there are six challenges, each with a different difficulty, from easy to hard. “

-- Leonard McCoy, GamersGlobal

<http://www.gamersglobal.com/news/1590>

Sweet!

“It's a matter of balance and simplicity. The one on one fighter genre had become bloated and impenetrable to anyone beyond the most dedicated of players; those willing to learn the huge, esoteric button combinations to play the games with any great success. *Street Fighter IV* strips the genre back to its essentials, with a only few, instantly recognizable button combinations (down, down-forward, forward, punch) needed to get stuck in. Every character and their moves each has their own risk and reward, a perfect balance of timing, tactics and reactions. Input timing for special moves is generously calibrated, allowing newcomers to be able to pull off many of the moves relatively easily (17 years later, I can finally pull off Zangief's spinning piledriver consistently). It's the most accessible fighter in years, yet also remains the most skillful, with the more experienced and dextrous types still able to hone their skills to an almost superhuman level. The advanced arts are still there, with canceling combos and the new focus attack offering that great depth for the dedicated to gleefully wallow in.”

-- Tom Hoggins, The Daily Telegraph

<http://www.telegraph.co.uk/technology/video-games/4680192/Street-Fighter-IV-review.html>

Yes! Perfect! I'll take it!

Okay, here is what I propose to do: I really, actually, truly, haven't played this game – and I'm going to be a one-man-focus-test. I will record what happens to my brain and my feelers as I break the seal on this game. Right here, in this very article. In fact, right after *the next paragraph*.

Now this isn't a scientifically valid process – I have a point I'm driving towards, and that is going to affect my experience, and furthermore, everything about this idea reeks of self-important chest-pounding (which is my usual gig). However, I take the position that such trivialities aren't really relevant in light of what will (I fear) become abundantly clear to any game designer as we travel our course together. We shall see!

Let's Get This Party Started

So, let us embark on our journey. I took the liberty of buying the guide as well – even I know that if you're going to get into something like a fighter, you'd better at least bring along a guide.

After flipping through the guide quickly, I decide to jump in – I mean, we are in the year 2010, right? Right. So! Bravado in hand, and prepared to re-enter the genre that I once loved with a stalwart conviction, I shift into present tense, put in the disc, and boot the PS3.

Entering The Game

The opening sequence is *spectacular*. It's fluid, amazing. The legendary characters of the brand grapple and pound each other in what looks like a moving painting. The piece was part of the marketing for the game (if I recall), and it's certainly one of the best in class for this kind of thing.

It's worth noting, too, that CAPCOM went as far as using a song by a band named Exile as the theme to the opening – and that song is clearly a *pop* song.

They are reaching out. I feel reached out to.

Moments later, we hit the start screen. This pops on quite abruptly, with a single voice announcement: "STREET... FIGHTER... FOUR!" in a... well, I suppose one would have to call that a cheesy announcer voice. Grey metal background and the logo front and center. "Press START" lures me seductively from the bottom of the screen.

Hmmm. Well, that's okay – I've seen worse. Even so... there wasn't even a *fade up*. But what the hell - you can't judge a book by its cover, man.

Stalwart! I press [START]. I am eager to learn how to play.

The Main Menu

Ryu glares out at me from the background, eager to fight. Over that, I can see four text boxes. The text is small, almost illegible on my non-HD screen – but all that really does is cause a twinge of guilt that I haven't upgraded my TV yet.

One text box seems to offer settings of various kinds. One holds explanation text. Button instructions linger near the bottom in their traditional place.

“MAIN MENU”, one box declares, and offers me the following choices:

- Arcade mode
- Versus mode
- Network battle
- Challenge mode
- Training mode
- Player data
- Gallery
- Options

Okay. *WoW*.

...

I scroll up and down on this list, trying to make sense of the choices and their help text.

Now, I design games and direct teams for a living, and have been doing that for quite a while now. I have enough information in there to figure out what the distinctions between these choices most likely are.

However, the UI design-review-meeting-brain that I have cultivated over the years is screaming at me right now. “How in the world would a mass-market consumer with little-to-no experience with your genre ever hope to make sense of such a menu?!?” it is shouting.

I mean, the last three I can figure out. ‘Options’, ‘Gallery’, and ‘Player Data’? Sure. But let’s just say I want to *play the game*. I can choose between “Arcade”, “Versus”, “Network”, “Challenge”, and “Training” modes.

What do I pick?

Basic Training

Okay, okay, whatever. I’ll start with the basics. I’m going to try Training mode. Figure I’m not ready for Arcade mode yet – my dusty fingers haven’t fought in a real fighter in ten years.

I am presented with the character selection screen.

My guy on the right, the opponent on the left, and a big list of face icons in the middle. There is no text save the name of the currently selected characters. It’s sexy.

Hmm. I’m being asked to pick between... let’s see... sixteen different characters. Another 10 await to be unlocked, it seems.

Now, I know how to play *none* of these characters. What little I do know about the characters in the franchise I know from watching friends play, and from goofing around with the original Street Fighter in arcades (I played about five bucks worth of games, maybe, before deciding I would lose money slower at another machine).

So the really weird thing about this screen is that there is literally *nothing* here to help me with my choice. I like the looks of Chun-Li, though. I’ll try her.

For my effort, I am rewarded with a popup box, with two selections I can make. The first is “Color”. I think I can figure out what that does. The second selection, however, says “Personal action” and is set to “01”.

I have *no idea* what that means. I mean, none. Even now, editing this article, I don’t know what it means.

Okay, WHATEVER! Let’s play!

I then select my... opponent? Strange. And then a loading screen...

And then I’m in!

The announcer voice pops up: “Are you ready? FIGHT!”

...

I am standing in a white box. The walls are marked with grids – clearly the classic “whitebox” of game development. A red line splits the room into two halves. Meters decorate the screen frame.

We are both playing our idle animations.

...

I wait. Ryu (my opponent) stands on the other side of the red line. We stare at each other.

...

No one moves.

After a minute, I creep forward.

He doesn't react. Surely, this is a test of some kind. I verify that X and O will cause attacks to happen, at least. So I run forward and WHACK HIM!

Save for playing a hit reaction and taking some damage, Ryu doesn't respond *at all*. Even more amazingly, almost immediately his *health regenerates*.

I step back, and take a moment to reflect.

See, I was hoping for some kind of *training*. So far, I have a blank practice room and a Ryu-shaped punching dummy. Eventually, I understand the full scope of my mistake – training mode is literally a mode for you to train *yourself*, not a mode where *you are trained*.

This is not explained - even though it is counter to most other games I have played. Further, this information is not even *available to be discovered* – it must either be deduced or explained by an outside source.

Okay, fine. Whatever, I got it. Stalwart! I am here to train myself!

So...

...how do I train myself?

I have seen no assistance so far. None. Literally no instruction of any kind. There are no objectives, no prompts, no explanations of the mechanics. No popups have pointed me towards suggested actions, no arrows have drawn my attention to features that I might be interested to learn more about.

In fact, as far as I can tell (and with this paragraph, here, I am writing *from the future*, after having dug around a lot more, finished the article, and then come back through with an editing pass) there seems to be *nothing in this entire game that explains how the game itself functions*.

But I will not be thwarted! I am here to FIGHT, dammit! I begin to press buttons.

Here is what I learn:

[X], [O] and (bizarrely) [R2] will kick. [SQUARE] and [TRIANGLE] and [R1] will punch. (I assume that this “two rows of three” is a hold-over from the Sega days? Or just fight-genre standard? Probably both.)

Either way, these moves are so fast that I literally cannot tell the difference between the punches. [R2] appears to be a high-kick – it’s a roundhouse, so I figure that’s slow and hard. [X] seems like the fast one, and [O] is somewhere in the middle. Okay. Light, medium, hard, punches and kicks. That’s what I was expecting.

[L1] and [L2] are mirrors of [R1] and [R2] – literally duplicates.

Okay. Got it.

I’m somewhat surprised to discover that there is no way to block.

(Later, and again, here I am writing after-the-fact, the depth of this misunderstanding will sink in, and my ire at the game designers will raise a good two notches – you block by pulling *away* on the left stick – but only when an attack is incoming. This would have been nice to know. Somewhere before my fifteenth loss would have been great.)

I continue to be amazed that in this “training mode”, there is *literally no training*. In fact, Ryu does *nothing at all*. Except constantly regenerate his health, of course, which is something that I will come to learn *never happens in the game*.

I discover that Chun-Li has a few more fun attacks if you repeatedly press the buttons. Pressing [X] several times will produce the famous “many kicks” that is her signature move. Cool!

Pressing up on the left stick jumps. I was ready for that. No problem.

Something else I learn: There are *three* gauges on the screen. The top one is health, sure, clear, no problem, got that. Bottom, though – there is an ‘EX’ gauge and an ‘ULTRA’ gauge. After some quick experiments, I develop a general theory that one fills when I land hits (EX), and one fills when I *am* hit (ULTRA), but that’s not 100% true (after punching Ryu a few times, his ULTRA is full, but he has one bar of EX?).

I experiment some more.

In fact, I learn, you don't even have to kick. It appears any action will fill the EX gauge – and once it's full, it becomes a 'SUPER' gauge! Cool!

...

How do I use this stored power?

...

I try pushing every button combination I can think of. Nothing. I have no idea what to do with this full SUPER gauge. Nor is there, as far as I can tell, any way to learn what to do with it.

Okay. There HAS to be a way to figure this out. I dig further.

I hit the menu for help. In there I find an entry for "COMMAND LIST" (and, for the record, this menu is probably the least friendly menu *of all time*. It literally *punched me in the face*. ...No, I made that up, but *WoW*, is it hard to comprehend).

"COMMAND LIST" sounds promising! I want to learn how to attack and do cool moves! Those are "commands"! I choose that, select my character on the next popup (Chun-Li)...

And the screen fills with a two-column chart.

The sections are marked: "Normal Attacks", "Unique Attacks", "Target Combo", "Special Move"... looking good! Names of moves, followed by chains of symbols! Boots, fists, arrows – those look like control instructions! It is clean, it is well-designed, it has lots of colors. I am filled with hope! Yes! This is it!

...

As I look deeper at Chun-Li's command chart and start to actually try to apply the information I extract from it into practice against my Ryu Dummy, all the quotes in the press about "accessibility" come rolling back to me. They start to seem more and more like irony. They begin to have that sulfuric stench that comes from being written by malevolent hands.

There are a few things I would like to point out here:

- Although it clearly is useful to someone who knows how to read it, after several minutes of study, I have actually learned very little from it. I may be dumb, but I'm not *that* dumb. It's a list of moves, and nothing more.

- Decoding the screen itself is an act of deduction and interpretation. I deduce, for example, that the 'boot' icon is kick and the 'fist' icon is punch, and that L, M, and H probably stand for 'light', 'medium', and 'hard'. The red circles with arrows in them are probably the sticks. But, honestly, I am *uncertain* about my interpretation... and I'm surprised by that! After all, there is a clever invention of chart-and-table communication that has been used by humans for some time that would immediately make all of my uncertainty vanish: it is called a *key*. There is no *key* to be found.
- In order to access this screen (which is, remember, in the *training mode*), I have to press three buttons, and navigate several menus. That is, to quote an old friend of mine, "sub-optimal". If I forget an attack, or am unsure of a particular combo, or just want to confirm it, the process is a bit of a walk. One button would be better, methinks.
- I truth, I *cannot read* a good chunk of the text on my screen. I figure this is because my screen is non-HD.

(Later in my explorations, I learn (from the BUTTON CONFIG menu) that, sure enough, the three types of kicks and punches are called "LIGHT", "MEDIUM", and "HEAVY". I was expecting that, but it's strange to me that those three words appear *nowhere else in the game*.)

But WHATEVER!! I am twiddling nits here!! I am having sour grapes! I am making a mountain out of a molehill! I FOUND MY ATTACKS!! I can TRAIN!!

/highfives self

Filled with enthusiasm, I explore further into the training menu.

I stumble upon this *incredible* screen! It has all kinds of neat looking options and settings... and when I turn on "INPUT DATA" and "ATTACK DATA", what shows up on my screen but a vertical scrolling list of the commands I have input to trigger attacks! COOL!! That is very useful stuff.

I suppress the urge to remind myself that I had to go looking for these settings while completely blind to what I was looking for, and I didn't know what it would do when I activated it, etc, etc. That's crybaby stuff! I can TRAIN now!

So, I geek around in this white room with these settings and the COMMAND LIST for a while. Maybe this game will actually prove to be accessible! If that's true, then...

...well, you won't be reading this article, that's for sure. So, if you are reading it, that's a kind of spoiler, I guess. SPOILERS! Fighting games aren't accessible!

Anyway, where was I? Oh yeah! PRACTICING!

My aim is to imprint some of these new moves I've found into my hands. I know that I will forget most of them when I enter battle, but that's okay - you gotta start somewhere.

I make progress... but...

...I'm actually fairly unsettled.

So, I'm about 20-30 minutes in to *Street Fighter IV* so far, and I still have no defined goals in mind besides just getting into a fight someday.

The game has utterly failed to guide or invite me into the experience. It's been a remarkably quiet experience, full of menus and white rooms, and very little actual in-game achievement.

At least I can now see the expected cycle clearly: I am to navigate to the COMMAND LIST screen, pick a move, memorize it, and then return to the white room and practice it until it becomes instinct. I am expected to do this without guidance, reward, or, in fact, *any clear feedback* about whether or not I am succeeding. When I pull off a combo, I see it... but I only have my own personal faith to assure me that the move I have done is, in fact, the move I wanted to do. Was that the correct animation? I *think* so, but I have no way of knowing for sure. Worse, if I am having trouble deducing what some of these stick movements mean, or exactly what kinds of timing are required to execute the moves, I am entirely on my own to figure out what I'm doing wrong.

Which is a long way of saying that training without strong guidance and support sucks. Not a world-shattering conclusion, maybe, but *every other genre in the games industry* has found a way to alleviate the pain of training. Why not fighters?

Minutes pass... and I'm getting bored. Screw training mode! I'm ready. (Also, nothing in the game is telling me I'm *not* ready.) I want to FIGHT SOME DUDES.

Let's go play the game!

I don't want to rat-hole on this mode any further in this article - I still haven't even managed to fight anyone successfully. However, I cannot leave this section of this article without at least saying one more thing:

Gentlemen, ladies, designers, developers: there is a wide gulf between *training* and merely *providing information*. What I have experienced so far was being given information. What I wanted was training.

THE MAIN EVENT

I head back to the main menu, and select the mode that previously intimidated me: ARCADE MODE. I know now about how to attack, move, jump – I suppose, in that way, training mode has succeeded – so I'm willing to dive into deeper waters.

Not quite ready to leave the kiddie pool, though. The next screen is the difficulty selection. I pause.

Look: I know for a fact that I'm not good at these games. So, because of that, and because I'm feeling fragile at this point, I decide to back off on the difficulty. It starts on MEDIUM, so I back it off to EASY. I want to WIN, man. At least a few times.

I note, while I'm here, that there is also a VERY EASY and EASIEST setting. Suddenly, I'm wondering – *just how bad am I?*

Hmm. I have no way to know that right now.

Never mind. Easy it is! At the character select screen, I stick with Chun-Li. I get a bizarre cinematic, anime style, with Chun kicking ass on... bank robbers? And then some dude named Guile shows up (who is that?)...

Rufus

Okay, I'm matched with some dude named Rufus. GO!

...

NICE! I kicked the shit out of him, using just basic kicks and stuff.

Guile

Onward! Guile is up next – he's got a flat-top from HELL, I can tell you.

I push forward, all kicks and punches. Guile throws spinning things at me, and I learn that I can jump over them pretty easily. He's faster than Rufus, but I can still just overwhelm him. I win, easily! NICE! Again, the match is 2-and-0... although that one was a lot closer. I'm feeling like I picked the right difficulty.

El Fuerte

He's quick. He jumps around the screen a lot, including a cool attack where he literally uses the edge of the screen.

I discover how to do throws! If you press [X] and [SQUARE] together, you can throw a guy! Cool!

I kick the shit out of El Fuerte. I trounce him, 2-0.

A Quick Aside

Now, for the record, I'm *only* attacking. So far, I have encountered literally nothing to tell me how the game works, or to even encourage me to block. I assume you have to block in this game, right? And, I've manage to fill my EX bars every time.

Still have no idea what they do.

Blanka

Okay, Blanka! He's the green dude with the lightning! I know this guy. Go go go!

Hmm. He drops me. He's not so stunnable as the other guys. I lose the match, 0-2.

Hmm. Not sure what went wrong there. Let's try that again.

(Bizarrely, I can change characters when I lose?!?? WTF? I'll stick with Chun-Li.)

Still no luck – but I discover that a low spinning punch (left stick down + [TRIANGLE]) seems to hit him at long range, and his AI has no response to this. I discover this through button mashing – it's not something I practiced. He takes me at first, but I come back – and I win the match, 2-1. My spamming of the low punch is my saving grace.

I'm feeling like I cheated, exploiting the AI in that way, but whatever. I've done plenty of that in the past, no reason to suddenly discover a conscience.

Ken

Nice! My new 'low spinning punch' trick works pretty good on him too.

I'm starting to get a feel for Chun-Li. I can jump around pretty well, and let fly with a series of attacks. Almost having fun! I drop Ken like a bad habit, 2-0.

This is when I notice that there is a score screen between matches. I have no concept of what the numbers mean, and the existence of a score had escaped my notice for five matches. Interesting.

E. Honda

E. Honda takes me out. Okay, that's fair – I'm feeling like my skill level is about right here, but I'm just not getting his moves yet. During the first round (which I lose, for the record) I accidentally execute something Chun-Li calls a "spinning bird kick!" that looks pretty rad. Can't repeat it, though. I lose, 0-2.

I try again. The re-match is a repeat of the previous one: I lose, 0-2.

I try again. And again, soundly defeated.

Huh. I'm down again. This guy has a series of grabs and stuff that I can't seem to match. I'll try again.

No go. 0-2. He's using this head-spinning attack, and a grab that does a huge amount of damage. I don't seem to have anything like the kind of power he has, at least not in my arsenal of "light" "medium" and "heavy" punches and kicks. He's also blocking, I think – quite a lot.

(Note that at this point, I still have literally *no idea* how to block. I might be doing it for all I know. If I hadn't played fighting games before, I might not even be aware that the concept exists.)

So.... Five 0-2 losses in a row: I'm pretty stymied at this point. I decide to hang it up for a day, and come back.

No Progress

Being an experienced achievement whore, back in the menus I take a quick look at my stats.

I have made *literally* no progress.

Nothing that I did was recorded, or mattered at all, apparently. Personally, I'm pretty proud of my five victories, given that they came from a complete noob, but apparently my gains are not worthy of measure. The game records only complete games, not individual bouts.

That sucks.

I turn off the game.

Not in a good mood. Not by a long shot.

Round Two: FIGHT!

Days later, I return.

Remember, I'm a "normal" player – I have a life and stuff, so I'm coming back to the game after having had a few regular days filled with working and surfing Facebook and stuff.

Did you know that most people who buy a game will only ever boot & play that game an average of 4-6 times? Like, *ever*? As in, they play the game 4 times, it goes on the shelf forever, and they feel like they got their money's worth.

This is the kind of player I believe people mean when they talk about a game being "accessible".

This time, I skip all the foreplay, and dive right into a match. I know what I'm doing now.

I'm still playing on Easy. Here's how it goes:

Match 1: Blanka. I lose, badly, 0-2, but a quick look at my notes reminds me about my long-range low punch AI exploit trick. This works just fine the second match, and I clean his clock (2-0).

Match 2: El Fuerte. Owned. I literally spend the entire match spamming CIRCLE, kicking him in the face. He hits me twice during the entire match. 2-0, Chun Li.

Match 3: Rufus. Having much more trouble with Rufus this time. How in the hell do I block?? 0-2. I try again, and gradually learn that the trick seems to be to keep him at range with my kicks – if he gets in close, I'm fucked. I take him in the second match, 2-0.

Match 4: Dhalism. *WoW* – first round is a nightmare, but I quickly learn that if I just keep moving (like, all the time) he can't land his attacks. I'm feeling pretty accomplished now. I'm enjoying this! I win, 2-1.

Match 5: Balrog. F33R my kick spamming! 2-0, Chun Li.

Match 6: Sagat. Ow. 0-2. Ow. 0-2. I take a step back, and discover that I can stun lock him with a low heavy kick (left stick down + [R2]). It's looking good, but at the end of the third round, he opens up some whoop-ass on me, and wins with 10% health. I was at 90%. 0-2, but I can smell victory. It's a cheesy, exploit-laden victory, but that's a step forward, man! Next try, I take him – but I'm at 40% health both rounds. 2-0. Whew.

Match 7: Rival fight! C. Viper. First match goes to Viper, 1–2. My low kick technique combined with a lot of motion seems to be working. I learn to dodge her super... thing (can I do those??!), and the second try I take her out, 2-0.

Match 8: Seth

This is the big one, I know – the boss fight. He's the big new character, I guess, and I'm expecting a tough fight. I settle in for a rough ride.

First try: round 1 is a walkthrough... but round two – is that even the same character?!?!? His moves *completely* change, he utterly destroys me, and I'm down. 1-2. Cool, though – I was sort of expecting that. Wouldn't it have been ironic if I had gone through all this trouble only to kick his ass the first time through?

Second try: 0-2. **Third try:** 0-2. Low heavy kicks work sometimes, but not always. He's a beast. **Fourth try:** 0-2. I'm learning to land my kicks – the timing is key, and I'm getting better at it. **Fifth try:** 0-2. **Sixth try:** I beat him the first round – but again, the second round I'm fighting a completely new foe. I'm destroyed, and the match ends at 1-2. **Seventh try:** holy shit, that second round dude is impossible. 1-2. **Eighth try:** 0-2. I'm not improving, not at all. The result seems to be completely random.

I'm starting to become demoralized. **Ninth try:** I do the Spinning Bird Kick again (no idea how), but flipping him the bird does no good. 0-2. **Tenth try:** 0-2.

You know what? I was going to try this at least 15 times just to show strong effort, but this son of a bitch has destroyed me so soundly in each of these rounds that I just can't go on any further.

I'm pissed off, I don't understand what I'm doing wrong, and I'm done.

Still No Progress

I go back to the main menu...

...and I'm deeply depressed to learn that apparently *nothing that I have done counts*. I have no Battle Points, none of my records show that any of that was recorded in any way (again).

To be honest, if I didn't have the extra motivation that comes from writing this article, I'd be done with this game.

Very Easy Is Still Too Hard

Several days later, I return to the game for another session.

This time, I swallow my pride, and I set it to "Very Easy".

I feel horrible about this decision. Look, I am not bad at games. In fact, there are many games that I am quite good at! I struggle to consistently score in the top 3 in Call of Duty, but I'm rarely last, and I get a *lot* of assists. I finish most shooters I play on 'hard'. My League of Legends post-match scores are generally quite good, thank you very much. In the old arcades, I was a monster at Raiden, used to peg the highscore boards for the vector-graphics Star Wars game, and was a Joust master. I have 100%'ed every major Mario and Zelda game ever made... and, perhaps more to the point, I beat the holy crap out of the SNES version of Mortal Kombat.

I may be getting old. But I'll take any of you whippersnappers on in a fair fight.

You know what? After downshifting my pride to "You Suck At Street Fighter", I experience almost *exactly the same thing*.

Yes, ladies and gentlemen, you read that right: after over four hours of play, yours truly can't even beat *Street Fighter IV* on 'Very Easy'. Seth destroys me, every time.

And In Conclusion

Guys, I've already made too much of a big deal about what is really a small point, so let's wrap this up.

Hopefully by now you have glanced once or twice over at the point I'm making here. I reached the end of this walkthrough of gameplay without ever learning *how to block*. There are no tutorials of any describable type in this game, and several hours into the experience, it is clear that if I want to learn how to play, I need to learn from

the community - the game will not reveal its secrets to me. Each step of my journey was greeted by silent, hostile guardians of secrets that once discovered could not be confirmed. And, the font is unreadable in NTSC.

...Even so, let me (as is my want) go ahead and be explicit. After all, I am writing to *someone(s)*, so let's not concern ourselves with this whole "fourth wall" business.

Here we go.

The fighting game genre generally uses interface, training, and pacing designs that are completely out of date. This genre is one of the last genres where this is considered 'okay'. This belief is holding the genre back from being experienced by a wider audience.

To better invite new or low-intensity players into your games, please do some or all of the following:

- Improve your 'first hour of play' flow to include introduction modes for new players. 'Quick Start', 'Tutorial', or 'Basic Training' modes are popular and simple - better would be to integrate (optional) training right into a new player's first few matches, but let's not get too far ahead of ourselves.
- Explain all of the basic moves to the player.
- Give the player the space and time to practice *just these moves* until they feel they have mastered them.
- Add an option while in training that communicates to new players the name of the move they have executed, so that they can confirm that they are doing what they intend to do.
- Introduce the more complex mechanics (EX, SUPER, combos, etc) with a clear demonstration or tutorial.
- Include an on-screen method that demonstrates and/or makes clear any mechanic that requires timing or spacial triggers. These mechanics remain hidden to more casual players unless they are explained.
- If a player is playing on Easy (or less), and fails against any character more than a reasonable number of times, ask them if they want help. If they ask for help, give them help. Explain the mystery secret trick to them. Let them win.
- In your scoring and achievement systems, celebrate the small progress the player makes as well as the big victories.

...

Okay, those are the low-hanging fruit. There's one more big fruit that's just a tad out of reach...

Here it is:

- Allow players to play the game with *just punches, kicks, and jumps*. Call it 'basic mode', call it 'kiddie mode', whatever, but give me a fighting game where I can beat the crap out of my friends (and have them kick the crap out of me) without having to learn your secret arcane knowledge.

Let me have fun with your genre again. Please do this. Please, so that I can return to this genre that I once loved. I'm terrible at fighting, but I still want to give you money so I can pretend like I'm not.

And, since you made it this far:

ACHIEVEMENT UNLOCKED!

- "VandenBerghe Sucks At *Street Fighter IV* - 30g - Read the entire article."

Congratulations, and thank you for your time.

“

In many ways, Tingle functions as a Dorian Gray picture for the player, the character of Link, and the Zelda series as a whole.

”

SCOTT JUSTER

MAJORA'S MASK

The Legend of Zelda: Majora's Mask is often thought of as “the mutt” of the Zelda series³⁵. It is an understandable sentiment, as it diverges from many of the standard Zelda tropes: it is not set in Hyrule, the villainous Gannon is nowhere to be found, and Princess Zelda's only contribution to the adventure is lending her name to the title. While Link and many of his familiar tools are present, they are applied in a unique world governed by a constantly ticking doomsday clock, full of dark characters with intractable problems. It is a game that seems in conflict with itself: it simultaneously follows the conventions of its predecessors while also including themes and game mechanics that criticize tradition.

Unsettling the Player

The Legend of Zelda series is not known for its strict narrative continuity. While some of the Zelda games theoretically take place in the same universe, a player would have little trouble jumping into most titles without knowledge of the previous games.

As the sequel to one of the most critically-acclaimed and widely-played games of its era, *Majora's Mask* assumes and utilizes the player's familiarity with *Ocarina of Time* as both a ludic and narrative tool in order to evoke feelings of uneasiness, anxiety, and strangeness. The game opens with a familiar character: Young Link from *Ocarina of Time*. Young Link embodies specific plot and gameplay implications: Seeing him in his usual green garb, riding Epona suggests that the game is picking up where *Ocarina* left off in terms of story. When the player is given control of Link, it becomes clear that he follows the same control scheme, environmental rules, and interaction system from the previous game. *Majora's Mask* greets the large audience of people who played *Ocarina of Time* with a familiar setup.

However, as soon as these recognizable feelings are evoked, the game's antagonist, the Skull Kid, transforms Link into a Deku Scrub. This sudden shift dramatically alters the character that players have come to expect. Link's mechanics are severely impacted: suddenly, swimming, long jumps, and swordplay are impossible. The standard Zelda plot is also thrown into question: the most pressing concern is not finding the Triforce, looking for a Princess, or vanquishing a great evil, but rather trying desperately not to be trapped in a monster's body. Because the game has already deviated from the familiar coming-of-age tale told in most Zelda games, there is no narrative clue as to when, or if, the story or the gameplay will return to the "normalcy" of *Ocarina of Time*. *Majora's Mask* boldly exploits the popularity and consistency of its own franchise to throw players off balance.

Eventually, the player is able to transform Link back into his normal form, but *Majora's Mask's* emphasis on creating anxiety by subverting familiar symbols and systems remains. Because of the game's unusually short development cycle³⁶, many of the character models from *Ocarina of Time* are found in *Majora's Mask*. The game utilizes this constraint as a strength by fashioning what is essentially a Star Trek-style "mirror universe" in which people look the same but act differently. For example, Koume and Kotake, both fearsome enemies that guarded one of the final temples in *Ocarina of Time* are characterized as harmless old witches that ask for Link's help and offer to aid him in his quest. *Majora's Mask* is full of examples of characters whose *Ocarina of Time* characterizations are changed to challenge the player's associations: An honest fisherman is recast as a pawn broker who knowingly sells stolen merchandise, a jealous ranch-hand becomes a sympathetic talent agent, and even the helpful fairy companion Navi becomes the curt, sarcastic Tatl. After having spent so much time building relationships with these characters in Hyrule, encountering familiar faces and having to treat them as strangers works to make Termina foreign in both a geographic and a social sense.

An Open World with Consequences

Majora's Mask pairs these unique mechanical and thematic changes with an overall game structure that diverges sharply from *Ocarina of Time*. With Termina, *Majora's Mask* presents the player with a rare situation: the game world, along with its NPCs and quests, changes without the player's prompting. Although *Majora's Mask* came out before it was popular to describe games as having an "open world," it remains one of the most intricate examples of a functional virtual world. Because of the Skull Kid's mischief, the moon's inexorable descent towards Termina is a real and constant reminder that matters in the game.

Even the most photorealistic, majestic game environments like New Austin in *Red Dead Redemption* or Liberty City in *Grand Theft Auto 4* allow the player to dictate the pace at which most events in the world occur. A player can start quests whenever

they want, and in many cases, can take long breaks in between objectives without suffering any mechanical or narrative consequences. A person waiting on you to deliver a certain item will wait until eternity, and will say nothing of the time it took you to get there. In *Majora's Mask*, the game systems make it clear that Link and the player are agents, not masters, of the world. Miss an opportunity and it disappears; mistakes are only corrected by sacrificing time and progress by rewinding to the first day.

The game makes concessions by allowing the player to protect key items and abilities from the three-day erasure cycle, but the social progress Link makes with the townspeople and their problems is reset. Relationships are erased and solved problems crop up again with every rewind. The player has a lot of time to think about the world and to see old patterns play out. Link and the player become very familiar with Termina's denizens, their struggles, and their stories. Such repetition can lead to monotony and existential pondering, and it soon becomes clear that certain people in the story bear a disproportionate burden when it comes to fixing the world and dealing with life's hardships. Link and the player can only cling to childish wonder for so long before fusing it with pragmatism. Because Link never talks, this transition is difficult to witness. However, other children in the world face the same battles as Link, and their stories expand on the themes stifled by Link's silence.

Childhood Responsibility and the Burden of Leadership

Legend of Zelda games traditionally focus on Link and Zelda, two youthful characters tasked with assuming a level of responsibility incommensurate with their age. *Majora's Mask* examines this concept in depth by including many characters that, despite their youth, must grapple with questions of duty, social expectations and altruism.

When Link travels to the Southern Swamp, he finds the Deku Kingdom in the midst of a witch-hunt precipitated by the Deku Princess' disappearance. A monkey last seen with the Princess is captured and the King becomes focused on revenge, vowing to boil him alive and "prolong his suffering" as punishment for the Princess' disappearance. This all takes place in the context of a much larger threat to the Deku Kingdom that transcends the kidnapping of a single individual: their swamp has been poisoned and the environment is slowly dying. Despite this, the King's thirst for revenge overpowers his duties as a leader.

In actuality, the young Princess was the only one who saw the large threat clearly, and her kidnapping was a result of her attempts to save the kingdom. After Link frees her, she learns of her father's actions during her absence and comments:

“Father does such rash things when he’s worried about me.” Upon returning, she chastises her father for his single-mindedness and orders the monkey freed. The King admits that “Hasty decision making is my weakness...This time, more than ever, it has become clear to me.” The Deku Princess is shown to be the most clear-sighted leader in the Kingdom, despite her status as a child. Because of this, she is compelled to put herself in danger and teach her father lessons that normally parents teach children. Her story mirrors that of Link’s: both must assume responsibility for society at large, and act in a capacity that often exceeds the abilities of their elders.

The Deku society is not the only one in which young members assume premature maturity. When the Goron tribe’s best warrior disappears and a supernatural blizzard threatens their village, the Goron elder leaves his citizens and his family in an attempt to rectify the situation. Although he realizes his son is distraught without him, he resolves to push on, saying “Forgive me, my child! Your father has work to do!” Even after Link offers to help solve the problems concerning the village’s dwindling supplies and the disastrous effects of the cold snap on the people, the Elder displays an insular, stubborn attitude reminiscent of the Deku King. He states that the fate of the village “is our problem!” and “We shall not rely on the strength of strangers.”

Like *Ocarina of Time* (and most other Zelda games), *Majora’s Mask* is partly a story about isolation: in both ludic and narrative terms, Link is alone in overcoming the challenges he faces. Just as Link (and the player) must accept the ethos of self-sufficiency and stoicism in the face of an uncertain outcome, so too must the Goron Elder’s Son. After Link helps the village, the Elder’s son says “Even if my daddy isn’t right beside me, I won’t be selfish and cry.” The natural desire for fatherly attention is instead framed as selfish. The selflessness Link is forced to assume is also present in the lives of other youths in Termina. The Elder’s Son must accept that he has a responsibility to his people that transcends his own desires.

We are given a preview of what may await the Elder’s son upon meeting the Zora kingdom’s young matriarch, Lulu. Although the Zoras’ political structure is nebulous, Lulu’s family heritage and cultural influence make her a de facto leader of her society, which makes her transition from child to adult all the more important. While young, Lulu differs from the previously mentioned characters in that she has recently made a crucial transition in life: she will soon be a mother. As an added, painful component to this transition, she must also deal with the process of losing her children after her eggs are stolen.

Compared with the aforementioned youthful leaders, Lulu’s concerns are arguably the broadest and most personal: instead of theoretical notions of justice and independence, she must deal with the prospect of shaping the next generation of her society. Furthermore, it is subtly implied that Mikau, the Zora who went out in

search of her eggs and who dies in Link's arms, is Lulu's mate and the father of her children. Not only must Lulu grow from being a child into being a leader and a parent, she must do it without a partner.

Lulu's arduous transition out of childhood illustrates the challenges that Link's story usually glosses over or leaves open to player interpretation. In *Ocarina of Time*, Link's aging is done in a split second and stems from magic rather than hard-earned experience. Because of his silent demeanor and vague family structure, Link is cast as a figure fighting to preserve a world in which he is a perpetual outsider. His endless devotion to saving the world is consistent to the point of becoming a cliché, but Lulu's story serves as a reminder of the real consequences of failure: there is no future without taking the responsibility to create one and safeguard those who will live in it.

Responsibility towards the larger good isn't exclusive to Termina's young ruling elite. Link's obscure origins are echoed in the many other heroic youths across Termina who are quietly engaged in personal struggles. Romani, a young ranch hand, tries to warn her older sister about a mysterious force, known as "Them" bent on stealing their cows and ruining their business. Her warnings go unheeded, and only Link takes any interest in helping save the farm. Another child, Pamela, is thrown into the role of caretaker after her father is turned into a monster. Because of his condition, Pamela hides her father and adopts an understandable anxiety towards the magical and the supernatural. Even after Link helps her, she asks him to keep his distance in order to prevent future trouble: "Your strange power...If father sees that, he'll surely want to research it. That's why... I don't really want...you to meet my father... I'm sorry to say such a thing..." This paranoia demonstrates a reversal of traditional roles: Pamela, the child, is protecting her father from potential danger and his own naiveté.

The Bombers are the epitome of this youthful wisdom. In both a narrative and ludic sense, they provide the means to solving Termina's salvation. The notebooks the children carry keep track of the various townspeople and serve to map their relationships and their problems. By giving Link and the player a tool with which to structure quests and prioritize challenges, the Bombers demonstrate a holistic view of Termina that goes beyond the obsession with immediate problems other townsfolk fail to see past. As characters, their selflessness and sense of adventure is matched only by Link's: even the moon's imminent fall and the town's evacuation fail to drive them into hiding. As the end draws near, only the children and the soldiers remain in the town. The difference between the two groups is that the children elected to stay without be ordered to do so.

The Nature of Aging

While most depictions of youthfulness in *Majora's Mask* are sympathetic and heroic, Nintendo complicates things with the introduction of Tingle. The character, an impish 35-year-old who harbors a fascination with fairies, wryly undercuts the solemnity with which other earnest adventurers in the game are treated. Despite his similar stature, clothing choices, and interest in magic, Tingle enjoys none of the respect afforded to Link. Instead, Tingle is used within the story to demonstrate the dangers of grandiose dreams. At the same time, Nintendo employs Tingle as a joke about the growth of the Zelda franchise and its players.

While the other youths in Termina face complex and often dangerous decisions, Tingle stays removed from adult responsibility. The time he spends attached to his balloon, hovering high above the ground is a metaphor for Tingle's relationship with society. While he observes and documents the world, he is removed from having to deal with its intricacies. For Link and the other children in the game, having to face challenges and make difficult decisions augments the simple passage of time, turning the concept of simply aging into the concept of maturing. Despite being 35 years old, Tingle's life plan is to "stand here waiting for a fairy of my own," instead of pursuing any specific goals. Tingle's own father laments this, and complains "That spoiled child is off playin' hooky again! A child his age has no business searching for fairies...!" Instead of engaging with the world and its realities, he seems to seek refuge in escapism.

This specific type of character also functions on a meta-level in regards to the Zelda series and certain perceptions of the medium. The stereotype of a delusional man-child in a state of retarded adolescence is a familiar one, especially in the realm of video games. Tingle's clothing and his interest in magical adventures ape Link's identity without ever realistically approaching his abilities. Viewed cynically, the player can be seen to acting as a Tingle-esque character simply by playing the game. The player dons a virtual costume in order to fantasize about being a hero. When *Majora's Mask* was released, long-time players of Zelda had been acting out the same basic role for over a decade. While Link functions as an avatar with a relatively static age, it is quite conceivable that people who started their Zelda adventure as children had grown into adults by the time *Majora's Mask* was released. *Majora's Mask* contains a subtle tease from Nintendo: perhaps Tingle, with his delusions of grandeur and obsession with childhood, is more realistic than any other character in the game?

Of course, this joke can just as easily be applied to the developer or Link as a character. Nintendo's approach regarding the design of Zelda games is conservative: with the possible exception of *Zelda II*, the games utilize the same basic dynamics, reuse

the same basic abilities and items, and consistently structure the plot as a traditional hero's tale in a battle of good and evil. Until *Majora's Mask*, the series itself was still preoccupied with the same things it had focused on since its "childhood" years.

In many ways, Tingle functions as a Dorian Gray picture for the player, the character of Link, and the Zelda series as a whole. As an avatar, Link can provide an escapist fantasy for those who seek one. The player, Nintendo, and the internal fiction of the Zelda universe collude to turn a blind eye to the problems of perpetual youthfulness; and instead, the darker side of these traits is bound up in an effigy. Tingle is used to mock and critique the obsession with childhood and fantasy that is pervasive throughout the Zelda series, even as the cycle is repeated once again while exploring Termina.

A Composition of Conflicting Parts

Tingle encapsulates the mysterious, unexpected, and sometimes-contradictory oddities that make *Majora's Mask* such an intriguing game. Its reused character models, control scheme, and graphical style may have been born from the economic realities of development, but such recognizable aspects are creatively used to foster the strangeness that permeates Termina. In possessing the outer veneer of familiarity, the inconsistencies and surprises in the world make it a more foreign place for experienced players. Suddenly, characters do not conform to their normal behavior, the passage of time itself is altered, and Link and the player are no longer the only active agents in the world.

Many of those additional agents are youths who illustrate the challenges that arise from social pressure and a responsibility for the greater good. Whether they are Deku royalty or simply children trying to look out for loved ones, their stories stand in for Link's shallow character development. In doing so, *Majora's Mask* joins in the tradition of casting Link as an essentially blank slate while reserving the luxury of exploring themes that require characters whose functions go beyond acting as ciphers to be molded by the player. It is a game that follows a long tradition even as it breaks from it.

With Tingle, Nintendo compresses various counterpoints to the game's central themes into a single character. Tingle acts as a foil to the game's heroic child figures. His existence pokes fun at those that would spend their time fantasizing about magical adventures. His apparent stagnation in terms of maturity and life accomplishments presents an alternate, pessimistic interpretation of Link's perpetual youth and never-ending quests. To self-conscious players, especially older ones, he functions as a mirror capable of reflecting an unpleasant image of childish escapism and irresponsibility.

“

This gives the player the opportunity to flex their gaming chops doing all the actions they have learned throughout the game thus far.

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MARK SIVAK

BLOCKS, PLANES, DRAIN, AND KAIN: WELL PLAYED FOR LEGACY OF KAIN: SOUL REAVER

Are you tired of juiced up, armored space marines fighting aliens? Do packs of zombies and post-apocalyptic landscapes no longer arouse your senses? Are you sick of little kids wearing green and women with boobs so big they shouldn't be able to stand up straight? Do you pine for a simpler time when a vampire-turned-wraith that harvests souls to keep himself (somewhat) alive. While also gliding through the material and spectral realms by using wings that his boss ripped the bones out of. All while killing dozens of vampires in classic (sunlight, water, fire, stake through the heart) and not so classic (glowing blade fused with his arm that can take on elemental powers) styles to quench his thirst for vengeance? If you answered yes to any of these questions (especially the last one) come join me on a trip down memory lane and into the land of Nosgoth to chat about *Legacy of Kain: Soul Reaver*.

Legacy of Kain Series Background and Overall Story

I will move as quickly as possible through this information as it is important for those unfamiliar with the series or who played any/all of the games long ago. Even though the *Legacy of Kain* series has a notoriously complex story it is sufficiently spoiled in this and subsequent sections. If you know about the *Legacy of Kain* series, don't know about it and don't want it spoiled, or are just impatient, feel free to skip ahead to the next section.

Before I jump in I want to let you know that I have not played completely through all of the games in the *Legacy of Kain* series, only *Legacy of Kain Soul Reaver* which is commonly referred to as *Soul Reaver* (note that the games in the *Legacy of Kain* series are commonly referred to their name minus "*Legacy of Kain*"), and *Legacy of Kain: Defiance* (Defiance). I have dabbled in the other games in the series but I am not an expert on them.

The first game in the *Legacy of Kain* series was *Blood Omen: Legacy of Kain*, which was released in November of 1996 for the Playstation and would later be released for the PC. It was developed by Silicon Knights and published by Crystal Dynamics. The gameplay is considered to be "hack-n-slash" (like the Diablo series) but it has

also been called both an Action-Adventure and an RPG. The story in *Blood Omen* follows Kain, a murdered nobleman-turned-vampire, on a quest through the land of Nosgoth to avenge his death and slay the corrupt guardians of the Pillars of Nosgoth, mystical pillars that protect the land. After several double-crosses and at least one travel back in time the game ends with Kain as the last vampire and the guardian of the Pillar of Balance, the final pillar. He has two choices: sacrifice himself and allow the land to heal or save himself and let the pillars fall to the detriment of all. The selfish bastard chooses (via cutscene, not a player choice) to let the pillars fall and dooms Nosgoth.

The second game in the series is the focus of this review, *Legacy of Kain: Soul Reaver*. It was released in August of 1999 for the Playstation and the PC and January of 2000 for the Dreamcast (the Dreamcast version is the one I played for this review). *Soul Reaver* was released again to the PlayStation Network in November of 2009. It was developed by Crystal Dynamics and published by Eidos Interactive. I will be discussing the mechanics and story in the next sections so I won't cover those here, I will just tell you that the vampire-turned-wraith is called Raziel and his boss is Kain. *Soul Reaver* is thought by many to be the best game in the series and has the highest Metacritic score out of the games in the series with a 91. It was also the best selling game in the series and found a place on the Sony Playstation's "Greatest Hits" list.

The last three games in the *Legacy of Kain* series are: *Soul Reaver 2*, *Blood Omen 2*, and *Defiance*. *Soul Reaver 2* was released in October of 2001 on the Playstation 2 and November of 2001 on the PC. *Blood Omen 2* was released in March 2002 on the Playstation 2 and PC and December 2002 on the Gamecube. *Defiance* was released in November of 2003 on the Playstation 2 and Xbox and then in December of 2003 it was released on the PC. All three games were developed by Crystal Dynamics and published by Eidos Interactive. *Soul Reaver 2* is a direct sequel to the first *Soul Reaver*, *Blood Omen 2* takes place between the events of the first *Blood Omen* and the first *Soul Reaver*, and *Defiance* follows *Soul Reaver 2* in the storyline and is the current end of the series. These games were not as popular or well received as *Soul Reaver*.

Story Introduction

Before I talk about some of the in-game systems and mechanics of *Soul Reaver* I want to bring everyone up to speed (or remind those who played it before) on the story of our hero in *Soul Reaver*. When the game begins a cutscene opens up and introduces the player to some of the stars of this blood-drinking soap opera. We learn that Raziel (the player's character) is Kain's first lieutenant (and they are both vampires) and that he has served Kain for a millennium. The player also learns

that the vampires evolve over time with Kain always being the first to receive the change. Raziel, however, grew wings before Kain and the rest of the vampires. Kain was not a big fan of being shown up and decided to rip the bones of Raziel's wings out and then have his other vampire minions (Raziel's brothers) toss Raziel into a swirling abyss which burns his flesh...

Raziel then awakens a thousand years later and he is alive (kinda) but purple, emaciated, and missing his lower jaw. He is in a room with octopus tentacles on the walls (a.k.a. The Elder God, keeper of the Wheel of Fate) and a booming voice and it talks to him about revenge and oblivion. More specifically, The Elder God tells Raziel that his body is broken and he is not really alive but that he can still exact his revenge on Kain and the other vampires by becoming the *Soul Reaver*. The Wheel of Fate is slowing because it is fueled by a cycle of souls and since the Vampires can live forever they are removed from the cycle. The Elder God raised Raziel to kill the vampire minions and their masters and devour their souls, thus allowing them to fulfill their destinies with the Wheel of Fate. So souls for The Elder God, revenge for Raziel, it is a win-win. No ulterior motive or twists, it's very straight forward, I promise...

Armed with this information Raziel is unleashed into the now dilapidated land of Nosgoth to kill some vampires and devour their souls.

The stuff that makes Soul Reaver worth playing

While there are aspects of *Soul Reaver* that have not aged well or were bad at any time (we will get to those later) there is plenty to still enjoy about this gothic, revenge soaked romp. In the following section we will take a closer look at these aspects of the game that distinctly fall into the "pro" category.

Besides the gameplay elements discussed here many players were drawn to the impressive graphics, sounds and theme of the game. The opening cinematic and vivid world design was certainly a plus on the game's scorecard. As was the dark and rich soundtrack and the creative sound effects. The overall "adult" nature of the theme, gameplay, and story was remarked by many players as a breath of fresh air in the stagnant fog of fairy tale heroes at the time.

Story and Setting

The *Legacy of Kain* story has been praised for its themes such as fate, destiny, revenge and time travel. The non-linearity of the storyline mixed with a healthy helping of double-crosses and revenge leads to a rich and interesting experience

throughout all the games in the series. The narration done by Raziel, The Elder God and Ariel in *Soul Reaver* is excellent and makes the story more personal while giving those characters more depth.

Nosgoth is a compelling setting any way you slice it. Besides the obvious, such as vampires and gothic or medieval technology and architecture, Nosgoth has a few other interesting components. The Pillars of Nosgoth tie the people and the land together while emphasizing the impact of corruption. The Elder God, hidden underneath it all serves well as a guide and headquarters for Raziel. The two realms, material and spectral, lead the player to always want to explore both to make sure there is no hidden treasure or secret entrance to an area.

Unlike our shiny vampires of today, the Vampires of Nosgoth are very bad-ass. They were not bitten by another vampire. Kain stole souls from the underworld and reanimated bodies to create them. They must drink blood to keep their bodies healthy. While they satiate their blood needs they will live forever and evolve over time. They are the top of the food chain and rule with an iron fist over the humans. Each vampire has his own region of Nosgoth where their minions have taken on special evolutions unique to their leader like the ability to swim, phase through gates and scale walls. They worship the dark gods and in return get all these gifts.

Humans in Nosgoth come in several flavors, if the player spares the first human vampire hunter he encounters the rest of the humans in the game will worship Raziel. This makes the subsequent human citadel level a breeze. However, most humans in Nosgoth have been domesticated. They have accepted their role as slave and food source. The humans that are feral and resist are fanatical to their gods and in constant war to resist the onslaught of the various vampire sects.

Kain is the constant throughout the entire series, hence the series being named after him. In several games he is the protagonist and in others he is the antagonist. Raziel faces him early in *Soul Reaver* to learn more about the story of both Kain and Nosgoth. During this meeting Raziel learns that The Elder God is not being entirely honest with him and that his destiny is entwined with the *Soul Reaver* blade (an actual sword wielded by Kain) and Kain. This early meeting of who will be the final boss is an interesting game design choice because in most games the final boss does not reveal himself until the last levels, they just mettle with the player from afar. Another interesting example of allowing the player to know the final boss is BioShock. In both of these games the player character has interactions with the final boss before the climax of the game. This gives their dynamic more depth and emotion. Also in a game with a story all about destiny and fate, the choice of having the player face and almost be defeated by the final boss in the second level just strengthens those themes.

Realm Transitioning

Raziel's ability to transition between the material and spectral planes is one of the cornerstones of this game and future games in the series. It is used as a plot device, death mechanic, and a platforming puzzle element. It gives a duality to the game world where Raziel can, and more often has to, explore both to continue.

The material realm is the real world. It is where the vampires and humans wage war. Where water has substance and gravity equally affects dirt, buildings and beings. The spectral realm on the other hand is Raziel's home court. He always has the spectral blade when inhabiting this realm (after he faces Kain the first time). Water has no substance, gates are passable (after defeating the first boss, Melchia) and more usually the world distorts in an advantageous way.

As a plot device, it is used as the personal domain of Raziel. Sure there are some lesser bad guys hanging around but really it's Raziel's dwelling. It is where he goes to regain strength and to explore. On the point of regaining strength, Raziel shifts back to the spectral plane if he runs out of health in the material plane, a way to explain his very fragile material existence. Once in the spectral realm he can dispatch the ape-like spectral realm enemies because he can only return to the material plane at full health and at a proper transition point.

The realm transitioning is most often used as an element of exploration or platforming. Because Raziel can go into the spectral realm at any time and the actual geometry of the world changes between realms it is a perfect addition to platforming puzzles. A great example of this is when Raziel is hunting Melchia to find out what has become of his clan. The smooth wall of a room juts out in the spectral realm, allowing Raziel to climb out. The sense of exploration and duality that the realm transition gives is a fun mechanic because the player gets to see behind the curtain of Nosgoth while in the spectral realm, allowing Raziel to explore and gain access to areas otherwise impassable.

Health Drain Mechanic

The constant draining of Raziel's health in the material realm (when he doesn't have the Reaver) is an interesting mechanic that fits in well with the setting, story and character in the game. It gives the player a sense of urgency while reminding them of Raziel's fragile material plane existence. The draining life mechanic is used in other games in the series to emphasize the thirst for blood that vampires in Nosgoth feel (balancing the need Raziel has for souls with that of his more alive brethren). At the time, the idea of constantly draining health was new and health bars were the norm. It has since been used in other games such as the Lost Planet series.

Health draining works in sprawling world of Nosgoth because nearly every enemy is potentially a source of health for Raziel so the player does not need to hunt around for health power-ups, just beat up some vampires and get back to full health. Also because there is not a huge consequence for Raziel losing all this health (he shifts back to the spectral plane) if the player's health does drain completely Raziel just regains strength in the spectral realm and returns to the material realm. In puzzle areas where there are few enemies and the potential for serious health drain Raziel usually needs to shift into the spectral realm to complete the puzzle anyway. Health draining adds a sense of urgency to any exploration or puzzle solving in the game, early in the game before Raziel gets the Reaver the drain mechanic is a much larger part of the game. It is a great design choice because it is during these early levels that the player learns simple combat and realm switching, lessening the consequences of the health drain.

Vampire Hack-n-Slash

Soul Reaver is a beat-em-up, meaning that a single button on the controller is used to attack over and over and over. Most of the enemies Raziel must face include Vampires that cannot be killed simply by beating them to death. These vampires must be dispatched using a finishing move based on a vampire cliché.

This makes fighting multiple vampires a mix of strategy and twitch gameplay, a great combination and a way to stave off the boredom of single-button attacking. The player must be aware of environmental objects like fires, sunlight, weapons (spears, tridents, etc.) and water as they can be used to finish off the vampires. One of the more interesting ways of impaling vampires is to use hooks or spikes attached to walls. Raziel can lift dazed vampires and throw them on these objects in a rather fun and crude manner. The vampires struggle like they are enduring a lethal wedgie, it is simple moments like this that make the case for good game design.

Once Raziel gets the *Soul Reaver* blade the combat changes slightly because the blade can be used to finish off a vampire, by impaling. However, since the *Soul Reaver* only manifests itself in the material plane if Raziel is at full health, many of the vampires later in the game are very adept at getting in a first strike and forcing Raziel to kill them without the use of the *Soul Reaver*.

Block and Switch Puzzles

Raziel has claws and his wiry, purple frame is actually quite strong. This combination leads to some interesting and challenging block and switch puzzles. Block and switch puzzles are nothing new, they can be found in games from Super Mario

World to Portal. They are littered throughout *Soul Reaver* and in conjunction with platforming puzzles make up a nice counter-point to the combat system. They also are compounded in difficulty by the health drain mechanic forcing players to solve them under a time constraint or die and return to the spectral plane.

The most notable block and switch puzzle occurs before Raziel battles Melchia. The player must find and move several blocks to complete a puzzle that uses tracks painted on the floor, torches, switches and blocks. This includes using an elevator that is activated from a different level and multiple blocks that need to be stacked to complete the puzzle. At this point in the game the player has not yet been given the Reaver so they are required to complete the puzzle while under the pressure of the drain mechanic.

Zeldaesque Boss Battles

The boss battles in *Soul Reaver* are a great part of the game because they contrast so nicely with the beat-em-up gameplay that is prevalent in most of the levels. I have used the term “Zeldaesque” because in many ways the boss battles of *Soul Reaver* closely resemble the boss battles of the 3D Legend of Zelda games.

Throughout the game Raziel faces Melchia, Kain, Zephon, Rahab, Dumah and Kain again. None of these battles use the hack-n-slash or beat-em-up mechanics of the lesser vampires, they all require a special mechanic that is the foil of the bosses special power. Once Raziel defeats these bosses he devours their souls and gains their special powers, not unlike Mega Man or Kirby. He then must use these powers throughout the rest of the game to defeat enemies and complete puzzles.

The best boss battle in the game is Dumah. Raziel battles into Dumah’s region only to find that humans have defeated all the vampires. If Raziel spared the first human then all the humans will worship him instead of attack. Raziel finds his way to Dumah who is impaled with spears in his throne room. After removing the spears Dumah comes back to life and Raziel must lead Dumah to a furnace and burn him. This boss fight is great because it requires many of Raziel’s special abilities and platforming to complete. This gives the player the opportunity to flex their gaming chops doing all the actions they have learned throughout the game thus far.

Exploration and “Leveling up” Items

In what seems like another nod to the Zelda series, Raziel finds items throughout the world that increase his power and abilities, much like the heart containers and myriad shields, weapons, and tunics that Link finds in his travels. These items

range from Warp Gates that allow for fast travel around Nosgoth to the ability to swim, climb, and items that increase Raziel's magic power. All these items give a sense of Raziel "leveling up" and becoming more powerful. It is an easy way for the player to have investment in their accomplishments and see the benefits of exploring every nook and cranny of Nosgoth.

The not-so-fantastic stuff in *Soul Reaver*

In the same way the material and spectral realm combine to make a complete world in *Soul Reaver*, this section details the "cons" of the same game elements discussed in the previous sections.

There are several other valid criticisms of *Soul Reaver*. Like many 3rd person games of its era the camera has weird angles that have a negative impact on gameplay. One blind turn later in the game can remove the Reaver and force the player to stop and beat the crap out of a several vampires before moving on. In a game where the bad guys respawn every time you leave the room this can become a serious annoyance. Another criticism is usually levied on the world design itself. Nosgoth is fairly massive but the vast majority of the encounters follow the same flow: kill all the vampires, use either boxes or realm transition to solve the puzzle and move into the next room. Rinse and repeat. Couple the previous two issues with a game that can take over 40 hours to complete, a lifetime by today's game standards and it was not every player's cup of tea.

Story and Setting

The story in *Soul Reaver* is deep and intertwining but also convoluted and truly doesn't have an ending (there is actually a "to be continued..." at the end of the game). Kain and Raziel with their accents and vocabulary seem pretentious, almost insulting at times, when they are explaining the story (e.g. thesis, here-to-for). While this makes Raziel seem like if was once part of high society it also can sometimes make him seem like a whiner, never a good trait for a hero.

Nosgoth has plenty of well used clichés (gothic architecture, fanatic humans, vampire killing methods), but the post-apocalyptic nature of the world and the weapons have all been seen before. The vampires are slightly tweaked versions seen in other media, but vampires have a long established history of gothic cliché. The vampires taking on specific special abilities along with themed areas, once again reeks of Legend of Zelda (there actually is a water temple in this game). While this can make players feel at ease in a slightly new setting it there are puzzles, encounters, and levels that give a sense of déjà vu.

Realm Transitioning

Realm transitioning is the backbone of the game but it becomes overused and predictable due to its necessity as plot device, puzzle solution, and death mechanic. The player does not usually need to actually figure out the solution to a platforming puzzle, if it is not a block and switch puzzle it will be a realm transition that is used to complete it. This leads to players simply moving into an area and transitioning without even encountering the puzzle, just seeing the solution. There is also the need to explore every area in the game twice to see everything and get every secret. As a death mechanic realm transitioning is not a serious consequence for most players as usually the player dispatches a few simple enemies and then returns to the material realm at full health very near the spot of their death. Later games in the series change up how Raziel can shift between planes (by being able to essentially possess dead bodies), but the negatives remain.

Health Drain Mechanic

The draining health mechanic loses much of its importance after Raziel gets the *Soul Reaver* because it keeps him at full health while active. Since Raziel gets the Reaver before many of the most challenging puzzles and encounters the sense of urgency that the drain mechanic causes is usually addressed by players by just shifting into the spectral realm and getting to full health then returning to complete the puzzle with the Reaver and no time constraint. Also because Raziel does have a need for souls enemies have to respawn in already conquered areas which when coupled with tons of realm transition points for puzzles can make the drain mechanic more of a chore than an interesting game mechanic.

Block and Switch Puzzles

Like the omnipresent barrel in first person shooters, it always seems that action-adventures have block and switch puzzles and this is not an automatic con for most games. However, they are boring and now very outdated and *Soul Reaver* relies very heavily (even too heavily) on them as a counter point to the combat mechanics. There is only so much that can be done with dragging blocks and hitting switches. One of the most cliché block and switch puzzles is early in the game when Raziel must figure out that he needs to stack 2 blocks on top of each other to reach an exit to the area. This puzzle has been rehashed in many games from *Ocarina of Time* to *Lego Star Wars*.

Zeldaesque Boss Battles

Once the player finds the weakness of the boss, the strategy for every boss fight is just to repeat that same action 2-3 more times, that's it. You can start to see the problem with the boss fights when more than one in the game actually requires Raziel to run like a coward from the boss so that they can get caught in some kind of trap (Melchia and Dumas). One of the worst offenders of the rinse and repeat boss killing method that Raizel usually employs is the fight against Rahab. Rahab has become immune to the detrimental effect of water and is swimming in his lair. To defeat him Raziel must jump from platform to platform breaking stained glass windows to let the sunlight into the room. How does Raziel concoct this strategy you ask? The Elder God tells him when he enters the abbey that Rahab and his brood are susceptible to the sun, so the solution to the boss fight is explicitly told to the player and even then it's not like it is a hard action to pull off. Raziel doesn't even attack Rahab directly, once all the windows are broken Rahab just dies. It is very anti-climactic for one of the later bosses in the game.

Exploration and “Leveling up” Items

While these items to give Raziel and the player a sense of empowerment they also have several issues. Several of the best items are rather well hidden (such as the elemental Reavers) which means that some players, probably the players that need it most, will miss them and not have access to them later in the game. Another issue is that movement around the world is accomplished by the Warp Gates which have cryptic symbols and seemingly random locations. This can force the player to double back and lose a lot of time to dealing with the trash enemies that constantly respawn.

Conclusions

Here rests the too long, didn't read version of this review mixed with some of my closing thoughts. *Soul Reaver* does have a deep albeit convoluted story without a real ending. The rich but cliché-laden world of Nosgoth is populated with interesting beings and architecture. The characters of Raziel and Kain are interesting and well-developed, but in many instances come off as pretentious and forced. The gameplay in *Soul Reaver* was a mix of old and new. Realm Transitioning and Health Draining were new and innovative, but also repetitive and overused. The block and switch puzzles as well as the boss fights were not new, but proven and executed nicely.

Overall *Soul Reaver* deserves its 91 Metacritic score and is worth playing. It is a solid game in any time frame, although I found upon playing it again for this review that it had aged more than I liked to admit. The cinematics with low poly characters, the warp gates, the constant need to explore and save, I am glad these kinds of mechanics are outdated. However, the story, characters, setting, and many of the other mechanics would work today with little updating. The strength of *Soul Reaver* lies in the story, world and theme but it is the execution of the games mechanics that make it a truly great game worth playing, even today.

“

While playing the game and failing again and again to defeat the various level bosses, a revelation hit me; my personal struggle with the level bosses WAS the story.

”

CHARLES PALMER

TOY SOLDIERS

Overview

What is it about playing war that captivates children? From the tin soldiers of the mid-1800s to the green army men of our childhoods, millions of children have answered the call and let their imaginations transport them to another time and place. Whether it was Cowboys versus Native Americans or raising an army of elite commandos to rescue Bazooka Jim from behind enemy lines, we spent hours upon hours engaged in epic battles across our bedrooms, basements, and backyards. There was something magical about the activity. No matter our economical status, race, gender or physical abilities, for a time we would retreat into our own fantasy. The experience provided us with a developmental need; to be strong even when we feel weak.

As an exercise in imagination and ingenuity, we learned to see the world differently. An old cigar box became an impenetrable concrete bunker; a bit of thread and a paperclip were a grapple hook and zip line; and anything that floated became an unsinkable battleship. Until it became waterlogged and sunk, at which point it turned into an elusive submarine on a top secret mission. And through all that play we learned the craft of storytelling. We pitted hero versus villain, bent tyranny to our will, and returned conquered lands to the natives punishing interlopers in the process. We were always right, always in the nick of time, and always the reason for happy endings. Simply put - it was magnificent.

Signal Studios' *Toy Soldiers* brings back some of those memories. At its heart it's a 'tower defense' game. But, since the term was trademarked by COM2US in 2007, you won't find the term "tower defense" included anywhere in the instructions or their website. In this game players are tasked with preventing waves of enemy soldiers from infiltrating your stronghold. As general and architect, your mission is to build fortifications and defensive units capable of repelling the overwhelming attacks of wave after wave of enemy combatants. But to stand apart from the crowd of tower defense style games, the developers from Signal Studios expanded their title with the addition of a few twists on the common theme.



Figure 1: Game environment

Twist 1: theme and setting

To start with, these epic battles are reminiscent of our childhood adventures because the combatants are toy versions of WWI era soldiers. Yes, World War I, the War to End all Wars, a welcome change from the gazillion WWII titles available in every genre. In this game tiny toy replicas of soldiers, tanks, planes, and artillery from 1914-18 battle for supremacy in stunningly modeled 3d dioramas. The graphics and musical score are on par with most of the pricier console titles and the levels are rich with diverse locations, seasons, and strategic challenges. Furthermore since the combatants are toys, there are no gruesome, gory battlefield death scenes. Instead their demise is visualized by the likes of exploding gears and springs, humorous plastic death rattles, and soldiers propelled hundreds of feet into the air by explosives (there is even a 'Highest Flying Soldier' stat for each level completed.)

The main Campaign mode has 12 levels of 9-26 waves of German infantry, cavalry, armored vehicles, and aircraft that make their way across the battlefield to invade your toy box. Strategic placement of defenses is essential to victory. The lose-state occurs if a set number of units succeed in entering the toy box, or the player fails to defeat the Boss units found at the end of some missions.

Completing Campaign mode will unlock Campaign+ mode. Not a very original title, but this mode puts the player in the role of a German General fighting through 12 reconstructed levels for an entirely new challenge from British troops.

Lastly, since these epic conflicts take place in miniature, the theater of battle is actually a table or desk in someone's room. Flying around the boundary will reveal desk lamps, shelves, posters, maps, radios, and even a frosted window.

Twist 2: units and their placement

In traditional tower defense games, players position static units on the field of play, in an effort to "defend" against mobile enemy units attempting to traverse the area of game play; left to right, top to bottom or mixed. There are generally a set number of enemy units who can reach the end point before the level is lost. *Toy Soldiers* follows this pattern of game play, but instead of free-form positioning environments like Kongregate's Desktop Tower Defense or PopCap's Plants vs Zombie, players can only build/place units on fortified positions. These predetermined areas are strategically placed across the playing field clustered together as they would be on a real world battle front. This allows for co-placement of units types to provide varied defensive and support for the Toy Box.

As an added challenge, in some instances these positions are occupied by enemy forces that must be destroyed before the player can acquire the site and build units capable of defending the captured position.

Twist 3: unit control

All tower defense games let the user purchase, upgrade, and sell units. The currency is usually a point system derived from the destruction of enemy units. *Toy Soldiers* uses money to purchase, upgrade and maintain units. Defeating entities (troops, buildings, and offensive targets) earns the user cash which is deposited into a defense fund. These funds are immediately available to construct new units, improve (upgrading to level 3) or maintain (repair all damage) the player's defenses. With most TD games, the strategy is in the placement and resource management of units. But Signal Corps has added a first-person shooter element giving players the ability to take control of fortified and mobile units. In this game you don't just place and oversee units, instead you can override the artificial intelligence and take over a machine gun nest to rip a Beutepanzer to shreds. Or man a Mark VI Howitzer and rain devastating destruction on your enemy units and fortifications.

The addition of a first-person "Use mode" greatly enhances the game play and is a nice counter-balance to limited unit types and placement. Personally I enjoy taking control of the sniper tower. Even though the zoom control is a bit wonky (zooming often continues after releasing the control), it is very satisfying picking off enemy units that creep past your primary defenses.

Twist 4: unit management

Beyond the general upgrade process of units, the nature of combat also requires the user to repair damaged or destroyed units. Enemy infantry use guns, grenades, and mortar shells to damage the player's fortified positions. This along with the damage issued by armored units requires constant observation and vigilance of the battle field. Beyond routine damage management, players must also be prepared for the devastating destruction done by the six mammoth bosses.

Toy Soldiers, like other TD titles, uses waves of units which vary in the attributes of mobility (speed and flight), vulnerability (light or heavy armor, high health, and clustering), and attack strength (damage inflicted per weapon per attack). But it's the Boss battles which set it apart. Each Boss's appearance is preceded by its own period-inspired menacing theme music. This audio cue instantly changes the mood and atmosphere of the conflict. These end-of-level battles are spectacular as they require the player to switch from a defensive position to an all out tactical assault. The units themselves are ginormous, dwarfing everything in its path. The Tzar Tank is easily 10x the size of infantry units; making it an impressive and ominous behemoth as it lumbers across the battle field obliterating everything in its wake



Figure 2: Toy Soldiers game play example

Playing the Game

In *Toy Soldiers*, the player must defend their position and prevent 20³⁷ enemy units from entering their stronghold; a large red structure meant to represent the player's Toy Box. The game blends the real-time strategy of a tower defense game with the combat of a first person shooter. Both modes of play are modified to intermingled their strengths and create unique and challenging experiences. An example of this is at the core of the title's game play. Playing in "Use" mode let's the player be in command of a single unit. Instead of being controlled by the AI, this unit becomes an extension of the player; aiming and firing only on command. But the player must still manage the entire battlefield in third-person. Meaning, while taking control of a defiladed machine gun position may provide a short-term tactical advantage against infantry units, the player must be alert for other units sneaking through choke points or flying high over head toward their objective. With a single click the player can toggle through first person perspectives of every unit or exit back into third person mode.

| Difficulty Settings | | | |
|---------------------|------------|-----------------|---|
| Setting | Lose-state | Base soldier \$ | Setting notes (in game insructions) |
| Casual | 30 | \$35 | Enemies have less hit points and more cash is awarded for destroy |
| Normal | 20 | \$25 | For those with too much dignity to choose casual |
| Hard | 20 | \$25 | Enemies are stronger and have more hit points |
| Elite ³⁸ | 40 | \$35 | You're on your own. Only units you use directly will fire. |

Table 1: Difficulty settings

A WW1 themed loading screen starts the game displaying the status of the war's progression to the sounds of a scratchy gramophone playing two popular period pieces from the late 19th century **Goodbye, Dolly Gray** and **She May Have Seen Better Days**, or the original compositions of **The Sailor's Life for Me** or **There's a Candle Burning Bright** both by veteran game composer Stan LePard³⁹. These elements set the mood and establish the base storyline. Slides of retro-style box packaging further add to the mood and establish game play characteristics and control hints. Level load times seem long at 30 seconds, but once loaded a mission statement identifies the player's primary goals via a brief historical statement about the battles significance. Most missions are modeled after real skirmishes and battles so names might be familiar to history buffs. But extensive knowledge of the forces, terrain,

historical outcomes, and overall significance of individual battles is unnecessary to the novice player, making the game approachable for players with limited knowledge of the war..

Primary missions range in complexity; from holding the line to timed invasions to destroying strategic targets. They also vary in time from short skirmishes to a staggering 24 minute finale which ends with a hellish end boss battle against a Rail gun behemoth. Likewise starting funds also fluctuate, providing another challenge as placement of the first few defenses often determines a level's outcome and limits the ability to upgrade quickly. Additionally, missions also have secondary objectives which unlock in-game achievements and Xbox Live avatar swag.

The first conflict begins with a battle in the Belgium village of Langemarck⁴⁰, on a miniaturized battle field between toy replicas of German and British troops. Table 2 outlines mission objectives (primary and secondary) for the first three levels.

| Starting missions | | | | | | |
|--------------------------|----------------------------|--|--|--------------|--------------------------|------------------------------|
| Title | Date | Primary | Secondary | Waves | Time⁴¹ | Notes |
| Langemarck (1914) | Oct 24, 1914 | Defend Langemarck Village Northeast of Ypres | Score a 10x combo using a level 1 or 2 anti-infantry gun | 9 | 09:30 | No playable mobile Units |
| Gheluvelt Chateau | Oct 31, 1914 | Protect the chateau at Gheluvelt from enemy reserves at Polygon Wood | Use howitzer to destroy three enemy barracks | 10 | 11:50 | No playable mobile Units |
| Nonne Booschen Wood | Nov 11, 1914 ⁴² | Defend the lines along Menin Road outside of Nun's Wood | Destroy 50 enemy infantry with gas | 14 | 16:05 | No mobile units, Boss battle |

Table 2: Sample mission objectives

Art style

Missions open with a sweeping pan of the battle field and the first thing to note is the gorgeous scenery. Tiny villages rich with details represent life in the early decades of the 20th century; snow covered trees decorate rolling countryside; dirt and cobbled roads lead to quaint wooden bridges; and neatly dug trenches lined with sandbags are all rendered in stunning detail. The first few missions are well balanced to help the player get acquainted to the controls as well as the advantages and disadvantages of various units. But I found myself zooming around the battle field inspecting the detailed surroundings and testing the limits of the destructive environment; which is extensive by the way.



Figure 3: Soldiers mill about preparing for the first attack wave.

This art style is rich with textures bringing everything to life including animations which are ideal for the 'toy' like setting. Infantry troops, advancing across the field often stop to fire off a shot or lob a grenade at your fortifications. Sometime bumbling riflemen stumble and fall over small unseen obstacles or perform an end-zone style victory dance as they achieve their goal of sneaking into your toy box. Likewise, cavalry troops, which can leap over most fortifications, will stop to rear up before charging ahead into the fray. Even the 'Big Willie', the rhomboid shaped tank which

ushered in a new era of warfare, has a toy-like windup keys that spin constantly as is moves across the battlefield.

Unit types


Player units, ranging from chlorine gas and flamethrowers to anti-aircraft and mortar shells, offer a wide range of offensive/defensive strategies (see Table 3: Stationary Units). Placement of these units is the key to surviving advancing enemy waves. Levels have three types of fortified positions; small, medium, and large and units can only be built in these locations. Anti-infantry units can be built on any position, but the heavier anti-tank and anti-aircraft guns require the larger platforms. The medium platforms are actually two small fortifications linked side-by-side, providing even more defensive diversity.

These location restrictions provide strategic challenges for dealing with varying enemy troops. Frontline weapons like the **Vickers Machine Gun** are perfect against foot soldiers, but are quickly destroyed by the German A7V if you're not careful. Upgrades and repairs are the key to keeping your defenses.

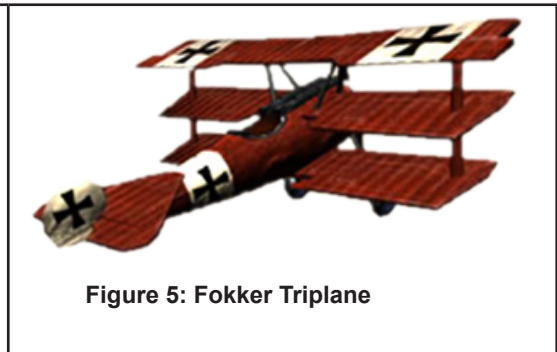
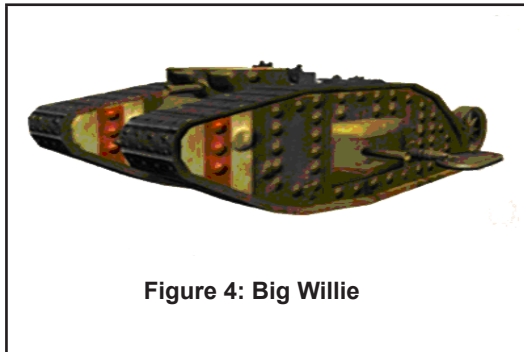
| Stationary Units⁴³ | | | | |
|--|--|--|---|-------------|
| Type | Level 1 | Level 2 1st Upgrade | Level 3 2nd Upgrade | Size |
| <i>Anti-infantry (Machine gun)</i> | Vickers Machine Gun Vital anti- infantry weapon. Ineffective against armor. | 37MM MLE Infantry Gun Faster firing with bigger bullets. Effective against cavalry. | Mark II Explosive crowd control. Light vehicle damage. | Small |
| <i>Anti-infantry (Chemical)</i> | Red StarSchilt Best used against large groups of infantry. Limited health. | Flamethrower Fire. Greater damage. | Livens Projector Gas and fire with the range of a mortar. | Small |
| <i>Anti-infantry (Mortar)</i> | The Stokes Use against infantry and tanks. Limited range. | Newton Increased range and vehicle damage. | Flying Pig Decisive power and health. Long firing arc. | Small |
| <i>Anti-tank (Howitzer)</i> | 18 Pounder Long range and high damage. Ineffective at close range. | Mark VI Greater range and more power. | Mother BOOM! Longer reload times. | Large |
| <i>Anti-aircraft</i> | Pom-Pom Effective against enemy air units. | The Seventy-Five Greater range and damage. | Old Quick Flak Flak. Impenetrable skies. | Large |

Table 3: Stationary units


As mentioned previously, players can also enter “Use” mode on any stationary unit. This first person orientation puts you in control of the action, firing on targets of your choice strategically taking out individual combatants who make it deep inside your defenses. It is also a useful method for firing on a cluster of soldiers to rack up combo bonus points which are only awarded when the player is controlling the unit. While in Use mode your other stationary units continue to be controlled by the game’s

artificial intelligence attacking random enemy troops. As great as this mode is, it does require the player to be aware of the overall battle field and mastering control of the targeting system of each unit type. Small projectile weapons (rifles and machine guns) use a familiar crosshair targeting symbol, while shell firing weapons (mortar and Howitzers) use an arc overlay for identifying the point of impact. This interface takes a little getting used to but is still quick to master. Additionally, these weapons have a “Shell Cam” view. Clicking the  (the “A” button) after firing changes the point of view to just behind the fired projectile. While in this perspective, the player can tweak the shell’s trajectory guiding it to the target.

Aside from stationary units, mobile vehicles are also available on many missions providing the ability to take the fight directly to the enemy. Two types of aircraft and armored vehicles are available for both campaigns (British and German), but not all vehicles are available on every mission.



These versatile mobile vehicles deliver a ton of damage on enemy troops and installations. But while piloting a vehicle in first-person the player can not manage their other forces. There is no method for building, repairing, or selling from the driver’s seat and the point of view is locked to that of the particular vehicle being piloted. To manage other units the player must exit the vehicle and take direct action.

When exiting ground units, the player has only 10 seconds to work, as indicated by a count down timer hovering over the vehicle. After the time elapses the unit is destroyed. So use this time wisely. Exit the vehicle with , take whatever measures are necessary, and hop back in before the timer reaches 0. If this can be accomplished, the player can continue mowing down the enemy. If not the ground vehicle will crumble and vanish, dumping the player back into third-person mode.

When exiting from a plane, the vehicle responds as if the pilot ejected. It continues to fly out of control eventually crashing in a spectacular fireball. Both units, the tanks and planes, will re-spawn at their starting location in 30 seconds. But this can seem like an eternity if you’re strategy depends on those units.

Navigation

As the battle continues in length and intensity, navigation around the battlefield becomes increasingly important. The camera controls are very simple and intuitive, but one of the greatest tools for navigating the battle is the overhead camera view. Tap down on the right analog stick to zoom high above the combat zone. This is the best tool for following battlefield action and repairing damaged defenses. From this overhead view, and surrounded by the sounds of high winds, the player can manage resources throughout the game field and zoom-in to a specific position.

Boss Battles

Most of the game's enjoyment comes from adventure and exploration. From level to level, new objects, tactics, and unit obstacles keep the play from becoming a stale incarnation of a typical tower defense game. But the essential components of accomplishment and achievement, needed to maintain player engagement, are derived from the end of level battles.

Boss battles appear at the end of every third level and truly take on the title of 'epic conflicts'. These levels proceed as normal with waves storming across the battle field to the player's Toy Box. But as the final wave of troops is destroyed a chilling stillness creeps across the battlefield, seconds later the silence is broken by an eerie tune which seems to emanate from everywhere.

The music of course is a cue for the Boss entry. Each boss is oversized and defiant on destroying nearby unit encampments before plowing into the Toy Box. Each boss is unique with its own cohort of diversionary units who focus on specific seek and destroy missions. For example the Zeppelin, which flies high above the battle field, will destroy any player controlled aircraft that attempts a frontal assault. But its modus operandi is to slowly meander toward the Toy Box protecting itself with massive air guns while deploying explosive kamikaze-style hang gliders to assail encampments; normally destroying the player's unit with one or two direct hits. Likewise, the fast moving Ubertank, rips through the no-mans-land between the player's forces and the enemy camp in a figure eight pattern. When facing the Toy Box it fires non-stop on the player's forces, but as its pattern sweeps away from the allied side, a rear door opens and a squad of mini-Beutepanzers rolls out making a beeline for the Toy box.

I'm not sure it's possible to defeat a Boss on its first appearance. Each boss requires a different strategy that can only be gleaned after seeing the beast in battle. To some players this can be very frustrating. Boss levels last 20-30 minutes and losing means the Toy Box is destroyed and the level must be restarted. But I think this

setup is what makes the game enjoyable. Accomplishing tough, and sometime gruesome, challenges gives the player a greater sense of accomplishment and a desire to see what the game has in store for them next.

Additional Modes of Play

Aside from the campaigns, *Toy Soldiers* provides three additional modes of play. **Survival mode** puts the player in the hot seat as wave after wave of enemy troops and bosses rain down upon the Toy box. The goal is to survive as long as possible racking up a high score for the community leader boards. **Multiplayer modes** (both local and online) pits human against human. In this mode both players set up their defenses on opposite sides of the battlefield to defend waves of troops sent by the opposing player. Just as in the single player mode, each player is rewarded cash for destroying enemy units, and these funds are used to upgrade and repair defenses.

And finally there is the addition of Downloadable Content. To date, two add-ons have been created; The Kaiser's Battle and Invasion. These DLC packages extend the playability of the title by adding new scenarios, maps, units, objectives, avatar achievements, and bosses. The Kaiser's Battle allows players to take the role of the French Army in the 'Spring Offensive' against a cunning German opponent. The five new units don't change much of the game play, but the new boss is amazing. Invasion adds more than just a few skins to the current set of units. In this title the player battles under the German flag against the British army and a menagerie of their secret weapons. Playing off of the toy box theme, the player must now defend against waves of toy fire trucks, space tanks, mounted knights, flying saucers, and fish tank helmeted space men.

Well Played

Great video games provide constant challenges as we struggle to learn, adapt, and overcome the game's objectives and revel in its reward system. These exceptional games artfully create an engaging experience which straddles the boundary of rigorous challenges and infectious enjoyment. Too complex or lengthy and players get frustrated, leaving the game unfinished; too easy and players are bored and unfulfilled with the experience. Designers of great games harness and mold that balance seeking a sense of equilibrium; creating rich, engaging, virtual environments where players become engrossed in the setting, the strategy, and the story.

I have to admit that while analyzing *Toy Soldiers*, I wrestled with whether a game of this nature should be included in this academic journal. My hesitation had nothing to do with the quality of the game. Instead, it was the type of game play and the limited narrative scope presented by the title.

To date, most of the games reviewed in the *Well Played* series have strong cohesive over-arching storylines. The articles and case studies dive into protagonist motivation, value systems, and plot advancement; areas seminally important in the discussion of game theory, character development, and the evolution of computerized fiction. And during my first play through of *Toy Soldiers*, I failed to see how this incarnation of a tower defense game could add to the conversation. But after further consideration I decided to include this analysis because I found a few similarities to some of the journal's story-heavy counterparts.

When evaluating entertainment devices (movies, games, books,...) we often look at the genre, world-based systems (i.e., environments, resources, objectives, and rewards), character place/role in the world, story arc and conflicts presented to the player. And my assessment of *Toy Soldiers* was no different. The first three attributes were simple, but after the second play through I was struck by the game's lack of a strong story. Yes, there are mission objectives and in-game goal descriptions, but these are far from ideal methods of crafting a tale. They don't even chronicle the war let alone create an engaging narrative for the player. There's no hero taking on the establishment, no ex-mercenary with amnesia trying to clear his name, and no romantic subplot like so many games.

While playing the game and failing again and again to defeat the various level bosses, a revelation hit me; my *personal* struggle with the level bosses WAS the story. More specifically, it was *MY* story built from my specific experiences and approaches to completing each level. As architect of the battle field, my role became that of the protagonist, tackling obstacle after obstacle growing in skill (strategy) and weaponry (units and upgrades). These mounting challenges follow a pattern of ebb and flow as the player progresses to equally spaced boss battles which serve as a constant creeping threat. They present new and varied challenges beyond the terrain and unit combination of the other levels, letting the player utilize the new skills they've mastered. But, as I played further, I began to realize the true reason I continued to play. It wasn't the missions or the combat scenario that kept me playing. Nor was it the "playful" dioramic setting and charming toy animations that captivated my attention. Instead, it was the sense of exploration (things like *how does this combination work*, or *can I get a 20x combo...*) an accomplishment for both me *the character* and me *the player*. This was the game play I wanted. It was what motivated me to continue the struggle, switching tactics and testing defenses.

I found myself playing through the game one more time, looking with fresh eyes at the reward system and my motivations. And there it was, unfolding like a miniseries of four three-act stories. I was also crafting my own narrative based on the varied struggles of my forces. It was a unique storyline running parallel to the war theme where I imagined unseen opponents, enemy commanders and generals, furious as I defeated their troops or laughing manically at my pitiful attempts to hold them

back. And I wondered even further; *was my reaction what the designer's intended?* Did they expect players to fill the storyline void by internalizing the combatant's struggle? Or is this part of our conditioning, dating back to our childhood need to control and feel comfort?

Most psychologist agree that imaginative play is an important part of helping children build social, emotional, and cognitive skills which last through to adulthood. Is it possible that the time we spent letting our imaginations run free, building creative and imaginative muscles, also created a basis for how we rationalize and approach non-story experiences. As I continue to consider this final thought, I think back to other experiences that created an emotional imprint on who I am. Everything from movies to comic books to games we played in the street helped to develop the storytelling skills I use in everyday life. *WoW*, this review took a turn I never would have expected. Thank for listening, now go play Toy Soldier and have fun.

Toy Soldier has all the components of a great game. Although the game play is short (~20 hours to play completely through Campaign and Campaign+ modes); it is an exceptionally well polished departure from the typical tower defense genre. Taking control of various mobile units and fortified encampments in first and third person glory adds a unique perspective and challenge to each battle. That, combined with the animations and environments, rivals the rest of the tower defense market. Fans of this genre will delight in the presentation and exceptional challenges of this fast paced action strategy title.

Final word of warning...

Beware the German K-Wagen!

Appendix A: Additional Tables

| Mobile Units44 | | |
|-----------------------|--|--|
| <i>Aircraft</i> | Sopwith Camel Hit Points: 300 Value: 200. | Vickers Vimy Hit Points: 700 Value: 400 |
| <i>Armor</i> | Red StarSchilt Best used against large groups of infantry. Limited health. | Flamethrower Fire. Greater damage. |

Table 4: Mobile units

| End Level Stats | | |
|-----------------------------------|------------------------------|--------------------------------|
| Total Units Reached Goal | Mortar Shells Fired | Mortars Destroyed |
| Infantry Units Reached Goal | Heavy Artillery Shells Fired | Soldiers Lost |
| Mechanized Units Reached Goal | Highest Flying Soldier | Time Spent Using Sniper Tower |
| Total Money | Used Shell Cam | Time Spent Using Anti-Infantry |
| Units Bought | Money Earned From Kills | 3x Bullet Combos |
| Units Upgraded | Money Earned From Combos | 5x Bullet Combos |
| Total Enemy Kills | Money Spent On Units | 10x Bullet Combos |
| Total Time Using Units | Anti-Infantry Bought | |
| Highest Bullet Combo | Howitzer Bought | 3x Blast Combos |
| Highest Blast Combo | Chemical Units Bought | 5x Blast Combos |
| Most Kills With One Sniper Bullet | Units Killed | 10x Blast Combos |
| Soldiers Sniped | Soldiers Killed | 40x Blast Combos |
| Bullets Fired | Tanks Destroyed | |
| | | |

Table 5: Recorded statistics for each level

“

*A “horror affordance”
is something that
affords horror; that is,
it is some element that
makes it easier for you
to become scared.*

”

CHRIS PRUETT

SIREN IS THE SCARIEST GAME EVER MADE

In 2003 I decided to become an expert on horror games. At the end of the previous year my wife and I had moved from icy Albany, New York, where I was employed as a game programmer, to sunny Stanford, California. My employers were nice enough to let me continue writing games for them from our new apartment (a tiny cinderblock one-bedroom on the Stanford campus), and my daily routine involved logging in at 7 am, coding in my underwear for several hours, taking a break before lunch to shower, and then going back to the code until supper time. At the time I was the lead engineer on a forgettable Game Boy Advance game based on a forgettable animated movie, and for the first several months my productivity was very high because I had no reason to leave the apartment.

But after a while the routine started to get to me. Physical isolation was part of it; I didn't know anybody in California, and the only people I talked to were my game team via the Internet. Despite the warm weather I almost never went outside, and I'm sure some form of advanced Vitamin D deficiency contributed to the malaise I found myself in. One day I spent several hours seriously weighing the merits of taking a baseball bat downstairs and trying to locate the one car in the lot that randomly sounded its alarm every few hours. It was time for a change.

So I decided to become an expert on horror games. I started by making a list of titles that I knew about. The first version was an Excel spreadsheet that I printed out and stuck on my bulletin board. It was little more than a glorified shopping list, and it had about seven games on it. As I began to research the genre, I found that there were hundreds of games that could be classified as horror, many on old PC platforms that could no longer be run. Even limiting myself to console games, I quickly uncovered a large number of titles. In typical programmer fashion, I ditched the Excel document and instead wrote a bunch of code to track my growing list of horror games in a real database. The goal, I decided, was to play every game on this list to completion, write up a short review of each title along the way, and hopefully, after sampling a large range of horror games, draw some conclusions about the genre as a whole.

The result was a web site called *Chris' Survival Horror Quest*. I put the first versions online in early 2003, and by August of that year it had turned into a sort of blog (although at the time, the word 'blog' hadn't yet entered the vernacular).

One of the very first posts I made was about a new horror game from Sony Computer Entertainment called *Siren* (*Forbidden Siren* in Europe). There was no information in the post, just two creepy screenshots of misty locales and kids with bleeding eyes. The game was released in Japan that November, and then in the States in early 2004. I picked it up, played it for a while, and then put it down. The game was frustrating and difficult. I wrote an angry, complaint-filled rant about the game for the blog and then set it aside. A few months later I picked it up again, and this time it clicked. All of a sudden I was hooked.

Completing *Siren* was hard. It took me months, even with the aid of a hint book full of maps. When I finally finished after half a year of play, I posted to my blog that *Siren* was the scariest game that I'd played thus far. It's been six years since then, and I've played a whole lot of horror games, but none come close to matching *Siren* in terms of scariness. At this point I'm willing to call it the Scariest Video Game Ever Made.

I'm not trying to be hyperbolic here. Since I began my quest to understand horror games in 2003, I've made it my business to finish every single horror game I can get my hands on. As of this writing I've played about fifty horror games through, and there are another fifty sitting on my shelf in various states of completion. If my calculations are correct, this means that, within the genre limitations I've set for myself, I've tried almost every single game ever produced in the horror genre. I do not mean to brag; actually, my horror game collection and borderline obsessive interest in the genre is a bit embarrassing. But I do feel confident that I have sufficient experience to select the Scariest Video Game Ever Made, and that game is clearly *Siren*.

Siren is a third-person horror game. It looks a whole lot like *Silent Hill*: it takes place in old, dilapidated places, which are often shrouded in darkness or mist, and characters must frequently use a flashlight to navigate. The game even shares some of the original *Silent Hill* team's staff. The plot, which is told in out-of-order segments and focuses on a diverse group of playable characters, involves a remote Japanese village in which many of the residents seem to have changed into murderous zombie-like *shibito*. The central mechanic in *Siren* is "sight jacking," the ability to see through the eyes of shibito who are close by, and to survive the player must use it constantly. The graphics are nice and the sound is particularly key to the overall experience. Described this way, as just the sum of its various parts, *Siren* sounds like a pretty good horror game.

But it's not a pretty good horror game; it's not even a great horror game. It's the Scariest Video Game Ever Made. And to understand why it is the Scariest Game Ever Made, we need to look at how *Siren* works at a much more fundamental level.

Off the Beaten Path

I have a very clear memory of playing *Siren* one evening in my concrete apartment, after my wife had gone to bed. I had progressed through a long, complicated level set in an abandoned hospital (a popular locale for horror game designers), and to complete it I needed to cross an open courtyard to some sort of monument placed in the center. The courtyard was unfortunately inhabited by a lone shibito, and low on health and lacking any means to defend myself, I knew that I wouldn't survive an outright dash for the end. Instead, I searched the outlying area for some sort of weapon or health item. I found a bunch of junk: a burned-out light bulb, a broken TV, and a laundry shoot embedded in the side of a wall.

After some thinking a plan began to form in my mind. I made my way to the second floor and found the top of the laundry shoot. When the roaming shibito was near enough, I dropped the bulb down the shoot. The monster heard the sound of the bulb breaking and changed course to investigate. I waited until he stuck his head into the bottom of the shoot before dropping the TV down the hole. There was a crash as it crushed the shibito's head in, and, feeling extremely pleased with myself for having figured the sequence out, I leisurely progressed to the end of the level. It was one of those moments where I was more surprised as a player that the puzzle had worked so naturally--though it was clearly a carefully designed encounter, the whole thing felt thrillingly organic. The sweat on my palms was proof enough of that.

Siren is a deeply innovative game. It's an absolute treasure trove of interesting game mechanics and ideas. Not every idea is successful, but the sheer amount of design experimentation found in the title is astounding. In fact, *Siren* is such a departure from regular gameplay norms that it's challenging to decide which of its many innovations are the most important.

The key to understanding *Siren* is that it is, at its core, a stealth game. The stealth genre, defined by designs in which the primary mode of play is sneaking, is dominated by games about ninjas and spies; horror and stealth is not a common combination. In fact, I don't think that there are any other true horror stealth games outside of the *Siren* series. *Clock Tower* and its brethren (including *Haunting Ground*) are based around running and hiding, but not so much sneaking. *Deadly Premonition* has a sneaking mode in which the player can hold his breath to hide from enemies, but it is more of an ancillary move than a core game mechanic. In *Silent Hill* and many

other games, it's possible to avoid combat by turning off your flashlight and moving quietly, but these games rarely reward this behavior; instead, being able to sneak passed an unsuspecting enemy is often used as a way to make the game slightly easier. The only other real sneaking game in the horror genre is *Manhunt*, and that title is so different than the rest of the genre that it is its own class altogether (though it does share a few key traits with *Siren*, which we'll get to).

As a stealth horror game, *Siren* is pretty unique. The stealth design works by throwing the player into large, sometimes open-ended levels, which are populated by various shibito. *Siren's* shibito are zombie-like, but unlike traditional zombies they retain some higher-order skills, like shooting guns, using flashlights, and even locking and unlocking doors. Most of them seem to be acting as they did when alive, perhaps out of habit: until they notice you, they'll tend the fields, or clean the house, or patrol an area (or, later in the game, spend their time building disturbing structures). As in many stealth games, the core game mechanic involves learning the patterns of the enemy and then deftly sneaking passed them when their backs are turned. Since *Siren* has no mini-map (nor any other sort of on-screen HUD), the only way to actually learn the shibito's patterns is by using sight-jacking to peer through their eyes. By closely examining what the shibito see, the player can identify blind spots in the map and carefully sneak by.

The key here is that it's never quite clear what the shibito can hear and see. The range of their perception is fuzzy, and in fact certain shibito have much better senses than others. This is quite a departure from the stealth precedent; most sneaking games follow the *Metal Gear Solid* approach of explicitly rendering each enemy's range of vision on the map, and many implement increasing levels of alertness (as defined by *Tenchu: Stealth Assassins*) in order to give the player a way to retreat if they are about to be discovered. *Siren*, on the other hand, offers the player neither affordance: it purposefully obfuscates the exact boundaries of shibito perception and its enemies respond aggressively to the slightest motion or sound. In this respect it is similar to *Manhunt*.

Couple this fuzzy perception model with an extremely unforgiving combat system and you have a highly stress-inducing stealth mechanic. If the player is found by an enemy, it is unlikely that he'll survive the encounter, and even if he does, the sound made by combat will likely draw other shibito. So the player is forced to move quietly, and slowly, and hide in areas that may or may not be safe. Many times a successful sneak will require the player to cower just a few feet away from a roving shibito, and since it's never quite clear whether or not a given hiding spot is truly safe, these moments are heart-stopping.

It is normal for game designers to try to limit player stress and frustration by giving them ways to adjust the difficulty: think checkpoints and power-ups. *Siren* selects the opposite direction and makes its core stealth mechanic extremely high-stakes.

It then doubles-down on this approach by layering puzzles on top of the basic sneaking system. The design ensures that the player never has a chance to fall into a comfortable routine, and must constantly be thinking on his toes.

The puzzles in *Siren* are varied and, occasionally, ingenious. While the rest of the horror genre seems to be mired in fetch quests involving locked doors and key cards, *Siren* invents whole new classes of puzzles. Many involve distracting shibito from their regular patrol so that the player can pass; in one early puzzle, the player must make a pay phone beep incessantly by inserting an expired phone card so that a nearby shibito leaves his post to investigate the noise. Others involve using the actual environment; late in the game, the player must break through a locked door by timing his strikes against the lock with a thunderclap, thus masking the sound from nearby shibito. Some puzzles involve the level progression itself: a door unlocked by one character may allow another to pass through that same door at a later time.

There are all kinds of other interesting ideas here, and as far as I know, many of them are unique to *Siren*. The level progression system is presented as a dependency graph-spreadsheet-thing, with time on one axis and characters on the other, so that levels completed at certain times by certain characters unlock other levels at other times with other characters. Many levels have multiple end conditions, and must be played several times to unlock the entire graph. Almost all of the game's huge cast of characters are playable at some point, but by the end very few survive. *Siren* represents a huge departure from the norms of both the horror genre and the stealth genre as well.

Culture Shock and Horror Affordances

But just being a highly innovative game probably wouldn't be enough to name *Siren* the Scariest Video Game Ever Made. Even the stressful core sneaking mechanic, while quite traumatic on its own, is not sufficient to warrant the Scariest Game title. No, there's more to *Siren* than just interesting core mechanics. There's another aspect to the game that makes it much scarier than other horror games, even games that employ similar design patterns, like *Manhunt*. I'm going to call that aspect *Siren*'s "horror affordances."

In user interface design schools, an "affordance" is something that suggests its use just by the way it looks. The handle on a teapot is designed to look like it would be easy to grip, and thereby saves you from scalding your hand by trying to pick the pot up by its base. The handle "affords" gripping, the UI designers would say. Its design suggests its intended use.

I'm going to use the word in a similar way. A "horror affordance" is something that affords horror; that is, it is some element that makes it easier for you to become scared, or even suggests that the appropriate reaction to the element is fear. *Siren* is scary because it has several different horror affording elements, and not all of them are obvious.

Siren's first horror affordance is the stressful sneaking mechanic I discussed above. That's one element of its assault on your emotional state.

Another horror affordance is the game content itself: the monsters, the characters, the level design, the dialog, the camera work, all of the things that make up the narrative events of the game. The sound design is particularly noteworthy here; hearing the shibito sob and laugh while looking through their eyes is more than a little bit unsettling. To the casual observer, it might seem like the game content is the central horror affordance: it stands to reason that the monsters are scary and the locations are scary and therefore the game is scary. But I think that the scary content is just one more piece of the *Siren* formula, and not the most important piece at that. Though many games have great content, very few are successfully scary, so content alone cannot explain how *Siren* works.

I think *Siren* deftly employs a much lower-level horror affordance: culture shock.

As a sophomore in college I spent a year in Japan on a study abroad program. I ended up getting a degree in Japanese (along with one in Computer Science, though I had to cram my CS classes into three years since my excursion to Japan put programming on hiatus), and as I write this I am sitting in an apartment in Yokohama. But looking back, I realize that my first year in Japan was spent mostly trying not to lose my grip on reality; I was caught in the throes of culture shock.

Culture shock, at least for me, is like trying to stand up on a boat. The floor of the boat itself appears flat, and sometimes the motion of the waves is so subtle that I can't really even feel it when sitting down. But when standing up or (god forbid) trying to walk, I'm suddenly off-balance. The random, pattern-less rocking of the boat clashes with my brain's assumption that flat ground is fundamentally stationary, and consequently I am surprised by even the smallest motion. It's a weird, stressful sensation that I have lost control; I do not fully grasp the forces acting upon me.

That's how it felt when I first came to Japan. The juxtaposition of Japanese sensibilities with familiar Western symbols made me feel like the world had gone crazy. Parts of Japan look a lot like an American city (there are tall buildings and nice cars and people wearing suits), but (I eventually realized) the motivations of the people living in Japan are often quite different than those of my culture of origin. Even minor incongruences made me feel uneasy; there were so many new things to absorb, my definition of "common sense" suddenly seemed unreliable. I felt like a fish out of water--the sensation of lost control was very strong.

This feeling of being out of control is a powerful horror affordance. I might go as far as to say that loss of control is a central element in almost all forms of horror; media that sets out to scare is often fundamentally about making its audience feel vulnerable by removing all connections to comfortable routine. Consider horror films such as *The Shining*, *The Birds*, and *Alien*. These films throw their characters into confusing, conflicting, incomprehensible situations, and never really stop to let the viewer catch up. This keeps us off-guard, constantly second-guessing our assumptions. It puts us in a very vulnerable state, and lets the filmmakers pipe their scary content directly into our brains.

Siren achieves this same effect through culture shock. It does this in two distinct ways.

First, it presents to us a weird, disjointed, out-of-order story, in which characters are not clearly good or evil. The effect is amplified for Western players because the story content is rooted in Japanese culture, and the motifs and clichés it employs are decidedly unconventional to our eyes. *Siren's* narrative isn't the first to benefit from its foreignness; I suspect that the recent Asian horror film boom in the United States has more to do with culture shock than filmmaking. But, as with other horror films and games that are distinctly Japanese, *Siren's* ability to scare is improved because it seems unpredictable to us; it doesn't follow the standard, comforting format that we're used to.

It's also important to mention that *Siren* is stock-full of references to Japanese mythology and urban legends. The eventual antagonist, Hisako Yao, is based on a character from Japanese folklore called Yaobikuni, a woman who ate the flesh of a mermaid and became immortal. This folklore is not commonly known in the West, and thus it is a vector for culture shock, a strong horror affordance.

The second form of culture shock that *Siren* employs is entirely unrelated to its country of origin. Rather, the core mechanics of the game, the sneaking and innovative puzzles, are so far from the norm that they represent a horror affordance themselves. The culture here is modern game design precedent--a set of rules that are so universal that players recognize them as systems rather than game content. When you find a key with a symbol on it in *Resident Evil*, you know it's just a matter of time before you also find a locked door with the same symbol engraved above the lock. When you collect an item that has no immediate function, you can usually assume that it'll end up being combined with other items or used in a specific spot. And any time a tentacle monster appears, its tentacles will have bright glowing bulbous spots which also happen to be particularly weak to gunfire.

This is the Chekhov's Gun principle applied to game design. Players understand a mechanic and, once they have identified it as a common routine, are comforted that they understand how to play. In fact, rule transparency and predictability is

generally seen as a strength by game designers--those games where there's never really any question about how to play are usually the most fun. Mario's floating question mark block affords head-butting; if you weren't supposed to smash it, it wouldn't be there in the first place.

But *Siren* presents the player with a different scenario. Chekhov's gun is hung on the wall in the first scene but revealed to be empty in the second. The puzzles do not follow common patterns, and because individual levels are usually traversed several times by different characters, there's often no single obvious path to the exit. By refusing to align to the game design precedent, *Siren* forces its players to think on their feet. Once the player starts to realize that the rule book has been thrown away, anything seems possible. In fact, as in most other games there is usually only a small set of correct solutions to any given problem. But because those solutions are so non-standard, the problem space appears to be extremely wide to the player. Suddenly all of our assumptions about how games are supposed to work seem unreliable and we find ourselves at sea: culture shock.

Siren's ability to scare us rests primarily on these four horror affordances: tense game mechanics, scary game content, unfamiliar narrative themes, and unconventional puzzles. These elements in combination create an extremely stressful form of play. They also contribute to *Siren's* high level of difficulty; since so many elements of the game are intentionally vague or obfuscated, it takes quite a long time for the player to get a handle on how even the most basic mechanics work. I didn't even really realize that *Siren* was a sneaking game until I was several hours in, and I think many quit in frustration before they ever really got to the good stuff.

But, as it turns out, that intense level of difficulty is part of *Siren's* success, too.

False Emotions and Difficulty Stress

In subsequent *Siren* games (*Siren 2* is a sequel and *Siren Blood Curse* is a remake), the difficulty level was toned down a bit in response to user complaints. And, for the most part, that change was successful; the game retained much of its scare power without forcing the player to continuously fail in order to learn the basic game mechanics. But, at least to me, the experience wasn't quite the same. The games were fun and certain sections were still extremely stressful, but I felt that the later games never reached the same intense level of fear as the original. They felt a bit defanged, and looking back, I think that might have something to do with the unforgiving difficulty of the first *Siren*.

A few years ago I read about an idea from the world of psychology called the Two Factor Theory of Emotion⁴⁵. The theory, at least the part I am interested in, states that your body takes its emotional cues from two sources: your physiological state

and your mental label for that state. Many types of emotions can trigger similar physiological states: both fear and arousal, for example, can cause your heart rate to go up and adrenaline to be released. To accurately identify a physical response your body therefore looks to contextual cues for help.

Psychologists have shown that by causing a particular physiological reaction and then introducing unrelated context, false emotions can be generated in test subjects. The brain, when confronted with some contextual stimuli, misreads the body's physical reaction and synthesizes an emotion. It appears that if you can cause a specific physical reaction in the body with one form of stimuli and then juxtapose some other stimuli to provide the brain with a label, you can get a person to believe that they are physically and emotionally reacting to the second input rather than the first.

What does this have to do with *Siren*? I think that the high-stakes game play and crushing difficulty are vectors for physical stress in the player. Even absent any horror content, the game play mechanics are enough to elevate the player's physiological state. Not because the mechanics are intrinsically *scary*, but because the high cost of failure makes them *intense*. In fact, I think many other non-horror sneaking games provide a similar level of intensity; the sneak-and-wait game mechanic is a pretty stressful interface for the player. And once the player is stressed and their physiological state elevated, all the game developers have to do is introduce scary content. If the Two Factor Theory of Emotion is correct, some players will misinterpret their body's state as a result of the horror content rather than the game mechanics, and will believe themselves to be scared of the bleeding eye shibito.

Of course, *Siren* also employs its other horror affordances to increase stress and deepen the effect of its scary content. It knocks down our defenses with unconventional mechanics and content, and keeps its game rules fuzzy and flexible. Many games have zombies, and bleeding eyes or not, *Siren's* shibito are not all that unique on their own. They work, I think, because the player is forced into a state in which he's extremely susceptible to stress, and perhaps is even ready to believe that such stress is a direct result of the mostly-dead villager trying to cut his character's neck with a scythe. *Siren's* horror game content is directly empowered by its difficulty, mechanics, and core game design.

But is it any Fun?

Siren is far from a perfect game. Though sometimes improving its ability to scare, the game's poorly-communicated mechanics and a couple of major UI blunders (the rotating map and investigate key come to mind) turned many players off. *Siren* asks quite a lot of its players; seeing the game through to the end is no small feat.

But as interactive horror, I think that it is significantly more successful than most other games in the genre. Its combination of mechanics, narrative, and difficulty, as delivered to the player in obscure and unconventional ways, make it the best example I've seen of fear-inducing game design.

Sitting in my little apartment, trying to keep my heart from jumping up into my throat, I played *Siren* to completion. Though it was one of the first titles I finished in my quest to play all horror games, it set a bar which has yet to be surpassed. It is the game to which all subsequent games are compared. While a few have come close to *Siren's* brilliance, the vast majority of horror games can't hold a candle in a haunted mansion to it. And that is why I feel absolutely confident in my selection of *Siren* as The Scariest Video Game Ever Made.

“

*The player is never told
what to do in The Way
of the Samurai 3.*

”

ARTHUR PROTASIO

NARRATIVE REINCARNATION IN THE WAY OF THE SAMURAI 3

Becoming a Ronin

The metal clash of blades roars in the background as a (stale) narrator explains the setting of the game world you are about to inhabit, which mainly comprises the troubles of the Sengoku “Warring States” period of Japanese History.

You are one of the few survivors of a recent confrontation between rival clans. However, having lost the battle, you have now become a masterless samurai, a ronin, that faintly hangs onto a bit of life and treads the blood stained battlefield. As you limp, soaked by the rain in a Kurosawa-esque fashion, two merchants notice your presence.

The men approach, offer help, and you are prompted for a response. Four options present themselves. The first three are dialogue lines split between a slightly humorous response, a dramatic death-like statement, or an angry bark. However, being a samurai means you also have your sword at your disposal and as your fourth option you may draw it and manifest violence (or the threatening of it) as your reaction.

The previous paragraphs describe the first few minutes of *The Way of the Samurai 3*. Though the game may always start in the same manner, the decisions made by the player at this point represent the first step in one of many different lives that exist based on a narrative structure filled with varied ramifications and branches. In other words, the concept of narrative reincarnation.

Beyond Technicalities

By genre definition, *The Way of the Samurai 3* is an action-adventure game with role-playing elements. In technical terms, the player controls a customizable samurai avatar through the eyes of a third person camera and traverses scenarios that are filled with NPCs representing either shopkeepers, “quest-givers” or “save spots”.

When not talking to people, players are usually cutting their way through them with one of many weapons (some odd) that are available in the game, and hoping to survive the rigid combat mechanics (especially if one is playing on hard difficulty).

Apart from generic descriptions, the “Way of the Samurai” series, developed by Acquire, has always been known in the west as a niche game mainly composed by a few key characteristics such as drab (english) voice acting, subpar graphics, and lackluster swordplay.

Though it is not untrue to say these elements have plagued the series ever since its first release in 2002, in reality they are eclipsed by the strong storytelling structure present in the games. To simplify the whole in such manner is a disservice to the immersive experience that arises from making divergent decisions, such as aligning yourself with a clan, and treading different paths which may eventually decide the fate of other characters as well, such as allowing the death of the only remaining heir of that specific clan.

It is because of this focus on branching narratives that *The Way of the Samurai* series stands out. Even if among other murky elements, the storytelling pillar is still strong and the experience, as a whole, reveals itself as a rough, yet well played, gem. It is for this same reason that, to me, Way of the Samurai is a series I eagerly await for future versions, hoping for improvement in the flawed areas, but also desiring to revisit the game narrative cycle and feeling present in the same branching plot structure.

The Narrative Life Cycle

The Way of the Samurai (series) provides, through its story, an insightful journey into the experience of living many different lives that explore the “what ifs” of an Akira Kurosawa samurai film. Through the mix of a structure that lies somewhere in between an adventure game and a “Choose Your Own Adventure” (CYOA) book, the player is given the freedom to play a versatile role. He may choose to affect the outcome of the game world or take a neutral stand and merely watch events take place without your interference.

Despite of what one chooses to do throughout the journey, the individual stories in *The Way of the Samurai* series always begins in the same manner. The prologues and initial scenes are always the same, as the premise of the story does not change, unlike the RPG *Dragon Age: Origins*, in which each character race has its own introduction. Specifically in *The Way of the Samurai 3*, the player finds himself in the region of Amana, amidst an imminent conflict between two clans, the oppression of a helpless village, and the impending invasion of Nobunaga, an external shogun

ving for control of the country. Though he may wander aimlessly through villages and clan headquarters, story advancement is triggered by specific events (including the option to abandon the region at any time).

Describing the game in this manner triggers memories of the *Groundhog Day* film. In it, Bill Murray's character is found hostage to a mysterious time loop. After living through February second, instead of going to bed and waking up on the third, he finds himself continuously reliving that same specific day. Both scenarios from *The Way of the Samurai 3* and *Groundhog Day* share many evident similarities. Characters relive the same scenario, but each time create alternative events by taking different actions. Therefore, at each subsequent scenario they relive, they are aware of information they previously did not know and may use that knowledge to alter the course of other events.

However, while Murray's character explores many different strategies, such as learning peoples' secrets, seducing women, and even kidnapping the memorial groundhog, he does so in order to end the time loop. The character feels trapped and wants out, unlike the player in *The Way of the Samurai 3*. In the game, the player character exercises freedom and pursues different avenues mainly because of a narrative curiosity. Exploration emerges as an enticing feature, rather than a punishing condition. The possibility of living different lives and each time discovering new things, while simultaneously accumulating a wealth of intelligence, motivates the player to actually put together these jigsaw pieces from a world mosaic and learn more about characters, scenarios, and history.

The player is never told what to do in *The Way of the Samurai 3*. The closest there is to a tutorial is a woman who is being harassed by two bandits. After (and if) one decides to save her she will give the player a few pointers as to how to play, but interestingly enough, if he chooses to say he already knows her, she then acknowledges that it isn't the player's first time in that world. This line of dialog not only breaks the fourth wall, but also establishes how natural the narrative cycles are to the game world. Each cycle (or playthrough) lasts an average of 2 hours and means that instead of living a novel, the player is actually taking part in various different short stories. All of them start the same way, but change according to the decisions made. The player might want to drop the controller after pursuing a couple of narrative paths and will still have "finished" the game, but won't have completed the whole "short story collection". What essentially drives the player to do so is the liberty to choose any path and see the results in a relatively short time span, when compared to other games.

Regarding this topic, the major difference identified between *The Way of the Samurai 3* and other video games is the amount of time it takes to complete the game. Instead of spending between 6 and 30 hours living one specific story, as is

the case for most first person shooter (FPS) games or role playing (RPG) games, the player may spend 20 hours witnessing many different endings. For example, in my personal adventures, after having played 35 hours exploring the world and playing with its possibilities, I still have not attained all 21 endings. However, this isn't Grand Theft Samurai. There is no gigantic sandbox structure at the player's disposal, but the game welcomes anyone to experiment with whatever is available and check out the narrative results.

In fact, *The Way of the Samurai 3* is so resolute on the idea that the player is living one of many different stories, that direct elements from the game, such as save spots, illustrate this aspect. The player saves game progress by talking to specific NPCs scattered throughout the world. The surprise is that these "Save Spot NPCs" are actually biwa minstrels spread throughout Amana. The biwa is a short-necked fretted Japanese lute very important to the Japanese history and culture. Japan's indigenous spirituality, the Shinto, portrays the biwa as the instrument of choice of Benzaiten, the goddess of music, eloquence, poetry, and education; and during the Sengoku "Warring States" Period, samurai from the Satsuma Domain used the biwa for moral and mental training. Apart from these specific references, the biwa has always been a typical tool of Japanese narrative storytelling (similarly to the lute used by western bards), and this becomes evident when each of the minstrels seem to save progress by actually "learning about the player's story". It is not clear how they learn it or why, but the game implies they will later compose a song about the player's wondrous tales. This feature works marvelously because regardless of how the audience is addressed, the suspension of disbelief maintains itself by reinforcing the idea that this current story is but one of many others the player has yet to live.

This structure clearly identifies the mechanics of the game in which players are encouraged to enact freedom by playing (and replaying) several times and pursuing a different narrative trajectory on each occasion. A certain character in the game even has a line that addresses this aspect (and indirectly refers to the audience). Setsuen says the player character has an interesting future ahead of him and "It's almost as if you could become everything and nothing all at once. If I were to use a metaphor, I might say your future is like that of a cloud." In other words, Setsuen is making both the character and the player aware of their narrative freedom.

The Samurai of a Thousand Lives

In *The Way of the Samurai 3*, the reliance of this branching narrative structure on the player's exploration of varied paths through many different playthroughs is evident. Without the player's participation in at least two different narrative branches,

the game's experience becomes identical to one of a game with a single linear story. Nevertheless, once the player begins participating, the gradual discovery of narrative elements transforms into both temptation and reward.

Each of these playthroughs can be interpreted as the creation of parallel universes in which each of the characters live their unique lives. However, one may disagree since these stories do not take place simultaneously, but rather in succession depending on the player's choices. Based on this piece of information, one can conclude that the relationship between the player and the game is one of experience and learning (derived from these experiences). The condition is that the knowledge gained from one narrative cycle, be it combat or relationship wise, can only be applied in the next playthrough. Therefore emerges the concept of narrative reincarnation.

It is worth noting in this regard *The Way of the Samurai* acts as a mixture between Shinto and Buddhist ideals. The Shinto does not embrace reincarnation *per se* in the same way Buddhism does. However, because of its syncretism with Buddhism, explanations became necessary to settle the apparent differences between native Japanese beliefs and Buddhist teachings. One of these versions is that the Shinto Kami (like Okami's Amaterasu for example) are actually supernatural beings caught in the cycle of birth and rebirth. For this reason, they are born, live, die, and are reborn, therefore taking part in the karmic cycle.

The analogy between reincarnation and the game's narrative journeys does not surface by accident. An immediate first reference is in the book *Trigger Happy* in which author Steven Poole compares the general game experience to an ethically inverted form of Buddhism. He states that while Buddhism's final aim is to end the continuous process of living anew through committing good deeds, life in a video game is always a good thing, and killing is the morally praiseworthy action required to resurrect it.

Though that may be the case in many games, it is not in *The Way of the Samurai 3*. You may kill, but it is not the act of killing *per se* that will trigger narrative advancement. In fact, the game penalizes (through a point system) villainous acts, such as attacking and killing innocent people, and deducts points after a playthrough. The consequence is that in order to regain those points, the player needs to play again and, in a way, witnesses the manifestation of a growing karmic debt. Hopefully, during the next playthrough, the player will have learnt from past experiences and use the acquired knowledge to follow narrative (and perhaps non-lethal) paths which were before left untouched. If the player refuses to explore different strategies much of the game's content will never be discovered, especially the endings, and the karmic debt concept will be reinforced by the condition of "not progressing as a consequence of not becoming better".

Another issue that arises from this connection to Poole's idea in which killing is revered as a positive action, is that players in *The Way of the Samurai 3* have the option of wielding the blunt side of any of their weapons. This means the player can act in the same manner as Samurai X's atonement seeking Himura Kenshin and not kill anyone throughout the whole game. By beating foes, instead of slashing them, defeated characters may return later on and other narrative branches may be unlocked, but most importantly, the player can minimize the amount of bad deeds committed. Once again, the idea of an ethically inverted form of Buddhism is opposed because killing is not necessarily encouraged.

The second reason to compare the game's journey with the reincarnation trajectory is grounded on the fact that Buddhism and reincarnation are elements directly referenced in the game's context. Buddhist monks are occasionally seen in the game, as well as items such as Buddhist beads, and an old lady goes as far as to say that the player character must be her late husband's reincarnation. The slight oddity here is that the old lady only makes this comment if the player does a good job hitting a huge temple bell. However, in order to perform well and accurately hit the bell (via a mini game), the player needs some practice. Practice that could have been obtained in another playthrough, or in other words, another life.

By now it should be clear that the game offers a variety of narrative paths to be chosen. Some befriending certain characters, others befriending none of them, and some defeating many of them. As an example, by choosing to align yourself with the recently empowered Fujimori clan (among many other decisions), instead of trying to rebuild the betrayed Sakurai clan, the game encourages the player to ponder about their lives and the way in which they make decisions. In *The Way of the Samurai 3*, the chance to relive "small lives" and analyze how each decision leads to a different path helps people understand how the inverse logic applies to real life. Very rarely do people get the chance to calmly reflect and analyze the divergent paths that present themselves in real life. Not only does the game make you think about the topic, but it also helps you realize that, in life, once you choose a certain path, you are inherently choosing to not live many others. Thankfully, in *The Way of the Samurai 3* you can live all of them through the entertaining process of narrative reincarnation.

A Samurai's Soul

If the player is able to live many lives through this process, it is also because the game keeps track of all those lives. Aside from usual game stats identifying which items have been unlocked and what endings have been attained, the player's weapons acquire experience every time they are used. The only thing the player character's profile accumulates are samurai points, but what essentially goes into play and is carried from one life to the other are the weapons and items.

The sword is the player character's soul because only weapons get better with use and accumulate experience points to go up levels. Though the player might apply the knowledge from a previous story in the next one, when it comes to combat, only the weapons retain a record of specific combat techniques. It is as if the experiences lived in previous playthroughs were channelled into the weapons, therefore functioning as a memento of past battles. The more a sword is used, the better it becomes and the easier the player's next lives will be. Thus, in turn, reinforcing the bond between a samurai and his weapon. Intriguingly, this directly affected my self-esteem, as a player, when I brandished my fifteen-life-old sword to fearful villagers and overconfident samurai. Because the player draws attention and causes scares when drawing a weapon, unlike in other games in which the avatar can walk around with a machine gun in hand unnoticed, *The Way of the Samurai 3* made me think before doing so. Since then, I've initiated the healthy habit of holstering my guns in other games when they aren't needed.

In the first game of the "Way of the Samurai" series, the save system would automatically delete the game file once it was loaded. Then, once the story reached an ending, the game would save a new file with the updated information. The problems with this system were that firstly, if for any reason the game console were turned off (perhaps due to a power shortage) all progress would be lost. Secondly, if the player died during the game, all items and weapons being carried by the avatar at the moment of death would be lost as well, therefore resulting in a very similar sensation to a permanent death. Without doubt, the result was a reminiscent sensation of roaming the perilous dungeons of the action role-playing game, *Demon's Souls*.

The glaring issue with this approach (aside from the obvious technical problems) is that it did not incorporate the idea of reincarnation in which the life experience (regardless of how it ended) was embedded with enough meaning and context to affect the next life. *Demon's Souls* had the objective of making players think and act carefully because every step could represent a fatal risk. In fact, in *Demon's Souls* second chances are a rarity and the probability of losing a significant amount of progress in the case of death is extremely high. *The Way of the Samurai* series is not bent on creating thoughtless and careless players, but the permanent death structure is one that directly contradicts the idea of reincarnation which is possibly the series greatest strength.

It was an expected relief to see this feature modified later on. Dying in *The Way of the Samurai 3* does not result in the loss of weapons and progress. Death merely represents the end of one of many stories. One that might have met a tragic end, but nonetheless contains worthwhile experiences that should be applied in future lives.

A Samurai's Context

It is no mystery that director Akira Kurosawa is a huge influence to the series. The plot is fictional, yet based on a historical setting, and accordingly illustrates various peculiar scenarios inspired by many of Kurosawa's samurai films.

The starting point is the Segoku Warring States historical period, also presented in films like *Kagemusha* and *Seven Samurai*. A ripe situation to depict the warlords' dispute for power and the helplessness of villagers found in the thick of bloody confrontations between loyal samurai. Naturally, villagers tend to either admire or hate samurai and mostly end up being treated as oppressed pawns by the current ruler. The opinions of villagers from Takatane clearly displays this issue, while the speeches from either Ouka or Fujimori clan are all about taking back, taking over or garnering more power.

Also present in the game's narrative is the convoluted relationship between two brothers and a father. Though the film *Ran* features a ruling father and three sons, the similarities make reference to brothers who each represent different clans and fight for power. In *The Way of the Samurai 3* these conflicted family values also involve betrayal, but they vary according to the player's choice. Munechika, the father, was chief vassal of the recently defeated Sakurai clan and has since then become head of the Takatane village. While he has opted to leave *The Way of the Samurai* behind him, his two sons, Shinnosuke and Yuma have each opted to defend rival clans and Yuma hates his brother for it. Because all of this information is only acquired by living, talking and inhabiting the game world, the player may end up triggering events that result in the confrontation and death of all three characters or none of them. In fact, the player only starts to understand the family relationship once he becomes aware of its existence by putting together pieces of information acquired through various "lives". One might finish the game without ever knowing the three characters were connected or the real reason behind Shinnosuke's betrayal, who once was a loyal member of the Sakurai clan.

The main storyline concept from Kurosawa's *Yojimbo* also plays out in the game, though it relies entirely on player action. The film featured a ronin who convinced rival clans to confront each other and consequently destroy one another. In the game, the player can choose to do that. Though he might also choose to eventually pick sides, both the Ouka and Fujimori clans will offer jobs to the player's samurai character up until the final events. Freedom is an option and that also includes the player's choice to leave Amana after deciding none of these factions are worthwhile.

Equally important to the narrative structure of the game are the moral decisions present in it. Instead of relying on traditional meters that quantify how "good" or "evil" a determined character is, the decisions in *The Way of the Samurai 3* derive directly

from the themes of its storyline. In this sense there is no “morality bar” (thankfully) because many of the decisions are tied to specific factions. By favoring one side, the player works against another. However, since every faction is constituted of characters with different personalities it is impossible to pinpoint if any of them represents an ideal that is good or evil. Traitors silently lurk through high ranks and at one time the player might think he is helping a faction, but rather accidentally favoring individual schemes. Alternatively, the player may also choose to take all matters into his own hands.

During a specific life, I chose to eliminate the Ouka clan. I did not agree with their ideals and thought they were a nuisance to regional stability. However, after killing all high ranked samurai and Genjuro himself, the leader of Ouka clan, the remaining low ranked soldiers declared me as the new leader. As time went by, having seized control of the Ouka clan, I realized I could try taking on Shuzen, leader of the Fujimori clan and Amana ruler. Even more unexpected to me, than becoming leader of the Ouka clan, was killing Shuzen and later learning, through the game’s epilogue, that my character was not an apt strategist warlord and succumbed to the external invasion of shogun Nobunaga.

Sadly, the game’s cover art directly contradicts the possibilities and freedom portrayed in the game itself. By exhibiting a dichotomic black and white image with words like loyalty, honor, greed, and deceit the player is led to believe that decisions are divided between these two categories. On the contrary, *The Way of the Samurai 3* allows the player to tread many branching paths that stray far com the simple black and white categories of morality. The consequences of certain actions are not necessarily motivated by such primal and distinguishable feelings.

Experience through Existence

The Way of the Samurai 3 is an excellent experience that intelligently combines both emergent and embedded narratives. It is only through the emergent narrative (or player action and decision) that each of the embedded narrative branches are discovered and lived. The result never feels too open or too linear.

Unknown to many western players, *The Way of the Samurai 3* is a Japanese action-adventure game that demands patience and understanding. As the players becomes more and more engaged with the narrative, it becomes easier to fit pieces together and complete the “world mosaic”. Exploring one path allows better understanding of characters and their motivations, which in turn enables the player to apply that information in order to explore other branches.

Not only does the game present an elaborate narrative structure, it also delivers it drenched in cultural influence, ranging from cinema, history, and religion. This defines the game as a work of expression capable of conveying powerful and meaningful messages, especially ones referring to the freedom of living many different stories. Choice and consequence serve as the structure of narrative and ethical testing grounds. In essence, it is an experience that allows the player to examine his own values by taking part in the process of narrative reincarnation.

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around them.*

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ANDY JIH

LIMBO AND THE MISADVENTURES OF P.B. WINTERBOTTOM

Introduction

On paper, *Limbo* and *The Misadventures of P.B. Winterbottom* appear to be brothers in arms – both games are puzzle-platformers released on Xbox Live Arcade⁴⁶ within five months of each other. Both games are highly stylized as they are shown primarily in black and white, have no spoken dialogue, and have strong references to films and art styles from around the 1920s. They were also both well-received critically, though, to my best estimation, *Limbo* has been a greater financial success⁴⁷. Despite their similarities, their differences in approach regarding context and presentation as well as tone and style result in play experiences that could not be more divergent. In looking to Jesse Schell's lens of Essential Experience, games are artifacts and a means to creating experiences, and not only is how the game constructed important, but taking a holistic view of the game, its presentation, and how players play, are all key in how a player experiences the game.

The Misadventures of P.B. Winterbottom began as a student project by a team of students at the University of Southern California Interactive Media program. It soon made the rounds in various indie game competitions, and later resulted in the formation of the company, The Odd Gentlemen, and a publishing deal with 2K Games.

The game features P.B. Winterbottom as a sort of anti-hero; his primary goal being to eat as much pie as possible, and in the process, wreaking havoc everywhere he goes. Through the tutorial, he gets lured by a mystical pie into a portal that takes him to a parallel universe where clones of himself are running about. From here, the game's primary game mechanic is introduced - while holding down a button, the player is able to record all of Winterbottom's actions such as running, jumping, or swinging his umbrella. Once the player releases the button, a clone of Winterbottom is created that goes through the exact same motions that the player had just recorded in a repeated loop. The player-controlled Winterbottom can then interact with the clones, such as standing on top of them to reach higher

platforms, or swinging his umbrella to hit the clones to pies that might otherwise be out of reach. To complete each level, the player must collect all of the pies through the creative use of Winterbottom's clones. Each level has a limit to the number of clones that can be on-screen simultaneously. Using this game mechanic as a foundation, all of the levels and puzzles take this foundation and present various twists and variations throughout the course of the game.

While *The Misadventures of P.B. Winterbottom* began as a student project, *Limbo* was created by Playdead Studios, a small independent game studio located in Copenhagen, Denmark. Arnt Jensen had the initial idea behind *Limbo* beginning in 2004, but after beginning to work on it on his own, he realized that he required the assistance of a programmer. He created an art trailer in order to garner interest to recruit a programmer. Dino Patti signed on, and Playdead Studios was founded shortly thereafter in 2006. *Limbo* has been in development since then, has won a variety of indie game awards, and was released on Xbox Live Arcade in July, 2010.

Limbo has very little by way of exposition or overt narrative – the game begins in the woods with an unnamed boy shown in silhouette lying seemingly unconscious on the ground. After the player presses a button, the boy's eyes open and he stands up. The player is then in control, though the game has provided no overt instructions or tutorial to guide the player's actions. Through experimentation alone, the player is able to move the boy left and right, jump, and hold onto objects. With only those interactions, the player must then solve a variety of platforming puzzles to progress further in the game. The game is split up into chapters, though how those chapters are divided is only apparent from the chapter selection menu; no UI or menus ever appear during gameplay unless the player pauses the game. Much like *Winterbottom*, *Limbo* takes a core set of interactions and constructs myriad inventive puzzles around them.

What follows is an analysis of each of the games' various features and designs such as art style, gameplay, and narrative. In placing these two games side by side, their respective strengths and weaknesses are shown, and I contend that one game, despite its developers' best efforts, succumbs to ludonarrative dissonance while the other is able to succeed in creating a wholly cohesive and entertaining experience.

Art style

Limbo's art style borrows very heavily from film noir and by extension, German expressionism. German Expressionism was a style of film made in Germany in the 1920s and 1930s, and most films of the style were made on relatively low budgets compared to the films made in Hollywood. Given these budgetary constraints, the filmmakers often utilized stark, stylized, and surreal sets and designs in lieu of creating life-like and extravagant sets. Films made in that time period and style often used such aesthetics in order to represent dark and cerebral themes.

While film noir and German expressionistic films of that time were black and white due to technical limitations, *Limbo* is entirely black and white by choice. The character that the player controls is shown in silhouette, with his eyes being the only feature on his body that is white. While the gameplay is 2D, the layered backgrounds combined with the strong use of chiaroscuro lighting create a greater sense of depth; various assets in both the foreground and background are shown as fuzzy and out of focus in order to enhance the sense of depth, and parallax scrolling is used to enhance immersion. By placing objects and elements in the foreground in front of the protagonist, the player is often unable to see the boy; very rarely are characters hidden from the player's sight in games that show characters from third-person perspective. Other environments are entirely in the dark, requiring the player to push on and continue moving forward despite having no idea where he or she may be going. The sound design in *Limbo* is also quite effective at establishing unease in the player; there are myriad animal noises, whistling wind, and other ambient sounds that aren't tied to any visible assets. Nearly all of the sound found in the game is diegetic, though at certain points in the game, extradiegetic music plays. Generally, this music is a soft, low, sustained note, which introduces a somber tone; at other points in the game, a loud, ominous gong-like sound plays. Obscuring the boy from the player's sight and enveloping the character in complete darkness combined with the game's effective sound design creates a great sense of unease as well as foreboding not often found in action-platformers.

Like *Limbo*, *The Misadventures of P.B. Winterbottom* also borrows heavily from film noir and German expressionist films, though to different effect. The vast majority of *Winterbottom* is also black and white, with only the pies that P.B. Winterbottom collects and a handful of other game elements that are in color. Its character design and aesthetic combine elements of Edward Gorey's books with various references to Tim Burton films. P.B. Winterbottom is a humorous-looking character with an over-sized top hat and exaggerated mustache, looking like a caricatured and more mischievous version of Charlie Chaplin's famous silent film on-screen character The Tramp. Barring a few exceptions, nearly all of the levels don't scroll due to the use of a static camera for the majority of the game. By using a static camera, the developers create another parallel to silent films; due to the infancy of the medium and technical limitations, films of that time shot footage from a static camera and simulated motion through editing. When the player records Winterbottom's actions, the game changes its aesthetics and sound design, mimicking the filming or projection of a 8mm or 16mm film; the entire screen flickers as film projectors do, film perforations appear on the sides of the screen, and the sound of film rushing through a camera or projector is played. David Stanton, the composer for *The Misadventures of P.B. Winterbottom*, composed music that was a brilliant combination of styles that includes silent film music, Danny Elfman's film scores, and rag-time piano⁴⁸. All of these features in addition to its absurdist premise create a playful yet dark tone akin to a mash-up of Charlie Chaplin's silent films and Tim Burton.

Context and Presentation

Despite the saying that one shouldn't judge a book by its cover, it is necessary to account for how a book's cover affects and informs a reader's interpretation and expectations. A book cover with a scantily clad adonis with a woman would read as "romance novel" to anyone who's spent time in a bookstore or library, so if the book turned out to be an introspective stream-of-consciousness autobiography, such a difference would throw off just about any reader. Traditional video game boxes and cases functionally act as the book cover for the game to be experienced within. Marketing departments carefully craft movie posters and video game boxes in order to ensure that audiences will be enticed by what they see, as well as to give a glimpse into the kind of experience the viewer or player will have, be it a game or movie. With downloadable games, what constitutes a "cover" becomes blurrier – a game's art style in the Xbox Live Marketplace has to sell the fiction of the game quickly and succinctly. As computers and consoles added network capabilities, downloadable demos have become ubiquitous, though they often prove to be a double-edged sword; strong demos are capable of capturing players' interests, and through positive word-of-mouth, are able to spread like wildfire, while weak demos can be commercial poison.

Everything that a player encounters before gameplay begins, such as title sequences, main menu art, background music, etc., while not technically gameplay, is vital in establishing the tone of the game as well as setting the player's initial expectations. By and large the vast majority of games have a plethora of this kind of rhetoric and presentation that inherently states, "This is a game." Through *Limbo*'s rejection of such presentation and features, it affords itself a more immersive ambiance. The player only encounters a single menu before beginning the game, and once the game has started, there is no use of any user interface, menus, or words, with exceptions being the main menu, the pause menu, and the use of the word "HOTEL", found roughly in the middle of the game that I will address later. This sparseness in the use of "game language," that most gamers are familiar with parallels much avant-garde art cinema in its rejection of creating immediately accessible and readable statements, forcing the viewer or player to draw his or her own conclusions as to what is being presented or argued. There are no tutorials that teach the player how to play the game either.

P.B. Winterbottom, on the other hand, is clearly presented as a game right from the outset. It utilizes all of the traditional markings and language of a game; it has various menus and UI features and breaks down the game into clearly marked worlds and levels that can be chosen, skipped and repeated. Once a player begins playing the game, tutorials teach the player the game's various gameplay mechanics. During gameplay, there are also very clear UI elements that give the player information

on how many clones he or she can make (which I'll explain more later). After completing a number of levels, different modes are unlocked that include time trials or puzzles in which the player must use as few clones as possible. All of these features and designs define and frame *The Misadventures of P.B. Winterbottom* squarely as a video game.

Narrative analysis

Many films made during German Expressionism were silent films, utilizing intertitles that either presented dialogue in written word or allowed a narrator to explain context or actions that were occurring. Neither *Limbo* nor *The Misadventures of P.B. Winterbottom* utilized voice-over narration, but *P.B. Winterbottom* actually utilized intertitles to frame the context of its story.

Before each level in *The Misadventures of P.B. Winterbottom*, a series of intertitles is used to provide exposition and to put each of the levels that the player plays in context. The intertitles function almost as a children's book, as they are told in rhyme and include illustrations. The basic narrative in *The Misadventures of P.B. Winterbottom* consists of P.B. Winterbottom, the anti-hero, on a quest for all the pies in Bakersburg. After a mystical pie lures him through a portal, he suddenly has the power to manipulate time and create clones of himself. With this basic premise, the story is fairly simple; each chapter places Winterbottom in a different predicament, and each of the levels within each chapter provide some ancillary details to the conflict for the chapter. In chapter 2, "The Ticking Tarts", the Bakersburg clock tower is broken, and as a result, the townspeople are somewhat absurdly and humorously unable to tell time. Here are some of the intertitles from chapter 2:

*In Worthishman's Tavern,
last call never came.
And the singing that followed
put bagpipes to shame.*

*The dogs of the town,
who were walked on the hour,
Held their bladders in check
with enormous will power.*

While few of these intertitles really drive the narrative forward, they provide detail to the world while maintaining a humorous yet dark tone. The first chapter functions mostly as exposition, introducing the player to P.B. Winterbottom, while also being the gameplay tutorial. In the third chapter, “Dangerously Delicious”, a fire is ripping through Bakersburg and in Winterbottom’s quest for more pies, he manages to save the townspeople and put out the fire. Chapter four has Winterbottom running around in the sewers and underground areas of Bakersburg; this time, Bakersburg has run out of water. By the chapter five, the final chapter, Winterbottom begins to wear down the mystical pie, and the setting reveals that the Bakersburg in which Winterbottom has been running around is theater set. Throughout the course of this chapter, the mystical pie argues that by forcing Winterbottom to travel backwards in time, the pie was helping him to undo all of the damage he had done to Bakersburg. In one of the intertitles, Winterbottom is given pause and considers that perhaps he could lead a life of doing good, but he quickly returns to his one goal and concludes that he will continue to pursue pie. In the last level, Winterbottom finally succeeds in reaching the mystical pie and defeating it.

The narrative in *The Misadventures of P.B. Winterbottom* provides a simple framing for the puzzles, but it isn’t very strong on its own; Winterbottom doesn’t really evolve or learn anything as a character and no real resolution is provided regarding the fate of Bakersburg. The intertitles, however, go a long way in establishing the game’s playful and mischievous tone.

PlayDead Studios, the developers of *Limbo*, have refrained from giving any sort of official reading of the story outside of the simple tagline that was provided in marketing materials, “Unsure of his sister’s fate, a boy enters the unknown.” The narrative is then to be gleaned solely through the actions and events that occur in the game. The game begins with the boy waking up in the middle of the woods with forest creatures creating an eerie and disconcerting soundscape. From here, the boy then travels through various locales that begin very naturalistic and gradually become more and more technologically advanced. Almost immediately, the boy comes across a simple boat, suggesting that, at the very least, there is the existence of man, though it’s unclear how technologically sophisticated they may be. The next sign of technology in this mostly naturalistic world are animal traps that snap shut upon impact. After traversing a number of obstacles, the first living creature that the boy encounters is a monstrosity large spider, almost 5 times as tall as the boy. Utilizing the animal trap to pin and cripple the spiders’ legs, the boy then proceeds to the next area where the environment makes a striking change.

In this area, the scenery shifts from a wooded area to a forest with many of its tree chopped down. The next major creature that the boy encounters at first glance is the same monstrous spider from earlier, but is in fact a mechanized and man-made spider construct. As the boy continues, there are various tree houses and

suspended villages shown in the background until the boy finally encounters other human beings. When the boy first encounters them, the human beings run away. Their use of spears suggests that they might be a somewhat primitive civilization. The boy encounters various bodies impaled on spikes and hanging from trees, which suggests a savage situation reminiscent of *Lord of the Flies*. The next sign of technology is when the other human beings roll a burning wheel down a hill at the boy. Shortly thereafter, the boy reaches an area that is evocative of the industrial revolution; in a mine-like area, there are carts, rotating gears in the background, and various levers, pulleys, and other mechanical systems. The game then segues into the next section that is somewhat similar to a factory from the same era. Levers and pulleys are used to trigger platforms and hydraulic power pipes to lift water levels, but unlike the previous section that still had a naturalistic base terrain like grass, dirt, and rock, this section has solid ground that is clearly man-made.

After this factory-like section, the game's one and only in-game text is shown, in the form of a neon sign that says "HOTEL". The technological significance of the neon sign indicates that the game has shifted to an area in which electricity is now able to be harnessed by humans and widely used such as in light bulbs and signage. From here, the game proceeds to further technologically advanced areas – factories that feature gears, saws, light fixtures, and other such features. From here, the game starts to introduce game mechanics such as magnetism, flipping gravity, rotating gravity. These technological advances push towards present day and suggest a possible future where people will be able to manipulate gravity itself. The final scene in the game involves the boy flying from the technological world through a glass wall back into nature. Here he finds his sister kneeling in the grass, though it's not clear whether she's picking flowers or digging with her hands. Once the girl realizes that the boy is near, she sits up straight in a jolt, there is a pause of about a second, and the game ends.

Through the gradual progression and change in the environment and introduction of various technological advances, *Limbo* is largely an environmental allegory, with the boy representing the human civilization's time on Earth so far. In the boy's pursuit to continue forward, technology advances along with him, first simple tools and shelter, leading to more advances such as electricity and factories. Throughout the entire game, the world is almost always presented in a haze – the haze at the beginning of the game appears to be fog, but it turns into smoke when the boy encounters the primitive tribe. Once the boy reaches the industrial revolution areas in the game, the haze is most likely steam, and by the end of the game, the haze represents the pollution that has been inflicted upon the earth. The large spider that the boy encounters early in the game is overcome through the use of technological advancements, and shortly thereafter, the boy encounters the mechanized spider, representing humans emulating the awe and power of nature that they've observed. The word "HOTEL", the only text in the game that isn't a part of a menu, indicates

the temporary nature by which humans are inhabiting this planet. Humans are only temporary residents of this planet, especially if we continue to develop technological advancements at the detriment of the environment. One critical area has the player pushing a loose gear into a mechanism which then causes the entire world to rotate around the player. By literally pushing a gear into place for the sake of advancement, both in gameplay as well as symbolically, the world is quite literally turned over upon itself, showing that human progress is changing the world. Throughout the game, there are various locations where a slug or worm of some sort drops from above and lands on the boy's head, preventing the player from controlling the direction in which the boy will move. The boy is forced to proceed in one direction until he runs into light, which then turns him around and faces the other direction. Additionally, the only way to get rid of this brain worm is for a bird to eat it, perhaps showing that often humans have to rely on nature in order to solve their problems. Thinking about *Limbo*'s name, there are a number of definitions that one can look to – the theological definition states that *Limbo* is the outer border of Hell⁴⁹, ostensibly where people go after they have died, but haven't been sent to Hell. In following the environmental allegory, the name *Limbo* refers to the current state of humankind in relation to nature; humans are on the brink of entering Hell by harming the environment, and through the act of developing new technologies and destroying nature, humans are actively creating their own Hell. Ultimately, the narrative in *Limbo* is rife for interpretation due to its ambiguity, with its developers laying out clues in every design decision, asset, and, sound effect.

Gameplay analysis

In assessing *Limbo*'s gameplay, what is immediately evident is how unforgiving and difficult it is; as soon as the player learns how to move and to jump, he or she encounters a steep hillside that kills the boy if the player jumps or goes too far beyond the ledge. Shortly thereafter the player must jump over a pit of spikes, and so on. The game's difficulty harks back to older platformers such as *Prince of Persia* or *Another World*, where they taught the player through failure, and the slightest missteps result in death. *Limbo*, as with the rest of its features, doesn't utilize any sort of player-identifiable checkpoint system – the player must simply continue to proceed as far as they can to the best of their ability without knowing if halfway through a particularly treacherous level whether he or she will respawn all the way at the beginning of an obstacle.

The obstacles and puzzles that the player encounters throughout the course of the game vary in style and execution. The majority of the obstacles in the beginning of the game are somewhat simplistic in that they primarily require approaching a situation, realizing that some object kills you, and then avoiding that object after you

respawn. Some of these obstacles are easier to avoid than others, but by and large the majority of these obstacles are learned simply through trial-and-error. When the player first encounters the large spider, they must approach the spider until it stabs down into the ground with one of its legs causing an animal trap to fall out of a tree. The player must then push the animal trap to a similar location underneath the spider in order to trap its leg when it stabs down. After the player has done this two times though, the third time the spider behaves differently and stabs outwardly at the player instead of into the ground. While a particularly skilled player might notice the very subtle difference in behavior before the spider stabs at the boy this third time, it's more likely that the player would die and have to start the entire encounter from the beginning. Roughly one-third through the game, the game shifts from its learn-by-failure obstacles to more puzzle-driven platforming. While the outcome for failing to solve some of the puzzles still results in death, these puzzles require a more thoughtful approach compared to the obstacles from the beginning of the game. As an example, one puzzle has a pulley that, when the boy jumps onto a free-hanging rope on one side, lifts up a large barrier. Below the rope is an opening, though there are grinding gears that would kill the boy if the player jumps directly down. The player must pull the rope down as much as he or she can, jump off the rope and down a platform to get underneath the opening with the grinding gears and grab hold of the rope before the rope retracts above. Once the player does this, he or she can then swing to the next rope that's attached to a pulley in order to lift a barrier next to the first barrier. Once both barriers have been lifted enough such that the boy can fit, the player must jump off of the rope and run underneath the barriers. Though this is just one example of the puzzles (and a textual description doesn't really do the puzzle justice), all of the other puzzles in the game slowly ramp up in complexity and are all elegantly designed.

While *Limbo* is superbly made in its narrative, aesthetic, and game design, it doesn't combine these elements very well and is ultimately less than the sum of its parts. It has lofty goals with regards to its narrative, but *Limbo* lacks cohesion in tying the puzzle-platformer gameplay with the narrative that it presents. The actions of solving these various puzzles and overcoming these obstacles never really makes sense in the context of the narrative. One of the more frequent criticisms levied against *Limbo* is that it doesn't even appear to have a story. Greg Kasavin argues, "You become completely immersed in it due to the flawlessly executed art style, audio ambiance, and physics simulation, all delivered without interruption. At the same time, little story vignettes imply a greater meaning to the events that take place, a meaning you continue to search for until the game is over. [...] It ends up going who-knows-where. The theme of the game gives it an "out" from a narrative perspective, in that a game about the place between life and death doesn't need to make sense (and probably shouldn't), and it doesn't need to provide clear answers (and probably shouldn't). Even still, *Limbo's* narrative felt incomplete to me in a way that wasn't entirely satisfying. [...] I realized that what was pushing me forward was

my search for continuity.”⁵⁰ While I contend that there is a narrative, his assessment of the game is actually quite similar to my initial response, in that after the first playthrough, *Limbo* seems to simply be a sequence of puzzles in a set of incredibly immersive and stylistic environments, but nothing more. Kasavin later suggests that this lack of continuity in narrative is due to there being no good way to create continuity with the puzzles that the design team chose to include in the game. And while he argues that because the puzzles don’t have continuity, the game and its narrative have no continuity, I would rather present the scenario whereby the puzzles and the narrative both have continuity – it just so happens that they don’t share the same path. The puzzles stand alone in isolation from the rest of the game, resulting in a discordant play experience resulting from its ludonarrative dissonance.

Compared to the puzzles in *Limbo*, the puzzles in *The Misadventures of P.B. Winterbottom* are quite different, though they are just as carefully and elegantly designed. As an example in level 2-5, the player has made two clones, one on each of two see-saw platforms. In order to collect the pies, the player must jump onto the mechanized platform, which then starts a timer of a few seconds. In that time, Winterbottom and his clones must collect all of the pies on the screen – otherwise, the timer will reset and the player will need to jump on the mechanized platform again. In this particular level, the player must jump onto the mechanized platform and run onto the left-hand side of the see-saw. The clone on the lower level has been recorded to jump down on the right-hand side of the see-saw, sending the original Winterbottom up to the second see-saw. The clone on the lower level then runs to the right to collect the other two pies on that level. Once the original Winterbottom is sent to see-saw above, he lands sending the second clone to the pie above, and when the second clone lands, he sends the original Winterbottom upwards to collect the last pie.

As with *Limbo*, this puzzle is simply one example of the 50+ levels in the game. Once the tutorial is completed, the player then proceeds from one chapter to the next. Each chapter has variations on the mechanic – in chapter 3, “Dangerously Delicious!” only Winterbottom’s clones are able to collect the pies. In chapter 4, “Spelunking for Sweets”, the core mechanic changes again. Instead of holding down a button to record Winterbottom’s actions, the player must initiate a recording from a set location. The player has a limited amount of time in which to make the recording, and the clones are only able to manipulate other objects if the player is currently in the recording mode. Chapter 5’s mechanic requires Winterbottom or a clone to be in a spotlight in order to acquire pies. There is a set starting point for the spotlight, which is usually triggered by a switch. The player then has a limited amount of time to get Winterbottom from the spotlight to the pie. Winterbottom and his clones can also pass the spotlight from one to another and vice versa, allowing them to reach more areas. The penultimate and final levels in the Chapter 5 introduce new mechanics whereby the clones begin to have minds of their own

and follow the original Winterbottom wherever he goes. The developers have made all of the levels varied in their execution, preventing the puzzles from getting too repetitious.

Contrasted with *Limbo*, *The Misadventures of P.B. Winterbottom*, features very direct tutorials at the start of the game, and the first two or three levels of each chapter are designed to be exceptionally easy in order to teach the game mechanics that will be utilized in the rest of the levels of that chapter. Through the course of each chapter, the puzzles become more and more difficult, creating a solid interest curve that gradually ramps in difficulty as the player's skill level increases. There are a few puzzles that push on the boundaries of being overly difficult, breaking the flow of gameplay, and, at the very least, frustrating me to the point of having to walk away from the game for some time before returning and attempting to proceed. That said, by and large, the puzzles are all very well crafted, and by introducing new gameplay mechanics not simply every chapter, but every few levels, the developers keep the player on his or her toes, without letting the core mechanic get too stale. Unlike *Limbo's* intentionally vague narrative, *The Misadventures of P.B. Winterbottom's* narrative is humorous and playful, but also direct and easy to follow. By keeping the narrative simple, the intertitles provide stylistic support in establishing the tone of the game and its characters, which keeps the puzzles as the primary focus, as well as avoiding the pitfalls that *Limbo* suffered of a conflicting story and gameplay.

Comparative analysis

In analyzing and critiquing both of these games, how the player approaches and experiences these games is important to understanding their effectiveness. Barthes wrote in "the Death of the Author" that it is both difficult as well as, perhaps, unimportant to attempt to read into what the author's intent was with a piece of art. While this is largely true, what is presented in the work reflects the decisions that the author made, and by analyzing these decisions of what is and is not presented in the work, the author informs and directs how the player or reader experiences the work. In much the same way that many independent and art films change or play with what it means to be a film by attempting to change the standard narrative structure of a film, *Limbo* presents itself immediately in such a way as to suggest to the player that he or she is about to experience an avant-garde and "important" piece of art. *The Misadventures of P.B. Winterbottom*, on the other hand, follows many traditional game constructions by using menus, textual transitions and explication, UIs, and other standard video game conventions. By doing so, while this isn't to say that *The Misadventures of P.B. Winterbottom* presents itself as "just a game," it does actively set the expectation of the type of gameplay experience that the player

is going to have. By not presenting itself as a narrative-driven game, the focus remains squarely on the puzzles, with the art style, music, and sound design all in service of the puzzle design.

Limbo, through its sparseness in explication, has a conflicting duality between its gameplay and its style and presentation. While having a character that constantly dies and respawns could be linked to the notion of *Limbo*, where a person is stuck in an area between Heaven and Hell, the constant death and respawning of the character is such a standard “game” construction that it doesn’t fit with the narrative. Additionally, the underlying story is at odds with the gameplay constructions. While *Limbo* has lofty and admirable goals and aspirations in its attempts to push the medium, it falls short of the mark due to this lack of cohesion in gameplay and narrative. *The Misadventures of P.B. Winterbottom*, on the other hand, by focusing on gameplay first and using intertitles for narrative and stylistic support, ultimately succeeds in creating a more satisfying and enjoyable play experience.

“

*Okay, fair enough, but
still the game is about
something.*

”

HEATHER CHAPLIN

THE PATH

The hairs on my arms are standing up. I'm nauseous in my belly and full of contradictory emotions in my chest. I feel sad, afraid, and wistful all at once. (Did I mention afraid?)

I'm playing *The Path*, from Belgian independent studio Tale of Tales, and I don't think I've ever felt so scared and upset while playing a videogame in my life. In fact, I know I haven't. I would describe the feeling as horrible - except it's only horrible in the way that watching *The Shining* is horrible. It's horrible because it lays open the ugly, dangerous, sorrowful side of life, which is to say it's not really horrible at all, just incredibly scary.

How to begin? Jesus. *The Path* opens in a room of five girls ranging from quite young to nearly grown up. It's a retelling of the Red Riding Hood fairy tale, and each girl - dressed in red and black - must try and make her way to grandmother's house. "Stay on the Path!" the game warns as you start out with each new girl, but of course the whole point is not to stay on the path, but rather to wander through the forest that surrounds you on either side. You run into rusty playgrounds, old graveyards, creepy campsites, and a wisp of girl in a white slip who sometimes runs past you and sometimes stops to hold your hand, play patty cake, or even hug you. In fact, if you do stay on the path and make your way to grandma's without encountering that infamous wolf of the fairy tale, you "Fail" that round automatically. The obvious point here is, of course, the impish game design tactic of wanting your players to break the rules. But even more interesting is what this design tactic wants to tell us about life. The game is all about the necessity of facing what's hard - even ugly and brutal - in order to "Succeed."

"Sometimes you have to go through something very cruel to get somewhere very beautiful," said Michael Samyn, who co-designed the game with his work and life partner, Auriea Harvey.

Harvey and Samyn both were trained as fine artists and graphic designers before becoming videogame designers in the early 2000s. They were part of a mid-1990s Internet-based scene, wherein creating virtual worlds and playing in flash and designing interactive experiences was the cutting edge of the art world. Both Harvey and Samyn remember discovering videogames in 2001. "My god, what could be done with this!" Samyn recalls thinking.

The Path is hardly a videogame at all. It's more like some kind of futuristic adult toy. It's an environment wherein you wander, (full of plants whose blooms are actually replications of medieval ornaments,) picking things up if you choose, or simply wandering until you stumble upon something. For many gamers - judging from the games blogosphere and people I spoke with - this was incredibly annoying. I found it relaxing and pleasurable. My problem with a lot of videogames is I get stressed thinking about what I'm supposed to be doing and wondering if I'll be able to. When there's a clock ticking, forget about it - it's like my brain freezes. I get so overwhelmed with the pressure I can't enjoy the experience. But *The Path* allowed me to be fully immersed in a beautifully realized game world without worrying whether I was doing everything right let alone fast enough.

And it's hardly like nothing happens. In my first run through the forest, I climbed into a little boat I found on the edge of a lake - I think I was fleeing gasping sounds that seemed to echo through the forest, eerily indistinguishable between a gasp of pleasure and a gasp of pain. I hopped into the boat and next thing I knew the "the wolf" was upon me - the wolf is not always in the shape of a wolf - and there my young girl self was, whirled into the air in a burst of circulating white light. It seemed both annihilating and blissful at the same time. And then the screen went blank, opening again on my young girl self crumpled in a heap, in the rain, at the foot of grandma's house.

The next character I choose was the youngest girl, actually dressed in a red, hooded coat, with a cute, little-girl walk. And this is when I realized just how immersed in the game I was. I didn't want to take her into the forest. I knew I had to in order to experience the game, but down in some deep part of myself I felt I was betraying her by taking her off the well-lit path. "Don't do it, don't do," I whispered to myself, even as I did it. She entered a grove where she could pick flowers, and, with each flower picked, a white, mask-like face appeared on the screen. I'm not sure how to describe just how scary that was, but that's when the hair on my arms started standing up. And for the rest of the game, I couldn't bring myself to go back to that part.

We ran into the little girl in white and walked together hand in hand for a while. I didn't want to part with the girl in white. I felt the urge to protect her, and also that somehow her presence protected my little-girl avatar. I felt she represented all that could go wrong in the forest - all that inevitably goes wrong in life - and the courage it takes to survive and grow despite even the bitterest experiences. She seemed endlessly old and yet totally vulnerable at the same time. I let the two girls play for a while, hug each other. Then I took my girl back to the path, and just kind of hung out there for a while. I know I said this before, but I have to say it again. I did not want to go back into the woods. The sense of wanting to protect my girl was that strong. And I was scared - really scared, watching *The Shining* scared. When I did take her

back in, I found myself pleading for her - to whom, I don't know - under my breath. We came upon an old graveyard, and my heart literally jumped a beat when I saw the wolf, up on his hind legs, creeping around the edge of the screen. Up to the graveyard I marched my little girl, and then it was a montage of fangs and moans and bristly hair, and then images of my girl riding him, roughly, round and round the cemetery. Again, all faded to black. Again, my girl was dropped, in a crumbled, broken heap at the foot of her grandmother's door.

And so it goes. The next girl, a bit older, sits next to a young man on a bench next to a playground in the forest, he looks at her - and she looks so tiny in her slim girlhood next to his muscled manhood that my heart breaks with the yearning to save her - and all turns to black before her twisted body is found at grandma's.

After that, I brought out the oldest of the young women, and said, 'fuck that' and marched her straight up the path to grandma's house, walked right into the door, found grandma in bed with a funny look in her eye and "Failed" the round. Fine with me, I thought. At least I saved her.

The last girl I played was in some ways the most difficult. She's a teenager who walks lasciviously, swishing her hips from side to side, arching her back and batting her eyelashes. I let her play by the side of the path with the little girl in white for a long, long time. It was as if I knew I had to take her into the forest to meet the wolf, to facilitate some process that, inevitably, had to be, yet I kept thinking, 'a little longer, a little longer.' Maybe I'd just been playing too long at that point, but I swear that when it was time to go into the forest, my girl knew just what she was doing. This time she (I?) was looking for the wolf - not dawdling about gazing at foliage or collecting flowers, not hiding from him, but flat-out hunting him down. This girl wanted her fate as much as she feared it. When I came into a campsite with bloody Xs on the trees, a cooler of beer and a man with an ax chopping away at the surrounding trees, I knew we'd found him. Might as well let her sit down on top of that cooler and wait for him to come.

I asked Samyn and Harvey what *The Path* was about. They laughed and asked what it was about for *me*. "Confronting your own interpretation of things is what's frightening," Samyn said.

Okay, fair enough, but still the game *is* about something. Samyn spoke of the traditional coming-of-age stories for girls that always come with a warning implied - usually against men. He said they wanted to turn that on its head a bit. Maybe the wolf isn't really so evil. Maybe Little Red Riding Hood isn't so innocent.

"There's this tension between is this girl walking into a trap or is she actively seeking this experience no matter what the cost is," Samyn said. "If *The Path* is about anything, it's about the fact that things are not as clear as we might wish."

When he said this, I thought of the scene where the little girl is pulled up in a swirl of white light – both ecstatic and obliterating. I thought of the teenage girl, swinging her hips at the wolf. No, things aren't cut and dry in *The Path*.

But OK, Samyn and Harvey say the game is about my own reactions. So I'll say this: for me, *The Path* is about what a remarkably fine line it is that separates childhood from adulthood, innocence from cynicism, and how utterly not black or white most things in life are. It's about the fact that, as much as we might like to believe otherwise, sometimes the places that should be the safest – childhood, grandma's house - are actually the most dangerous; that sex can be both brutal and transendent; that females, at all stages of their girlhood, are vulnerable in a very particular way; and that there's a certain inevitability to that vulnerability - no one gets through life without growing up. And sometimes growing up can be an experience that leaves you crumpled and nearly broken on the ground.

But maybe that's just me. You'd better play it yourself to see for sure.

“

*I'm beginning to realize
I have only the foggiest
notion of where I am.*

”

GREG TREFRY

LA NOCHE DE LOS MUERTOS

Lost

My feet pound the street in time with my racing heart. I reach the end of the bridge and bolt left down the street running parallel to the river. My lungs burn from the dash. I'm not sure I can keep going. I sprint out of the glow of the streetlight and behind a shed in planted in the center of a small parking lot. I glance back over my shoulder to see if anyone's following me. No one is.

Instead of black-hooded ghouls I see a couple strolling along by the water in the cool September night-air. Instead of my teammates I see a group of Friday night revelers staggering down the street towards a small pub. I'm surrounded by people, but I'm alone. Not one of these people seems to realize the city, their city, is infested with hooded skeletons lurking around corners and behind dumpsters just waiting to pounce and grab me, to rob me of my cherished mask and armband

But I can't tell them this. The ghouls aren't chasing them. They aren't marked like I am. It's not *La Noche de los Muertos* for them. Only I know all of this—well, me and two hundred other players swarming across the city toward some unknown destination. This is not ordinary night; it's the night of the dead.

I'm alone; alone on the streets of Bristol. I only just landed in the country 10 hours ago. I'm beginning to realize I have only the foggiest notion of where I am. I dig into my back pocket and pull out paper damp from sweat. I finger the limp pages loosely and twist to try and get a bit of that streetlight's yellow glow to illuminate the map printed on the front. A river splits the map. What luck, a river runs past me on my right. I take this as a good sign. I decide I'll follow the river and cross back over at the next bridge where I hope I'll be safe from the skeletons lurking on the other side of this bridge.

I lope off down the street following the river for several blocks until I come to a wooden bridge. I've never been to Bristol before and I'm struck by its blend of industrial, modern and ancient architecture. I sprint across a wooden bridge figuring if I were a skeleton charged with chasing down humans I'd guard every bridge. What better place to trap and cut off a player. But no skeletons leap out. I'm met only by the startled faces of a couple on a late night run for groceries. Maybe it's the running or maybe it's the Mardi gras mask I'm wearing. I find myself on a large island with two choices: a dark alley or a dark curving road. Neither seems particularly attractive. I pull out that sweat soaked map again. Ugh. Why did I wear jeans to play a game that demanded so much running? I look around for a street sign I can use to pinpoint myself. Nothing. I glance back over the bridge. I'm still nervous I'm being followed. I need to find another street name, a bigger street that might appear on this damned tiny map.

I find a street sign but no correlation on my map. That's when the panic starts to creep through me. This miniscule game map is the only guide I have to Bristol. It's 10 PM; most of the places I could buy a map are closed. If only this were *Half-Life* or some other video game on rails. A few seconds of fumbling down that alley and I would find it cut off by chain link fence; I would know that I'm supposed to follow the curving road. But peering down the alley I'm pretty sure it goes somewhere—probably no where I want to go, but it does seem to stretch on. Even an open world game like *Grand Theft Auto* makes it pretty obvious when you've reached the end of the content, if not the technical end of the world. The flood of details slows to a trickle. Not here. Man, the Bristol city planners suck at level design.

Then another thought occurs to me. I have no idea where I'm supposed to be staying tonight. A friend of a friend has graciously offered to put me up for the night. But I met him only briefly before all the running and chasing. We're supposed to re-connect at the finish line. And I have no idea where that is—no one does. Only the game designers possess that crucial bit of information. The rest of us have to earn it by completing the game. I check my iPhone which hasn't had been charged in more than 24 hours. Muerto. Of course. And that's when it hits me: I'm really, truly and utterly lost right now. I've no place to sleep. This alley? I don't even know where I am in Bristol. And it's awesome and terrifying at the same time. I feel the artificial terror of the game mixing with a real sense of danger. It's an unusual cocktail of feelings to find stirred into a game, the different flavors intermixing and strengthening one another.

Pause. Restart.

But maybe I should back up a bit, because unless you were there that Friday night in 2009 on the 11th of September in Bristol you probably have only the foggiest notion of what I'm talking about. And your having been there seems relatively

unlikely. Because as monumental as the game looms in my memory, only a couple of hundred people ever got to play. But boy do I wish you were there, because the game was an experience, a co-mingling of rules and time and location that make the experience feel unique and beautiful.

So let me go back to where it all started. Two hours before my panicked realization at the fact that I was totally lost, without an instruction manual and faced with the ever-increasing likelihood that I would be sleeping in the bushes, I was standing in the courtyard between two silent office buildings in a long snaking line of eager players.

I had come to Bristol, England for igfest, an annual festival of real-world games. The festival is spearheaded by SlingShot and Simon Johnson. Each year the festival features dozens of new and unusual games at different locations throughout Bristol. These games could be called new street games—they use the streets as the playing field, often transforming elements of the city into game pieces. The 2009 line-up featured a diverse set of games. There were location specific games like *Snakes & Blaggers*, a chutes & ladders like game that took over a six-story car park. *Circle Rules Football*, a sport featuring a gigantic yoga ball and a single goal offered the athletically inclined a strange cross between soccer and basketball. While some games involved a new fangled piece of technology like GPS-enabled smartphones, most were constructed of simpler stuff—rules, players, wristbands, chalk and occasionally a healthy slathering of face-paint.

The several hundred players now gathered to play *La Noche de Los Muertos* had each been given instructions to meet at a secret location—this dimly lit courtyard—at 7:30 PM. Upon signing into the game we were each given a Mardi gras style paper mask, an armband and a single sheet with a map and some simple rules. We formed into teams of five or six and waited in eager anticipation for some explanation about what the hell we had just agreed to. Having just arrived in town, I chatted with my teammates, only one of whom I had ever met before. Simon Evans, my one contact in the group, and his wife introduced me to our fourth teammate, Nina. Nina was a theater director down from London for the festival. Another young woman none of us had ever met rounded out the group. We all chatted, eagerly introducing ourselves and wondering aloud what was in store.



Photo by Andy Molyneux. Used with Permission.

Then the courtyard buzzed to life as twanging guitars echoed off the concrete walls and an undead mariachi band sauntered in serenading the assembled players. Then Simon Johnson, one of the designers and organizers of the game demanded our attention. Through a crackling megaphone he explained each team's mission: we must visit a series of checkpoints, collecting a trinket at each one en route to a final destination that will only be disclosed at the 6th and final checkpoint. Along the way we must avoid being caught by any of the undead zombies lurking the streets waiting to prey upon us. While playing we must wear our mask and armband at all times. Should a team member be caught, he or she must remove their mask. They are out of the game. The first team to reach the end wins. To win, at least one player from your team must make it to the end without being caught. We must do all of our travelling on foot. And that is basically it—that was the core of what we needed to know to play.

Get to the checkpoints, don't get tagged. Simple enough.

And with that the organizers began to send us off in waves. The first teams were released, with others following closely on their heels out into the darkening streets of Bristol.

My team dashed across a footbridge leading out of the courtyard and down a winding set of stairs, where we have our first encounter with what lays in store for us. On this lonesome footbridge had been erected a sprawling memorial of flowers and votive candles, littered with trinkets. A lone figure dressed in black with face hooded from view stood watch over the otherworldly scene. Catching site of the figure my heart leapt and my teammates and I stumbled over one another as we instinctively recoiled. The figure motioned to the trinkets and we realized this is was our purpose; we needed to grab one. Timidly collecting our first small trophy we spun on our heels and headed for a different set of stairs, bounding down them two at a time.

On the right we heard screams and saw another team being chased by figures in black. My heart leapt into my throat and we sprinted in the opposite direction down the streets of Bristol. A rush of fear mingled with hope. We were getting away. Those poor suckers were barely out of the gate and already running for their lives.



Photo by Andy Molyneux. Used with Permission.

From folk games to designed games

From a game design standpoint *La Noche* offers few innovations. On the surface it's a pretty straight-ahead chase and race game. You are given a set of spots to reach. Along the way you encounter some non-player characters who leap out, scare the bejeezus out of you and give chase. Your ultimate goal is survival and speed. There's no great need for strategy, just some clever navigating and fast feet. In fact the game is very much inspired by folk games like zombie tag. What made *La Noche* great was not innovative game design, but professional execution, inspired location selection and wonderful moments of small theater. This allowed the game to naturally mix with the texture of Bristol to produce a singular experience for the player.

Zombie tag revolves around the idea of an ever-growing hoard. In its most simple form the game plays like this: There are twenty players; one person is a zombie; when the zombie tags another player, the tagged player also becomes a zombie. With each new person tagged, the hoard of chasers grows. So slowly the game shifts from one player chasing 19 to 19 players chasing one. This gives the game a naturally escalating tension and arc straight out of a horror film. As the number of chasers swells, the game grows increasingly terrifying for the surviving players. This simple version of zombie tag can be played on a big open field with the grounds of the game delimited for players.

So where does this mechanic come into play in *La Noche*. Well it doesn't exactly. Johnson and the other designers, Clare Reddington and Hazel Grian based *La Noche* on a similar game called *Journey to the End of the Night* originally created by a group called SF Zero from San Francisco. That game used the mechanics of zombie tag described above and stretched them over an entire city. 200 players start off racing across the city chased by a handful of NPC zombies. As players are tagged they join the ranks of zombies. So by the end of the game, assuming you've survived that long you have whole mobs of players after you. *Journey* also uses checkpoints as a way to structure the game and give it a shape. By requiring players to pass through certain checkpoints, the game pushes players into moments of danger and interaction. In the big spaces between checkpoints you can assume you are relatively safe. It's as you draw close to a checkpoint that you must raise your guard, because that's most likely where the zombies itching to tag you lurk.

The design team of *La Noche* had run a game of *Journey to the End of the Night* in 2008 and found it both thrilling for players and also kind of broken. In play they realized that balancing for the zombie conversion mechanic is extremely difficult to manage. The number of zombies tends to escalate very rapidly, quickly making the game nigh impossible for the remaining runners. This ground the game to a halt after a few checkpoints.

To prevent this, the *La Noche* team jettisoned the zombie conversion mechanic, relying instead on a set number of non-player characters to act as the chasers. This gave the team more control over the pace of the game. The designers could pick where they wanted to station chasers to help craft the thrills of the chase. They could strategize and pick bridges and key corners near the checkpoints to guard. But this control came at a price. The number of non-player chasers the designers could recruit limited the game. In practice what this meant was the early stages of the game felt densely packed and suffused with danger. Chasers seemed to lurk around every corner you wanted to turn. The designers quite brilliantly anticipated the most desirable paths to the first several checkpoints and littered them with danger. But as the game stretched out over space and time, it began to seem as if the designers had spent all of their NPCs and they weren't able to adequately guard all of the game terrain. In reality they would have needed an army of NPCs to adequately cover the entire area. As the game stretched over more and more space, the number of paths players could take naturally increased. And the mass of players spread out making it harder to stand guard and startle large groups. Despite the checkpoints, it became impossible to guard all potential entrances.

In spite of this gradual thinning of danger, the game remained compelling. The designers had two key elements on their side; player psychology and the ability to tweak that psychology with the right bit of theater.

Out of the brambles and into the crypt

As the screams from our fellow players fade into the distance and we put a few blocks between them and us we slow to a walk and catch our breath. We secured our first token and survived our first encounter with the cloaked seekers. I am already growing a bit lost. I usually have an excellent sense of direction, but I am fast finding myself turned around. The combination of trying to learn a new city while being chased by hooded figures is not doing my internal compass any favors. We pull out the game map and Simon, thankfully more familiar with Bristol than I, suggests a path towards our next checkpoint, a place called Castle Park. He believes if we circle around and enter the park from the back we can avoid the more obvious entrances where chasers will inevitably lurk.

We all give winded nods of ascent and start out again at a trot. All goes according to plan until we get within sight of the park. We carelessly round the corner and standing there in the middle of the street is a figure hooded in black. For an instant we all freeze and then a scream of "Run!" frees us from our paralysis and all five of us take off down the street in a full terrified sprint. As I'm running a thought occurs to me: Get out in front of that short girl, they'll surely catch her before me and my long legs. Our team had begun to form some camaraderie after our small victories

and clever plotting, but in that moment, I think anyone of us would have gladly watched a teammate get caught rather than feel the gloved hand of this hooded chaser wrap around their arm. I don't look back till I round the next corner. Not very gentlemanly, but it's not like I had a secret weapon to ward off zombies.

Fortunately, another team had cropped up at the same time as us and the chaser bolted after them. Our team all arrives intact around the corner and dashes to hide behind the concrete base of an office building. Glancing back we see an empty street. Coast clear.

As I pant and catch my breath, I think about my reaction and my unwillingness to sacrifice myself for a teammate. I ask myself, what should I have done? Some part of me thinks the noble act would have been to try and save my teammates. But what could I have done other than run? The game threw us into a situation of recognizable danger (well, recognizable from movies and games that is): You are being chased by a monster and your team is in jeopardy. My mind instantly goes to *Left 4 Dead* and it's exhortation to stick together. I think of how many times Louis has freed me from a Smoker or some such ghoul. Thank you AI-controlled teammate, you are far nobler than I. What value does sticking together have here? We can't fight back. All we can do is flee. Is a big group even optimal? Wouldn't our team's chances be better if we were running solo, making us harder to spot and catch as a group? One of us would surely get through, right? But being on your own doesn't seem like a good idea either. On your own you don't have the safety of a slower person running next to you making a better target. And plus, it's all feeling a tad freaky and I have no f'ing idea where I am. While I realize our chances of beating all 200 other players to the finish line are slim, I do want to win. Preferably as a team, right? Righhht.

"Let's enter the park over there," Simon says, breaking me out of my reverie. He is pointing at a short wall behind which appears to be thick brush and forest. The ludicrousness of trying to claw our way through that bramble actually offers an enticing comfort. Surely no one is waiting in there to chase us. They'd have to be dumb or crazy to crawl through there. Which we figure makes it exactly the right choice. We trot over and hop the fence and plunge into woods. I am filled with the thrill of the taboo. I am a respectful law-abiding citizen, which means that I don't usually get to hop fences. And while this improvised entrance into the park hardly qualifies as seditious, it does feel vaguely rebellious. So much more so than knocking down an old lady in *Grand Theft Auto* where the only rules are game rules. Without informing the Bristol authorities, *La Noche* has empowered me. I'm just trying to survive. It imbues my out of the ordinary actions with a kind of legitimacy and lets me explore the city in new ways, like crawling through a thicket of bushes.

Halfway up the hill, as we struggle through up the thicket, someone asks Simon where exactly were supposed to be going in the park. To which he responds, "I'm not really sure." And suddenly the brilliance of this move seems questionable. We clear the top of a hill. Just a short way down in a small clearing sits stone building with torches blazing framing a door. And we know that's got to be it! We sprint down the hill in triumph and up to the entrance. Another team is leaving ("That's fine, we'll pass them on the next leg," I think). A guard in black, face painted white and black into the leering likeness of a skull ushers us into a glowing crypt where another ghoulish woman gives us our second trophy. We slowly back out of the tomb, simultaneously creeped out and excited. I'll return to this site the next day for another game and find it only half-resembles a tomb, but in the midst of the game I could swear I've stepped into the land of the dead. At this point I don't even quite realize how thoroughly the game has sunk its bony fingers into me.



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Personal experience versus the object

It is at this point in writing about *La Noche de los Muertos* that I begin to fear that I'm simply recounting stories about my personal experience of the game.

The game designer Nick Fortugno once told me his theory about why games and narratives make such strange and often mismatched bedfellows. Games are like dance. They are about the experience you have while playing. That experience can be powerful and even take on a sense of connection and narrative for the dancer. You experience it and build a narrative in your head out of all of your moves. But describing it often just comes across as a series of mundane choices. I tend to agree with him.

There's nothing more boring than hearing someone describe how they waited until the guard went back in the other room and then they switched to their big anti-gravity gun and then they jumped out and then they wasted all of the robots and it was freaking awesome! It ranks right up there with someone regaling you with hazy descriptions of their dreams. Both dreams and descriptions of your play make horrible, stumbling stories full of repetition and randomness. I love hearing about games, but I want to hear about mechanical choices the designers made to create a good game. Not the choices you made as a player to win the game.

At the same time I would contend that you can't fully understand the aesthetics of a game without considering the experience of playing it. Sometimes just talking about the mechanics of shooting zombies doesn't do justice to the experience of frantically trying to ward off an imposing horde battling at you from all sides.

Unlike a book where the text claims a natural position of primacy over your experience, games rely on the player to animate the game. So while a reader brings all sorts of personal biases to their reading, it doesn't really have much bearing on the state of the story. For one thing, books are largely standardized. We all get the same set of words when we pick up a book. Video games and board games generally offer similar objects, with some exceptions for the systems a video game might be played on, say a console versus a PC. These differences might seem trivial, but they can make the experience entirely different. We've probably all played a first-person shooter that was tuned more for one type of control than another. Perhaps it was tuned easier for a joystick, making play with a mouse and keyboard trivial. Or conversely the game required a level of precision hard to accomplish with dual joysticks.

Experiential differences like these become even more exacerbated in real-world games where the designers must contend with a greater set of factors they cannot control. Rain and shine can both ruin a game. An unexpected event like a passing

group of laughing school children can bring a wonderful light-hearted texture to your game. Or in the case of *La Noche*, you may have a bumbling American fresh to Bristol get utterly lost while playing, through no fault of the game designers, layering the game with complementing levels of fears about the game and the real-world. So in real-world games the experience comes to really dominate the aesthetics of the game.

For me *La Noche* drew much of its power from the tension between the game and the world. In the end, I struggle with how much I loved the game versus how much I loved my experience of playing it.

You don't know what you got till it's gone

We get separated sometime after the third checkpoint. At this point we're really cruising along. We had aced a musical challenge posed to us by the ghoul at the third checkpoint—a Simon-says like drumming challenge versus a tuxedoed figure with antenna sprouting from his bowler.

We have no doubt we'll make it to the end. Heck, we even talk about possibly winning. It sure seems like we're out ahead of the other teams. We get cocky. Up to this point we've assiduously avoided the direct obvious route. But now in our hubris we're making a beeline for checkpoint four. We haven't updated our meet-up points should we get separated.

And that's when it happens. We step out onto a main drag and there are two or three chasers waiting. No one even has to yell run this time. All five of us take off. But unlike last time when we serendipitously head the same direction, this time confusion reigns and the group splits in two, then splinters again.

Next thing I know I'm pounding my way across a bridge, veering off towards a small parking lot where I can hide and regain my bearings. As I'm running I have the feeling of our team splintering. I assume someone was caught and this time I'm actually saddened by the prospect of our team losing a member. At the same I assume I'll be able to meet up with the remains of my group at checkpoint four by skirting down this river and across the next bridge I see. It seems too dangerous to go back the way I came.

I hoof it downstream, cross the bridge and wind up in that dark alley trying in vain to match my map with my current location. And though I thrill at the prospect of being lost, I miss my team. I miss the camaraderie. A flight from the living dead necessitates teammates. *Left 4 Dead* was right, "Stick together." If not for strategic reasons, then for existential ones. We were just getting to know one another; we had so much potential.

I stand now on the fringes of the game, being pulled quickly out of it by the dawning realization that I am indeed truly lost in a city I don't know with a dead cellphone and no way of finding my way home. The designers of *La Noche* don't have the advantage of boundaries keeping their players in and pushing them towards the goal.

Boundaries provide the designers at Valve one of the best ways to shape and craft the experience of the player. The level designer crafting *Left 4 Dead* can disguise the shape of the world with a few well-placed open fields, switchbacks and blown out bridges. The player may not even realize how they are following a tightly prescribed path. The *La Noche* designers must contend with the fact that a player accidentally crosses the wrong bridge, wanders a bit off grid and suddenly their game has melted away into a typical Friday night. The further I wander from the game; the longer I go without sight of a ghoul; the more the game fades away and real-world anxieties take over.

I gather myself. I know I need to be west of wherever I am. I also realize I've probably missed the chance to catch my team at checkpoint four. I decide I will head west until I hit another river. That should indicate that I'm going the right way. A six-minute jog later and I'm crossing a bridge. Finally I find a street sign that matches the map. And like that I'm back in it. I think an approach along the north side of the river will lead me straight into chasers. So I cross another bridge and skirt along the southern side of a river until I catch the torches of checkpoint five blazing through the darkness.

The saving grace of pinch points

Just as in open world video games like *Far Cry 2*, pinch points save the day and give some form to what could otherwise become an amorphous mess. While the open-world nature of *La Noche* and well, the world, allowed me to go off and craft my own "fear of sleeping in the Bristol gutter" narrative the pinch points of the checkpoints brought me back into the narrative of the game.

They work structurally to allow the designers to craft moments of tension and conflict, stationing chasers around them. Equally importantly they offer the designers a place to focus the theater of the game. As with the votive candle memorial and crypt, each checkpoint allows the designers to design a scene that can compete with the real-world. Layering games on top of the everyday world puts the narrative of the game in conflict with the texture of the space. And unless you have a huge budget, the world's going to win out. That's why even on movie sets they're only filming small little views of the world. In a real-world game you can't control camera angles. It's even worse than *Half-Life* where the game allows the user to point the camera wherever they please. In that situation at least Valve knows all of the possible things the user might see and can craft ancillary visuals appropriately.



Photo by Andy Molyneux. Used with Permission.

It's more difficult to maintain the narrative of deadly zombies when you can turn around and there's a family carrying groceries walking bemusedly by. The pinch points combined with the darkness and torches allow the designers to focus attention and really decorate a location in a way that offsets and complements the real-world. By choosing excellent locations for the pinch points from a stone building in Castle Park to a quiet footbridge to an ancient and overgrown graveyard, the designers can occasionally reinforce the narrative and texture of their game.

More importantly, it gives me a place to meet up with my teammates.

Let's never lose each other again

I wait within the safety zone of checkpoint five for five minutes, 10 minutes, 15. I start to worry. Have I missed them? Are they just gone? Did they give up when we all separated? My spirits momentarily boosted by finding checkpoint five begin to sag. Other teams come running up, accomplish the blindfold challenge required to move on. I see our chances of winning begin to fade. I ask myself if I could preserve our chances at winning by just plunging ahead. But somehow it doesn't make sense to go on alone. I need my team.

And just when I'm ready to throw in the towel, up dash the Evanses, sprinting towards the bridge to reach the safe zone. We cheer for joy at the reunion. We're still missing Nina and that girl whose name we couldn't remember, but we at least have a quorum. We're a team again. Though I barely know these people, I'm relieved to the point of hugs to see them again. I'm reminded of the incredible ways that games forge social bonds. Especially when I consider that if we don't get to the end and I don't find my host, hopefully these nice people will let me crash on their couch.

We set off again. There's an obvious and straight path towards the final checkpoint, but we don't take it. We set off on a circuitous route to enter the park from the back again. The entire time we're jogging down abandoned streets looking over our shoulders and peering around corners. And even while I know in the logical part of my brain there's no way the designers could possibly have enough NPCs to guard this entire area, I give myself over to the fiction and look nervously back and peer trepidatiously around. The game and reality are pulling at each other and competing. In the back of my head I hear a repurposed version of Franklin Roosevelt's maxim, "We have nothing to fear but fear itself." The longer the game goes on the more it cracks at the seams. All of the chasers have been spent. All *La Noche* has left is the darkness and moonlight. But I have had such a good time up till this point, I want the game to work, I owe it. So I forgive the lack of chasers and plunge forward in my self-created anxiety.

Finally we stand at the crest of a large hill looking down across a wide-open field towards a wooden structure again blazing with torches. We know that's where we have to go. We know this is probably the last dash of the game. The moonlight softly blankets the grassy field. We look at each other in relief; that we've made it here; that at least three of us are still together; that it's over and we can stop all of this running soon. We can dimly make out the small figures of other players down there. We know we probably haven't won. But we feel a type of victory nonetheless. We know now, this wasn't a game about winning. It was about surviving. And with one last run we'll have done just that. We take off in a wide arc down towards the torches.

A coda

I am right that the game will offer no more gameplay. From this point on the game evolves into its own long coda. We make masks; we ride an old-fashioned London double-decker bus to an ancient graveyard where we traipse through the dark. A few ghouls jump out to scare us, but there is no more chasing. The game ends with the return of the undead mariachi band and zombies in wedding dresses dancing amongst the tombstone and players regaling one another with tales of their exploits.

We all wind up at a bar afterwards and I am reminded how important experience and especially shared experience can be. We tell stories of the game, of how we avoided chasers and snuck into safe zones and skirted danger like they're our own war stories. And they are. And we know that this is all a game and that most people will never care deeply enough to listen to us recount this experience. But that's okay. Because in this moment our shared experience is still fresh, the sweat is just drying and our muscles have not yet begun to ache. Like dancing the realness of it will soon fade. Some of us will be cursed to look back on it clinically, searching for lessons as game designers, finding fault with the balancing of this or the length of that. But the lucky ones will look back on it as something else, something closer to the wild exuberant experience of dancing and playing and being lost and found.

IMAGES:

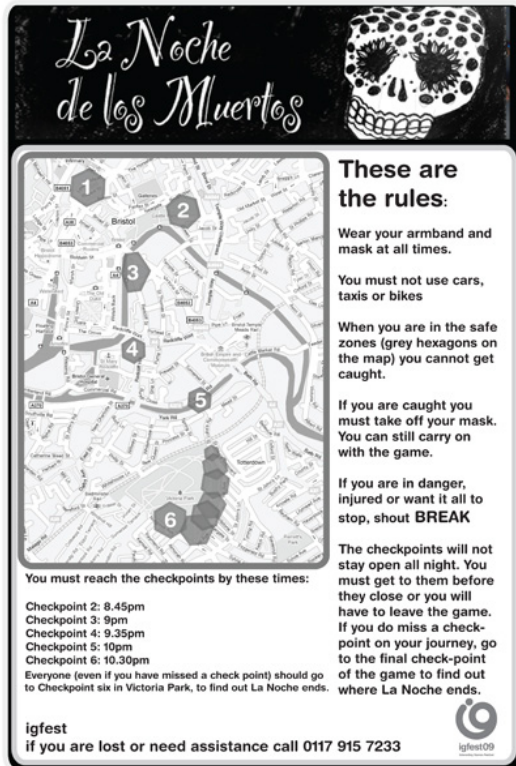


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*The pleasures of WoW as
a player are not at odds
with those of a researcher.*

”

**CRYSTLE MARTIN, SARAH CHU,
DEE JOHNSON, AMANDA OCHSNER,
CARO WILLIAMS, & CONSTANCE STEINKUEHLER**

DING! WORLD OF WARCRAFT WELL PLAYED, WELL RESEARCHED

World of Warcraft (WoW) is a massively multiplayer online (MMO) role-playing game that takes place in the fantasy realm of Azeroth and boasts over ten million players. *WoW* was vast in scope when originally released, and has since added on more territories and character customization choices. Originally consisting of two continents, Kalimdor and the Eastern Kingdoms, two expansion packs added the realm of Outland and the continent of Northrend to the map, and, have also expanded the content of the game with the addition of new races, lands, quests, etc., and raising the level cap (highest attainable level). When designing a character, the player is offered a variety of choices, such as selecting a character's faction (Horde or Alliance), race (10 playable races which include Night Elf, Troll, and Undead), and class (9 different classes which include Mage, Paladin, and Druid). The player is able to further specialize their character by selecting two professions, as well as spending points to develop talent builds. In addition, during gameplay, decisions must be made about what armor to wear, what weapons to wield, and in what order to cast spells. The choices are vast and are able to be molded to fit a variety of playing styles, especially considering the social interactions that raids and guilds support, the wide variety of gear choices that are made and re-made regularly, the complex role-play opportunities, and the various patterns that different players develop (and swear by).

As such, *WoW* offers a tremendous number of avenues for the player's enjoyment and just as many avenues of study for researchers interested in informal learning, especially in online collaborative spaces. We all play *WoW* but our backgrounds vary beyond that, ranging from a professor who researches informal learning and MMOs, four graduate students with a variety of research interests (including math, visual studies, and literacy), and a high school senior who is an avid gamer. As players and researchers of *WoW*, we could ramble endlessly about the game but we have instead decided to talk about nine of our most loved things. In this essay, we delve into how *WoW* has redefined gaming, narrative and raid centric playing styles, as well as the multi-level social interactions in *WoW*, as an exploration of what we love about playing the game. Then, we explore character aesthetics and player-produced visual models, the use of math and information literacy, and finally a player's experience with time in *WoW*, for our more research-oriented pursuits. Though we cannot go into much depth for each section in this short essay, we do cover a breadth of topics to offer the reader an overview of the wide variety of perspectives from which to think about *WoW* as players and as researchers.

WoW <3 from the Player Perspective

World of Theseus (Lead: Williams)

According to Greek legend, the ship of Theseus was replaced bit by bit as oars wore out and planks became rotten, until the whole of the ship was rebuilt with new and stronger pieces. Philosophers promptly began a fight—that continues even today—over whether that new ship was the ship of Theseus or a completely different ship altogether. If all the parts of something are changed or replaced, is it still that same *something*? Is there an essence that persists beyond the surface details? *WoW*, that living shifting persistent world that millions visit daily, is our modern Ship of Theseus, changing bit by bit and becoming stronger, newer, and completely familiar.

WoW was originally released in 2004 by Blizzard, and they have been consistently remaking it since. Two expansions (with a third in the works) brought drastic changes to the game for those who paid, but the real story of Theseus is in the patch notes—the long and informative list of changes that serve as the primary reading material during the long (seemingly infinite, sometimes) installation process of each patch. Those notes⁵¹ describe in detail the ways in which Blizzard has been striving to balance their incredibly complicated world, in pages and pages of text, carefully organized. And while some of these changes are small—a bug fix here, a change of gear stats there, an increase of spell-casting distance—others are incredibly large—a map change here, a new quest there, the complete and repeated revamping of talent trees⁵².

As mentioned in the introduction, when creating a character in *WoW*, there are 10 different races to choose from. Next, the player must choose one of nine different classes,⁵³ each of which approach the game quite differently. For example, the rogue class sneaks around and gains extra power for attacks that are unexpected, members of the hunter class capture and train attack animals, and warlocks deal elemental magical damage from a distance. Within each chosen class, the player then must decide over time what *type* of that class s/he wants to be. This choice is made through the use of talent trees, where the player can unlock special skills and strengths by spending painfully earned talent points. Each class has three different talent trees—druids, for instance, have the trees of Balance, Feral Combat, and Restoration to choose from, and each tree supports a particular type of gameplay (in this case, nature spells, shapeshifting melee, and healing, respectively). Using a talent point in the Balance tree unlocks more powerful Balance options, and lessens the options that the player has with Feral Combat and Restoration, so each talent point is an influential decision.

In every single patch they've released, Blizzard has modified some talents, but even more dramatically, they have so drastically changed the talent trees of *every* class at least twice that talent points were completely refunded so players could re-design their character from scratch. For druids, the talent points were refunded a *full four times*, which means that someone who's been playing a druid since day one has re-designed this important aspect of his/her character repeatedly. This sounds a bit frustrating, as with each new specialization, called a "spec", players have to learn new spells and form new habits. But what these changes indicate is that Blizzard is constantly improving the balance between classes and types of classes, fine-tuning the distribution of power in the game. In other words, Blizzard has responded thoughtfully to play patterns and player preferences, working constantly to refresh and polish their world, in a fashion that challenges the often-static nature of conventional games.

Not all games are static; in fact, many of them are static in some ways but offer new downloadable content *or* expansions *or* second releases *or* bug fixes. But *WoW* changes or adds *all* of those new pieces. Games like *Tic-Tac-Toe* don't have anything like expansion packs, really—they are just classics and they stay the same. *Monopoly* gets new makeovers all the time, including gold and diamonds, but I use the same rules and strategies I've always used despite the appearance of the game. *Starcraft 2* is released over a decade after *Starcraft 1*, and they are just as dis(similar) as *WoW* in 2004 and *WoW* in 2010. When I encounter bugs in *Red Dead Redemption*, I wonder *when* Rockstar Games will fix them, but the question is really *whether* they'll be fixed. I've been spoiled, that's all—I expect fixes and new things and dexterous changes as a part and parcel of gaming, as if that's what game companies should do as a matter of course. The truth is, though, that that expectation was created by my *WoW* playing—it may be slowly becoming more normal for game companies to continue working and polishing long after a game's release, but that bar was originally set, met, and exceeded by *WoW*.

It was during the analysis and design of the game, captured in "Math as narrative in *WoW* forum discussions" (Steinkuehler & Williams, 2009), that the unusual nature of *WoW* caught my attention. I realized that I couldn't retrieve the spells being talked about—I mean, I know what "mindflay" looks like *now*, but what did it look like back in 2006 when the data was retrieved? All of these little parts of *WoW* had changed, bit by bit, which changed the way certain classes were played and the way they interacted with other characters, which changed the make-up of raid groups and player-vs-player battles, which changed which classes were being recruited by guilds and started as alts, which meant that *everything* changed. The *WoW* that I play now is not the *WoW* that I played back in 2004, but somehow, simultaneously, it *is* the same *WoW*, and I get that same sense of recognition and wonder when I

log on. Perhaps, to steal Douglas Adams' (1990) phrasing and use it for my own purposes, "to be overly concerned with the original design and details, which are merely sentimental souvenirs of the past, is to fail to see the game itself."

Narrative Immersion and Identity Exploration (Lead: Ochsner)

The Warcraft universe has an incredibly well-developed history. Known as lore, this history spans thousands of years and can be explored in great detail on the official Blizzard website, numerous fan sites and wikis, as well as novels, comic books, and manga that delve into this universe's defining events and its most important characters. The level of importance that any player ascribes to the game's lore is entirely a matter of choice. For some, being engaged with the game's narrative elements is *the* reason to play; for others, narrative features are irrelevant. It is through exploring this engagement (or lack thereof) with the game world's narrative that we can truly begin to see the depth of gameplay options that *WoW* offers to its players.

Taliaraz is my newly-created Draenei shaman. She is a dark-skinned female with wavy black hair and harsh, hostile-looking facial features. She is alien to the game's primary setting Azeroth, having just crash landed on the planet with a group of fellow Draenei who are fleeing a demon army referred to as the Burning Legion. Overjoyed to have solid ground under her feet and filled with a passionate hatred of all Orcs, who were corrupted by the Legion and then betrayed her people on their former homeland Draenor, Taliaraz is eager to begin exploring this newfound world. As a shaman she feels a deep connection with the earth, and as she nourishes that sense of closeness she hopes to be able to learn increasingly powerful magic. Curious about the properties and potential powers embedded in the earth of Azeroth, she has taken up jewelcrafting, believing that diligent study will reveal some of the world's secrets.

This inductive description serves as much more than an introduction to Taliaraz's character – it indicates a certain play style for *WoW*, and it is one of many possible approaches. My choice to place an emphasis on Taliaraz's story and personality shows a play style that focuses heavily on narrative experience. Much of the story introducing Taliaraz comes directly from Blizzard at the very beginning of the game through an opening cinematic that describes the plight of her people. Her physical features and role as a shaman were choices that I made, but from a set of options that the developers provided. Finally, I supplemented the developer-created story and features with my own attempts to further develop and connect with her character. For example, her eagerness to explore the new world and her dislike of orcs are personal touches that I came up with on my own as a way to be more deeply invested in the experience of playing Taliaraz. However, these are features

that are believable and consistent with information provided by *WoW*'s developers. With this approach to play that is heavily focused on role-playing, I would try to experience the world as Taliaraz would and protect her integrity by making choices that make sense for her character. As I play her, I would try to think as if my thought process was hers, and under the most ideal conditions it would be as if my mind and her mind were one and the same. This coming together of player and character is what James Paul Gee terms *projective identity* (2007, p. 50-54), which he uses to describe both the player's act of projecting their real-life identity onto their virtual character and to the player's process of making that character into an ongoing project or creation to be worked on and perfected over time. When players engage in an act of projective identity, they feel responsible for their character and consider what experiences they want that their characters to have throughout the trajectory of the game. They are then careful to play the character in a way that is consistent with that path.

One of the advantages of taking this approach to playing *WoW* is that it allows players to reflect on their character's place in the game world, answering questions about where their loyalties lie and what their goals are. The character might take the time to get to know the people of each region s/he stops to quest in, and s/he might examine her/his reasons for helping them. This approach to play allows the player to explore different facets of her/his identity, trying on personality traits that s/he finds desirable or intriguing. S/he may also be able to play out possible fantasies, such as having a more striking physical prowess, being more assured in her/his powers of persuasion, or possessing more freedom and a greater sense of autonomy. With this kind of play, the player's focus remains concentrated on the game world and on her/his character more than social experiences. The player's experience is largely introspective and involves her/his using the developer-created fantasy universe to create a character s/he can use to explore her/his own identity. The projective identity occupying the space between the player's real-world and virtual identities reflects her/his "own values, desires, choices, goals, and actions" (2007, p. 50), which Gee explains creates a sense of ownership. This experience of creating, controlling, respecting, and developing a virtual character can be deeply pleasurable.

A Non-Narrative Social Approach: Raiding (Lead: Ochsner)

WoW is not just a world of history and lore; it is also filled with characters controlled by players from the real world. While the complex game world might be deeply engaging for some players, others enjoy *WoW* for entirely different reasons. For many, this game is at its core a social experience that players use to hang out with friends, play a role in a group, or compete against other players. A player can be oblivious to the current situation of her/his character's race, might not be able to

explain why certain groups are at war, and may not give a single conscious thought to her/his character's personality or motivations. While it might initially seem like this player is missing out on crucial parts of the *WoW* experience, this isn't necessarily the case. An equally valid and popular approach to the game is to value player-focused social experiences over narrative and character elements.

While there are a number of ways to play *WoW* that focus on the social elements of the game, one play style in particular seems to be a direct foil to the narrative-focused approach described in the last section – that of a raiding guild member. Guilds are self-formed groups of players who support one another and play together. When guilds raid, they form groups of characters that have reached the level-cap and go into dungeons to defeat their faction's more difficult enemies. Serious raiding guilds are demanding and selective, accepting only the most skilled and the most committed players. They often have very specific character requirements determining which players are allowed to join, and many follow strict time schedules.

A raiding player utilizes her/his character to play out a prescribed role as efficiently as possible. Take my own raiding mage character as an example. The main role of a raiding mage is to deal as much damage as possible to enemies. While this sounds like a very simple role, successfully playing any role in a raid group requires a precise process. My mage would be expected to deal a certain amount of damage per second (dps) to enemies. If I want to be considered a valuable member of the group, that damage figure needs to consistently fall within a certain range.

The mage's skills and strengths should be based off of a carefully researched "build" of talent points, which I would research online, often seeking additional advice from my more experienced guild members. Other players have poured countless hours into determining the most successful skill set for a mage, and I am best able to help my group by relying on their expertise. Raiding players are responsible for keeping track of any changes that the developers make to the game because the most successful raiding build can change quickly. For example, for a long time, using arcane spells was the best approach for raiding mages in *WoW*, but recent updates and changes have made fire spells a more successful spell type. Not only is the best type of spell set predetermined for a raiding player, there is also a specific spell rotation (the repetition of certain spells cast in a specific order) that must be used.

Raiding requires participants to play out very specific roles and yet the play style itself acts as a foil to a role-playing approach to the game. A story-focused, role-playing type of play involves the player navigating the game's vast and open world with a character that allows her/him to explore various identities that s/he chooses. Raiders follow a relatively linear path through the raid dungeons and are expected to perform specific sets of actions at very precise times. Yet, raiding is a challenging activity that requires players to take on a lot of responsibility. This type of play

offers players fewer choices, but the high level of challenge makes it an extremely gratifying experience when it is done well, especially since it is a highly organized and complex group accomplishment. While the reasons to value each of these play styles might differ greatly, they are both meaningful and valuable, having a lot to offer their respective players. Ultimately, players who take a narrative and character-based approach to *WoW* are essentially playing a different game than raiding players, finding pleasure in different activities and gaining vastly different skills. Whether it's feeling a sense of ownership out of taking on a projective identity, effectively playing out a critical role in a group activity, or achieving another accomplishment from an entirely different play style, any approach to World of Warcraft has the potential to be both gratifying and offer the player a powerful sense of agency.

Multi-Level Social Interaction in WoW (Lead: Johnson)

The impact of video games on my life has been enormous. *WoW* is a wonderful illustration of what a virtual world, inhabited by players scattered around the globe, can provide to an adolescent male such as myself. Contrary to popular belief, the majority of players in *WoW* are not adolescents, nor are they all male. In my case, this has led to exposure to peer groups that under other circumstances would have remained unknown to me. Late night discussions about politics, gender, and race, although uncommon, are not unheard of in these spaces. Other Internet phenomena tend to make their way into *WoW* as well, popular memes born elsewhere on the Internet almost always pass through chat⁵⁴ demonstrating that although the world of Azeroth is insulated, players enjoy throwing information at each other and seeing what happens.

My first encounter with *WoW* took place in the most stereotypical environment for gaming possible: my mother's basement. Games were by no means a new media to me. In fact, first-person shooters defined most of the peer groups at my school. I remember my first attempt at creating an avatar. I was so puzzled by the User Interface and could not figure out why anyone would want to sit alone and play a video game online with no face to face contact with other players.

Since those heady days of youth I have learned quite a few things about virtual worlds. All of the built-in services are available at all times from any location with an Internet connection and the appropriate computer gear. They can provide the social interactions of a playground, the wonder of watching an elaborate storyline unfold, and learning experiences that, under the right circumstances, parallel those found in the most well-equipped classrooms. The ability to be social with such a broad population in a low-risk environment is a skill no other generation has had the opportunity to master in such great numbers at such an early age. The fact that *WoW* is a persistent world means I can wake up at three o'clock in the morning and

find a group to run a dungeon with. It may be made up of four other white males who are staying up too late, but the number of times I've had the opportunity to connect with say, a stay-at-home mom or siblings waiting for their parents to get home seem to contradict any preconceived notion that *WoW* players are a homogenized population.

If you've ever read science fiction classics, you know that virtual worlds and the unique social situations they facilitate have long been discussed. Groups that differ in many aspects - age, nationality, and gender, to name a few - occupy the spaces provided by games like *WoW*. Over the course of the standard ninety-minute play-session I have no difficulty executing hundreds of player-to-player trades. Through thick and thin, *WoW* has promoted an exchange of perspectives between myself and otherwise disparate peers. The feeling of actively contributing to a narrative whenever you play is intoxicating—and of course, there are two million other players participating in a comparable narrative simultaneously. MMOs have mediated the barrier for engagement among groups that other formats of play cannot due to their social or geographic locations.

WoW provides a space for individuals to create and exchange values, be that through virtual goods or friendships with other players. Within my guild alone, there are sixty members playing four or more hours daily. Each of these players maintains a complex social network as well as participating actively in both personal and private chat channels. Many of them also participate in the frequently lewd and rebellious "Trade" chat channel that is usually used for buying, selling, and trading in-game goods and service. These multiple layers of discourse take place at the same time and most players don't realize the complexity of the social networks they are building.

WoW grabs many players' attention not because of the differences between it and their real lives, but because of the similarities. The conflicts I have moderated as an officer in a guild are not different from the classrooms I have taught in. Completing a long and tortuous progression through the newest content is intended to leave a player with the same feeling of accomplishment gained by completing a project in school or at work. Being mentored by a more experienced player feels the same as being mentored in any other situation. Most importantly, participating in varied and overlapping human interaction is an integral and necessary part of *WoW*, just as it is fundamental to everyday life.

Some of the rather menial tasks that players are asked to perform once reaching the level-cap, such as daily quests, resemble the small hardships that we all face in our day to day lives. Almost all quests boil down to a 'fetch this item' ideal, which can get really boring really fast if progressing through levels is your goal. However, when an element of competition is added between either the player and their compatriots or

their sworn enemies, an enormous jump is made into the realm of engaging social play. Now, when out searching for an item used to complete a quest, interaction with others is almost always the most efficient way to achieve the desired goal. In many cases, specifically with quests that can be completed repeatedly at the level cap (called “dailies”); players with a shared objective will form a group regardless of the difficulty of the task at hand. To avoid boredom at work during coffee breaks, we group up around the water cooler to gossip. At home, we largely follow the tradition of sitting down at the table to eat. Yet, all of these spaces remain engaging despite repetition. Conflict and reconciliation take place between individuals and groups inside virtual worlds in the same way they take place in any other venue viable for discourse.

In Blizzard’s upcoming expansion to this world, social aspects of the game are receiving heavy attention from developers. There are more incentives for a player to both join a guild and stay committed to that guild’s well being for an extended period of time. The fact that the creators of this virtual world are emphasizing the game’s social aspects is a statement about their importance. These spaces are given depth and reek of humanity because of the people who inhabit them virtually. Disregarding the rich, engaging, and thoughtful storylines, it is not the game environment itself that instigates many interactions in MMO, but it is the players who are using the space that make the space rich, engaging content.

WoW <3 from the Researcher Perspective

Looks Matter (Lead: Chu)

It started with a staff. Long, slender, and tipped with ruby gemstones. They called it the Emberstone Staff, and it was a much-coveted rare weapon dropped by a boss in the Deadmines dungeon. My first *WoW* character was a night elf druid with shiny blue locks, and, like most low-level players, I sported a mish-mash of gear, which could only do a three-year-old who dresses herself proud. I spent countless hours in front of the bank in Darnassus organizing the items in my vault storage space and equipped bags. One evening, while I meticulously arranged my linen and wool cloths by type in rows—I was a slight neat freak even with my in-game bags—another night elf druid who bore a striking resemblance to me approached the bank. What caught my eye was less her uncanny similarity to me both in hairstyle and mismatched armor, and more that I could not help but notice her shiny weapon as it beamed in all its glory. “Hey there,” I said, as I swiveled the game screen’s perspective and zoomed in to take a closer look. “Where did you get that staff?” Though only the two of us stood at the bank, it took her a moment to realize that my question was directed at her. “Me? From Deadmines.” After bombarding my in-game twin with a series of questions about the details of her cool-looking staff and the dungeon, I asked my guildmates to lead me to the so-called Deadmines, determined to claim an Emberstone Staff as my own.

In retrospect, as I leveled three different characters to the 70-somethings, the Emberstone Staff was one of the least attractive items I would come to own. My adoration of how cool other players' gear looked and my determination to obtain these items for myself, however, remain unchanged. This gawking often took place inside cities, where a high number of players congregated, many standing idly, resting. In their study of the social dynamics of *WoW*, Ducheneaut, Yee, Nickell, and Moore (2006) observed that a common occurrence was that players would leave their characters equipped in high-level gear parked in front of the auction house in densely populated cities, almost as statues for others to admire. The researchers likened this practice to how spectators would crowd around the best pinball players at an arcade. In *WoW*, the items that players equip signify social status and prestige. They tell other players where you have traveled, what bosses you have slain, and how much wealth you hold. An experienced player can "read" another's outfit and be able to construct a good portion of that character's history and experience with the game. Less experienced players are still able to distinguish between low-level and high-level items by how decorated the pieces are. Armor sets formed with matching pieces take longer and more skill to obtain, so those wearing such sets are therefore more attractive to other players. When playing in groups, wearing good gear is one of the major determining factors for a player's inclusion in a group. Those in immediately recognizable high-level gear are hugely favored in dungeons and raids. In fewer words: looks and aesthetics in *WoW* matter.

Owning appealing gear in order to advance in the game is not the only reason that players collect attractive weapons and armor. Klastrup and Tosca (2009) found that, "many players spend time acquiring clothing with no value to the mechanical game-performance," but items available in the game such as tuxedos, dresses, and Santa suits allowed the players to play a bit of dress-up. They observed that most players, not only role-players and female players, took an interest in looking good and being fashionable. For these players, what they equip act as visual cues to their status or expertise, and often their humor, which motivates other players to obtain similar visible markers for themselves. For me, with three high-level characters, the Emberstone Staff was only the beginning of years of admiring and chasing fashion.

Over the years, there has been growing academic attention being paid to aesthetics in games and their power to visually communicate meanings and values. T.L. Taylor (2009) has investigated the use of mods (user-created game modifications) in *WoW* and describes how mods help to "reconfigure play," by changing the aesthetics of the user interface in order to make what is visible more useful, and often what is hidden more visible, to help players advance in the game. One mod that Taylor discusses, CTRaidAssist, provides options and visual cues (such as broadcasting vital information on players' screens during a boss fight) that are so heavily relied upon it is as though the mod is the 41st member of a 40-player raid. With the understanding that video games are a highly visual medium with imagery composing

a large part of gameplay, I take interest in the kinds of visual cues that are displayed on game screens, such as the gear that players equip or the visible warnings that CTRaidAssist produces. As a researcher, I am fascinated by the layout of game interfaces, and in particular, how and in what ways visual elements on a game screen are significant in communicating complex ideas and concepts during player/user interface interactions. In the following section, I consider further the visual culture of games and its role in game studies by discussing a scenario in which the use of visual models is an essential part of *WoW* gameplay.

Learning to Slay Monsters Using Visual Models (Lead: Chu)

I never anticipated that I would be asked to complete homework for my guildmates. After all, I often played *WoW* to *avoid* studying. Occasionally, I would help a guildmate in high school generate essay ideas for his history class or work through a calculus problem with another who just started college—with the aid of several math tutorial websites, of course. However, this particular request was different. I was reminded of my assignment when a guildmate asked me, “Did you study those boss fights for Thursday?”

At the time, *The Burning Crusade*, *WoW*'s first expansion, had been released for about two months. My guild then had just enough players leveled to 70 and sufficiently geared to attempt Karazhan, a raid dungeon, together. Our guild leader possessed stellar managerial skills that could be the envy of top executives; he posted weekly on our guild message forum the highly detailed work plans for the raids taking place each week. *Click the “Sign Up” tab to fill in your availability. Sign up for only the raids you will show up for. Meet at the portal 10 minutes prior to raid time. Ensure that you have all the gear, pots, and mats⁵⁵ you will need. Go to the Bosskillers website and study all the fights. If you don't know what you're doing and wipe⁵⁶ the raid, you will be replaced.*

Bosskillers, along with numerous other strategy websites and YouTube videos illustrating tactics for conquering *WoW* bosses, have saved me from ever being kicked out of a raid group. In using these resources, I was able to exhibit the appearance of competence and experience with the instances. Little did the other raid members know, I was only a noob⁵⁷.

While countless player-produced strategy guides exist, numerous are text-only. As a visual learner, I value the complexity that a simple diagram can convey. Lengthy descriptions of room setting, player positioning, and fight tactics can be easily illustrated with a few screenshots of the room, marked up with symbols, arrows, and labels. A strategy guide on WorldofStrats.com for killing High King Maulgar in Gruul's Lair, for example, includes a diagram that shows the ideal positioning of enemies in the room. In the diagram, a screenshot of the boss room sits beneath a

layer of arrows and symbols: different colored *translucent* circles show the original positioning of the enemies (where they stand as a group on one side of the room), with arrows leading out of these circles and into *solid* circles that indicate the ideal positioning of these enemies (spread out around the room). This positioning is ideal since some enemies' attacks affect their surrounding area and thus these enemies must be held away from the other raid members to keep them from harm. As circles in the diagram, the enemies are reduced to abstract shapes. The diagram, then, has stripped the raid down to its core, making them easier to comprehend; to illustrate the strategy, the actual appearance of the enemies is superfluous and the use of symbols is more efficient. Many videos made by players show such diagrams in action by animating the enemies moving from their original positions to their ideal locations in the room. Video captures of a group's actual encounter with the enemies, often with text or voice overlay, can be found on numerous video-sharing websites such as YouTube, and also act as useful models for successfully defeating enemies.

And that is precisely what they are; these fandom artifacts are models. Models are significant in their ability to represent abstract ideas and explain processes, as they capture the predictive features of a given system, situation, or phenomena. In scientific inquiry, models guide scientists in their work by helping to explain data and by inciting further exploration, engaging scientists in deeper inquiry that will lead to the revision of these models (Passmore, Stewart, & Cartier, 2009). However, model-based reasoning and inquiry at large are difficult to foster in even formal science learning contexts (Crawford, 2007). Yet, within the *WoW* community, we see players routinely create, circulate, and consume complex models in preparation for play.

If the infamous Leeroy Jenkins video⁵⁸ fails to be a testament to the importance of preparation work done in and out of game leading up to a boss fight for you, then you simply need to stroll into a high-level dungeon without any knowledge of the fights for further proof. You likely will be slain faster than you can say, "I told you so." If there is one thing I learned about being a successful raider, it is to do your homework. And sometimes, that could mean watching countless hours of YouTube videos.

Math and WoW (Lead: Williams)

I love math. Like, *really* love it. Really, really love it. I love math the way Santa Claus loves eggnog, the way Night Elves love their pointy ears, the way that kittens love you in the morning before you've fed them.

But it's a secret. When someone asks me what I do in school, I say, "I study education." Or, "I study video games." Because when I say, "I study math," people flinch. There's some horrific visceral reaction, and suddenly the *fight or flight* instinct wakes up, and I'm in front of someone who has no interest in being in front of me anymore.

So I study video games. And in this case, I'm studying *WoW*, and I'm studying the way that suddenly math is *okay*, possibly even *cool*, because, boy oh boy, can math make you an amazing player! *WoW* is all about *identifying patterns*, then shifting those patterns according to specific stimuli. And it's all about *maximizing this* (like damage-per-second, and regeneration rates, and efficiency for leveling, and auction house profit) and *minimizing that* (like damage taken, or the likelihood of running out of mana during a battle, or wiping completely in a raid). And it's all about messily testing out different ideas and combinations, trying different armor and different weapons against different enemies, working to identify which is the elusive *best*. And it's all about navigating various maps (can we say *Cartesian coordinate plane*, anybody?), and seeing what happens to some stats when others go up (can we say *modeling unknown functions?*), and always finding the best place to grind for each level (and although it sounds almost unachievable when put this way: can we say *maximizing unknown functions?*).

Don't tell anybody, but *WoW* is crammed full of math, everywhere you look. It's informal math, for the most part, and it bears more than a passing resemblance to math we often encounter in "real life." When we have to run a few errands (buy milk, deposit check, buy stamps, drop off book at library), we minimize the distance traveled, trying to complete the errands as efficiently as possible given the constraints of roads, traffic, and locations. When we schedule two appointments at opposite ends of the town, we try to leave enough space in the middle just to travel from one to the other—we don't want to be late, nor wait an uncomfortably short and uncomfortably long 45 minutes in a funny smelling waiting room with old magazines. So we estimate our speed and distance based on prior experience and have some idea of how much time we need. But there's one big fabulous difference between math out here on Earth and math in there.

In Azeroth, we talk about it. When was the last time you systematically and thoroughly compared the efficiency of errand routes? Or examined class requirements and figured out a way to get your bachelor's in 3.5 years, and compared your plan to that of your friends? Or calculated the likelihood of getting sick after eating that raw cookie dough, and evaluated the risk-reward ratio with the baker? Or added a numerical critique to the discussion page of a Wikipedia entry? (Well, maybe you *do* do these things. I mean, *I* do.)

In "real life," *some* people discuss these types of things on a regular basis. In Azeroth, *everyone* is involved in those discussions (or rather, the mathematically parallel ones). Part of just *being* a *WoW* player is being up to snuff on the pros and cons of talent tree distributions, learning how to get places and meet up with people (memories just flooded my brain of groups waiting impatiently for me as I headed for the wrong dungeon!), of figuring out whether to use this piece of armor or that piece of armor ("This one adds to those stats, while this one adds a *lot* to those

stats, but takes some away from these”), being able to read complex displays filled with numbers—all of these skills are expected of an experienced *WoW* player. And the way you learn these skills is a mixture of *doing* (repeatedly, in some cases) and *talking*—talking to guild mates or strangers, posting and arguing on forums, building mathematical models and comparing them with the models others have built.

My fascination with this topic began back in 2004, but only recently have I begun digging further into the mathematical activities that surround *WoW*. Relevant forums, such as those hosted by Blizzard, serve as a nice snapshot of what players think about and talk about. And when examining those forums, math rears its head repeatedly—in the service of scientific argumentation (Steinkuehler & Duncan, 2009), and, in a particularly fascinating case, deeply embedded in a complex blend of narrative and mathematical modeling (Steinkuehler & Williams, 2009). Future research, following in the footsteps of these studies, will hopefully continue to map out what the role of math is for the *WoW* community, and—I suspect—will confirm what resonates with my gameplay experience: math is used consistently as a powerful tool that you ignore at your own risk.

Wonderful math—if only I could share my love of it, like a contagious disease or fleeting smile. Wonderful *WoW*—it’s pretty fabulous what this game can do to so deftly change terror into temerity. Wonderful Azeroth—where everyone speaks my language!

Information Literacy and the WoW Info Sphere (Lead: Martin)

WoW is an amazing place for the study of information literacy skills, which is very important both as a 21st century literacy and a lifelong learning skill. Information literacy has been defined by many different groups all with their own variations, but in general it can be described as the skills needed to find and use information when you have an information need. Typically, information literacy is written about in standards or processes designed for K-12 or university settings, focusing on institutional information sources and institutional uses for the information. However, these skills are imperative in all information use in life, and are especially valuable in being successful in *WoW*.

The information needed to move through *WoW* is a vast sea and requires navigation so as not to get lost on it. Navigation across this sea requires information literacy, for quite a few reasons. First, you have to realize that you need information. This happens to players all the time with questions arising like: Do I want this piece of armor? How should I spec my character? Where can I buy my mount? Next, you try to find the information you need by one of two methods — you either ask fellow players or look it up.

Looking up information for *WoW* is relatively easy. The information community surrounding the game is enormous, offering a variety of wikis, forums, and websites devoted to information about *WoW*. These resources, especially the wikis and forums, are extremely useful information resources because they are kept up-to-date and are vetted by a knowledgeable expert community. In this sense, for use in the game, these information resources would be on par with those you would use to research for a paper in an institutional setting. This comparison can be drawn due to the fact that both sets of resources (*WoW* wikis and published articles in library databases) are vetted and peer reviewed by their respective communities and each are refreshed by new information as either new research is completed or changes are made in the game (and the *WoW* wikis tend to be more up-to-date because the publication time is much shorter and peer-review is done in real-time). This comparison is not meant to lessen what academic publishing offers, but to raise the status of these *WoW* resources within their own context.

Asking for information through in-game chat channels is the other way that information seeking occurs in *WoW*. This is possibly the easiest way to seek information but not always the easiest way to have your information needs met. The usefulness and quality of the information received relies on the knowledge and willingness of the other players to share at a particular time. Most of the time people are willing to share the information they have or point players with information needs to resources outside of the game. It sometimes takes the player who needs the information asking the question multiple times but someone usually answers, and, oftentimes, gives a variety of sources that enrich the information literacy experience.

One of the most interesting aspects of information literacy in *WoW* is the fact that it is a different type of information literacy process than that described in traditional information literacy standards. It is collective information literacy (Martin & Steinkuehler, in press), information literacy that relies not only on resources but the collective intelligence (Levy, 1997) of the community. The knowledge of the individuals of the community creates the knowledge web that supports the information needs of the community. The collaboration within the game, as in many MMOs, has fostered this new type of information literacy using a range of information literacy skills, changed, recombined, and optimized for collaborative settings.

Crossing Time Maps (Lead: Martin)

WoW, being a persistent virtual world, has a clock that runs continuously and—unlike other types of games—*WoW*'s clock matches the solar/mechanical time that a player is experiencing in the physical world. Time functions very differently in different types of games. Time in games where missions or storylines are the driving force is rarely cyclical. Most often time is advanced by the story so that it does not

matter if it takes five minutes or five hours to finish the mission, it will be midnight at the end either way. The only missions where time makes a difference are the *complete this mission in x time* style. For example, you have five minutes to escape before the nuclear bomb goes off ala *Tom Clancy's Splinter Cell: Double Agent*, and numerous other *escape the burning/blowing up structure* situations. In open world games, time is cyclical day after day. In *Elder Scrolls: Oblivion* or *Grand Theft Auto 4*, two open world games, time only moves when you are playing the game, so if you save and quit, then re-enter the game two days later, time will start exactly where it left off no matter what the solar/mechanical time of the physical world is. Also, in these games, the game time—although cyclical—moves at a pace much accelerated compared to our solar/mechanical. However, in *WoW* time is cyclical and moves forward at the same pace as that of time in our daily lives.

Gell, building on Pierre Bourdieu's theory (1977), describes two types of time-maps in which people live (1992). Most people in developed nations would be considered to live in a B-series time map, living a highly structured life where time is cyclical. Times are fixed, i.e., school time, work time, appointments, etc. In this structure time must be scheduled, even time for leisure. A-series time maps are based more on natural activities, such as hunting, cooking, farming, etc., so time is viewed in larger chunks encompassing activities that happen on a freer time scale. *WoW* exemplifies A-series time maps in that many activities, like gathering herbs or mining minerals, falls to the exploration of the player and not to a set time. This looser time structure allows for and encourages exploration of the surroundings. Despite the fact that the game clock runs in B-series time it does not hamper the A-series feel of the game: e.g., no matter what B-series time you go to town, it is never closed and people are always there to buy your goods).

These time maps, according to Gell and Bourdieu, are mutually exclusive, each person lives in one or the other. Curiously, however, when it comes to *WoW*, this mutual exclusivity does not entirely hold. In the "real world," you and I live in B-series time maps where our lives are structured around school and/or work and game time is usually scheduled in the time left for leisure. In the "virtual world" of *WoW*, however, you enter a world that is much more structured around A-series time maps, where activities include gathering raw materials, crafting, and defending yourself against attack can take a great deal of time. Thus, in game playing episodes, players must in fact negotiate the demands of both time maps at once. Such as, when my group is moving through an instance and a member of my group runs into a B-series time conflict (e.g., movie night with their significant other) that causes a problem within the A-series time map in-game. The instance that I am moving through does not necessarily constrain me to B-series time, being that it can take many tries to successfully complete an instance, and the instance does not have a time constraint other than the time it takes is based solely on the skill and organization of the group. So the player with the conflict wants to leave but is held there by her commitment to our group.

Thus, while Gell and Bourdieu argue that a person can only function in an A-series or B-series time map, *WoW* allows people to move beyond this and function in both time maps which are entwined and entangled. This crossover into a time map that players do not normally inhabit may be the reason players lose track of time despite the fact that a clock giving the time experienced in the physical world is always available. The deep level of engagement experienced in *WoW* may be connected with the entanglement of the two time-maps, sometimes evoking “addiction” discourse by some. The ability to cross time-maps offers a unique ability to experience time that most people do not get to experience, experiencing a new time-map gives the player not only a perspective on this new map but also a unique perspective on her/his original map.

Conclusion

We have taken you on a journey across the expanses of *WoW*, sharing with you a modicum of topics that we have explored as players and as researchers. The topics we cover in this essay may seem disparate but two concepts tie them together, participation in an online social environment and informal learning. Whether it's learning and relearning the game as it changes, or learning, creating, and using math, visual models, and information literacy skills to improve your game play, or developing social skills and relationships while exploring the narrative structure of the game, working in a group to raid, or working with your peers to negotiate cross time-map conflicts, the social skills and informal learning opportunities are at the heart of all of our topics. The pleasures of *WoW* as a player are not at odds with those of a researcher, it is not players versus researchers. These pleasures are intimately related, for instance without the complex social elements of the game artifacts we would not be available to study mathematical and information literacy practices. Or, the ability to play *WoW* with different intentions (i.e. narrative based or raiding) affords the opportunity to study the visual elements created to help other players navigate the story or the dungeons. Researching games means playing games, in order to research a game well it is absolutely necessary that you play the game and love to play the game, that you become an insider to the game and the community, because we love what we study, we study what others love and why they love it.

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*This feedback is a subtle,
yet effective way to show
players that they now
are holding hands and
won't lose each other.*

”

DREW DAVIDSON

PLAYING ICO: FROM INVOLVEMENT THROUGH IMMERSION TO INVESTMENT.

Involvement

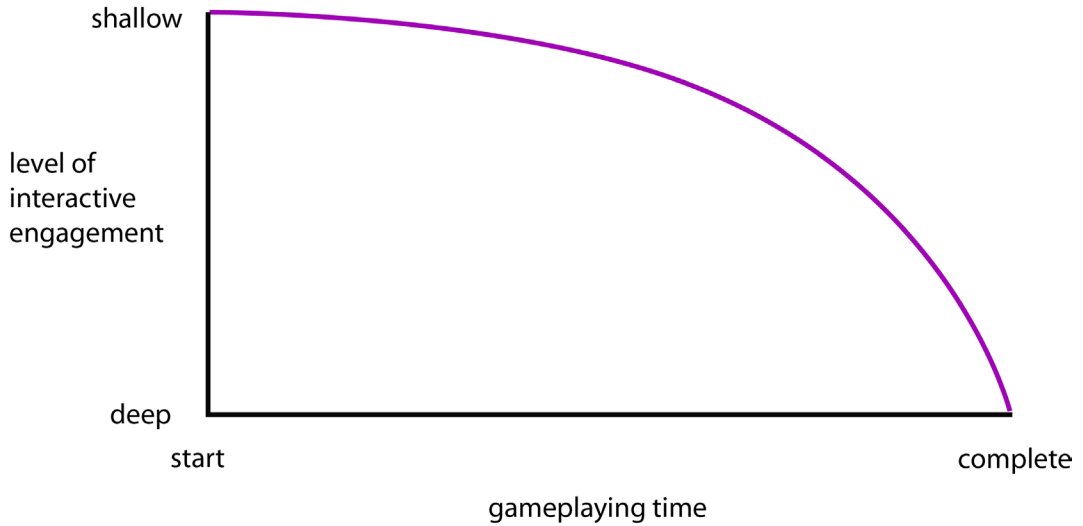
A young boy, with horns on his head and hands bound, rides with three large men, all helmed. The horses walk through the woods, light cutting through the trees. They enter a stone clearing, a constructed space, one that hasn't seen activity for years. The camera pulls up and back, revealing a huge castle complex and a deep chasm. By boat, the group of men row the boy across the chasm to the cliffs beneath the castle. Through a gate, they enter into caves and beach the boat. They approach a large, sealed portal with an idol door. The oldest man speaks in some foreign tongue, and one of the other men goes and returns with a sword. This sword has a radiance that powers a resonating radiance with the idol door, which then opens. The group enters a deep cylinder, and takes a long ride up the shaft. They exit into a large room with row upon stacked row of small sarcophagi, one of which is open. The men place the horned boy into the sarcophagus, telling him it is for the good of them all, sealing him in. The men leave, and the camera reveals that as they descend the cylindrical shaft the floor actually raises, blocking the exit below stone, further sealing the boy away in this large room. The amazing forces involved cause the room to rumble and shake, and the sarcophagus containing the horned boy abruptly breaks free from the wall, shattering opening and tossing the boy to the floor below, knocking him unconscious. In his dreams, we see him in a grainier, darker scene. It is a dark, stormy night and he is walking up a winding staircase. Suspended out in space, where one would expect a grand chandelier centered over the stairwell, is a cage. The young boy sees a slender, entirely black figure lying on the floor of the cage. He yells out to the figure. Unbeknownst to him, a black spot on the wall forms and grows behind him. The blackness grows out of the wall, grabs him, and pulls him into the blackness and he's gone. The horned boy wakes up, back on the floor in the large room full of sarcophagi. The camera pulls back up and above, and our adventure begins . . .

This is an update of one of my first close in-depth readings of a game, *Ico*, in which I initially developed the concept of three interactive experiential stages; involvement, immersion, investment. I wrote it for a presentation and for the proceedings of the 2003 International Conference on Entertainment Computing. And I thought it would be interesting to revisit it in this third edition of *Well Played* to look back on how I started working on an analytical concept of interactivity in order to help me better unpack the meanings found in playing a game.

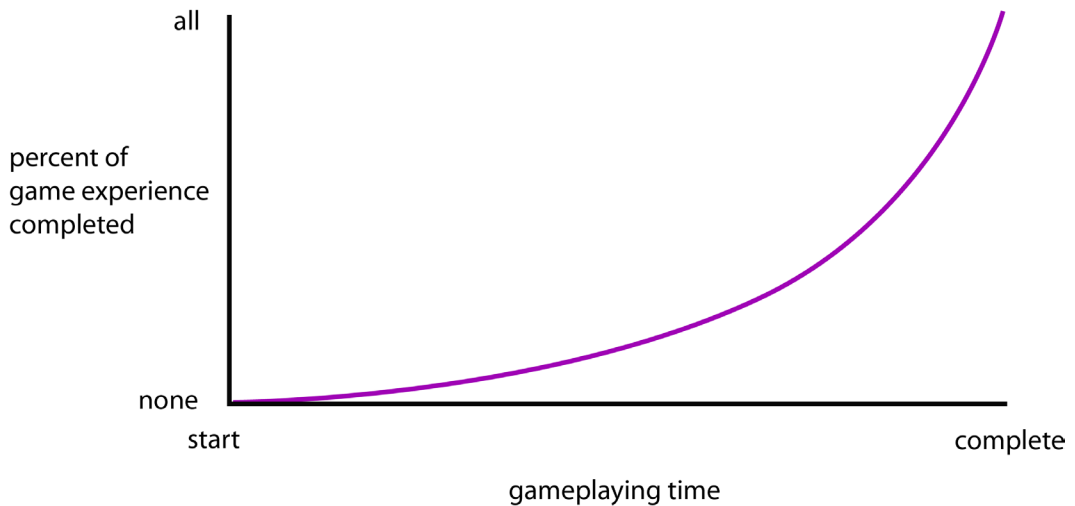
With this article, I will delineate the interactive experience of videogames (playing videogames from the perspective of a player) through a series of three experiential stages: involvement, immersion, and finally, investment. I then go on to relate these three stages to discussions found in the existing game studies literature. I define these three theoretical stages in some detail, and propose that these stages can aid in examining an inherent part of the game playing experience. Throughout, I apply these stages as an interpretative lens of my own playing experience of the videogame, *Ico*, for the Playstation 2 (I should note that I'm going to discuss the game in some details, so consider this a spoiler alert). Finally, I explore how these stages could be useful in aiding videogame developers to design more engaging and compelling gameplay experiences for a variety of players.

Ico is a beautiful game that received a lot of praise for its intuitive gameplay, emotional character design, and subtle story that yield a poignant and evocative experience throughout the playing of the game. *Ico* serves as an ample object of study in which to ground this theoretical set of experiential stages and explore how well these stages help with an interpretation of playing the game. These stages focus on the gameplay of videogames, the interactive process players go through to reach the goal of the game (Federoff). I am focusing on the experience of players, because (to borrow from Brenda Laurel) games have the "capacity to represent action in which humans [can] participate" (1). And games are the realization of the performance theory notion that the audience (with games, the players) becomes performers (Phelan, 161). Games allow players to engage and enact their experiences, interacting, playing within the content (Sayre, 103). Marie-Laure Ryan delineates a move from immersion to interactivity, from text as world, to text as game (175). So, I'm focusing on the interactivity of the text as game, of how players actively engage and interact within a game. By interactivity, I mean that players can, by varying degrees, observe, explore, modify and change the experience of the game (Meadows, *Pause & Effect*, 62). Interactivity is participation and play (Aarseth, *Cybertext*, 49). Within a videogame, the player is the always present participant, or actant (Juul). So with these three stages, I am focusing on the players' interactive experience of playing a game. I believe that these stages describe the arc of a playing experience, one that engages players to the point of finishing the game. If players do not experience one of these stages, they will probably quit the game. But the further along this arc players get, the more likely it is that they will pursue a game to the end. Beyond interpretative, I believe these stages could also be useful in the game design process in order to consider design decisions that could help better engage a variety of players, and offer compelling gaming experiences that encourage players to complete games.

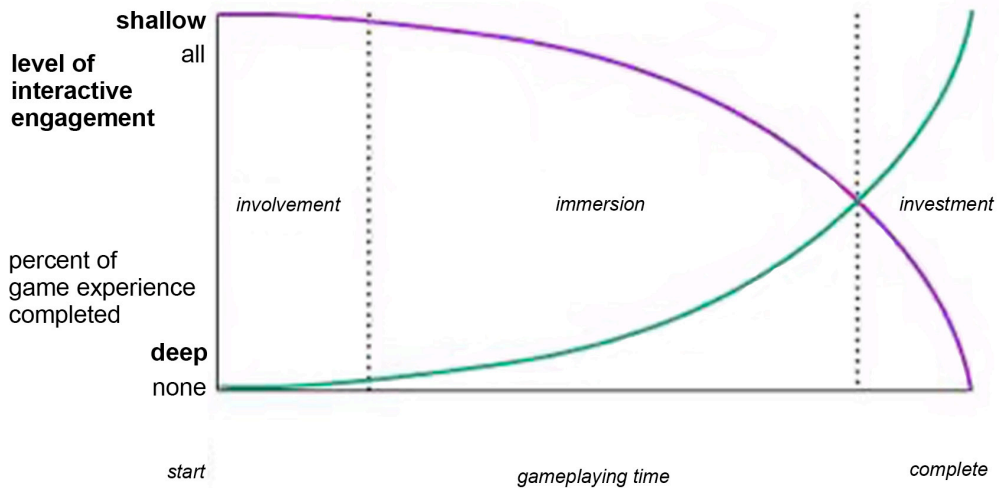
Here's a conceptualized graph to illustrate the process of these three stages. To start, a graph that shows the relationship of the time spent playing a game, from start to completion, along with the level of interactive engagement, from shallow to deep.



So the longer players play a game, the more engaged they become with it. Next, a graph that shows the relationship of the gameplaying time, again from start to completion, along with the percentage of a game completed, from none to all.



So as players continue to play a game, they get closer to completing it. Finally, combining the above two graphs together into one graph showing the relationship of gameplaying time, along with both the level of interactive engagement and the percentage of game completed.



I posit that the first stage, involvement, occurs until a point in which players begin a curve into a deeper level of interactive engagement that coincides with more of the game being completed. Then the second stage lasts, and the third stage begins, when the two variables cross and players become deeply engaged with the game, and are committed to completing the game. Now, these graphs are not meant to be hard and fast, or drive by date, but I do believe they can help illustrate the process of these three stages as players move from involvement, through immersion to investment.

| Involvement - literally, the start of the game. This stage begins with the introductory experience players have within the game. I'm assuming that they have access to the system/console on which the game is played and that they have bought, rented, borrowed the game. They have loaded the game and have begun to play. At this point there is a lot of uncertainty as to whether they will continue to play for 5 more minutes, 1 hour, 1 month, again and again, or not much more at all. Involvement as an experiential stage lasts until players have either quit playing the game entirely (thereby not experiencing the following stages) or until players become engaged enough in the game to continue playing in the gameworld, approaching a point of Immersion.

. . . You now are in control as the horned boy. You can run around, jump, climb, push, pull, grab, throw, and yell. He (played by you) is the protagonist of this game. The light and shadows in the castle are quite beautiful as you run around exploring. You spend a lot

of time exploring. At this point, the implied objective seems to be to get out of this castle (and there is some sense that you may have to go interact in some manner with the figure seen in your dream). You puzzle around your immediate surroundings, and up some stairs you discover a lever. You pull the lever and the camera reveals that directly below you, a door opens . . .

Players' involvement is about moving from the start into a comfort zone with the game. Within this period of involvement, players move beyond the introductory scenes, and into a playing mode in which they grasp the gameplay to the point of it becoming intuitive and less of a conscious act, so that the interactions become more engaging and the game is one in which players want to continue. It's when players understand the gaming situation, the "combination of ends, means, rules, equipment, and manipulative action" required to play the game (Eskelinen). It should be made clear that this period of involvement does not have to be contiguous. It merely represents the in-game engagement in which players go from having started the game to wanting to continue playing it. So, players could have several sessions of gameplay that constitutes their involvement. For whatever reason, if players lose interest in the game and decide to no longer play, then those players never move beyond the stage of involvement. Once players get into a game enough to want to continue playing, then they have moved from involvement to the experiential stage of immersion into the gameplaying experience.

Essentially, it is a question of why players play games. Considering this question, many researchers study players and why some games "hold you for hours while other have you running back to the store to return them" (Saltzman, 27). But as Brian Sutton-Smith notes in *The Ambiguity of Play*, our combined theoretical definitions of play are filled with ambiguity (1). The many modes and methods of study offer up a plethora of proposed solutions. Focusing on this issue, Chris Crawford, in *The Art of Computer Game Design*, claims that the fundamental reason for playing a game is to learn (23). Assuming this basis, players need to learn how to play the game in order to continue playing. A game can and should teach players what they need to know and do in order to succeed. In essence, "play is how we learn" and move from one stage to the next in a game (Costikyan, "Where Stories End and Games Begin"). We are just beginning to understand how to most effectively use these new technologies to enhance our learning within games (Squires). But James Paul Gee notes that well designed games teach us how to play them through rhythmic, repeating structures that enable a player to master how to play the game ("Learning by Design"). Ideally, playing the game should teach players the gaming situation so they can move from involvement into immersion in the game.

Immersion

. . . With the girl, you are now attempting to escape the castle (or at least, just get out of the immediate area it seems, and move forward). Currently, you are in a large room with sunlight streaming through windows high above. Holding her hand, you explore the room together and discover a large crate that you can push over to a wall. Leaving her for a second, you climb up on the crate. From here you can jump and grab hold of a ledge and pull yourself up. The minute you do this, the camera pans and reveals the formation of a vibrating pool of black darkness below, out of which streams a group of oily, smoky black creatures with glowing white eyes. By now, you are familiar with what this entails. These creatures are after the girl. They will try and take her down into the pool of darkness. If they succeed, a dark explosion will end your life. The girl sees the creatures and frightened, she tries to flee them. Jumping down, you call to her and rush to protect her from these creatures. One of the creatures picks her up, carrying her back to the black pool. You manage to hit it with your stick, causing it to drop her. You take her hand and pull her away from them as they follow right behind you . . .

| Immersion - the second stage in the process of experiencing a game. At this point, players have become comfortable with the gameplay and are most likely going to continue playing. The game has become enjoyable as players now understand the way the game is played and have become more immersed in the world of the game and know how to interact within it. This stage lasts until the players reach a point where they either quit (and never experience the last stage) or they enter into an investment to successfully complete the game.

The gameplay of *Ico* is simple, yet meaningful. It's primarily an adventure game, a genre of games where players are explorers (Flynn). But it also has a bit of action thrown into the mix with some combat. When exploring, players have the ability to jump, climb, push and pull. The players can also pick up objects and throw them as well. For the numerous fights with the dark creatures, there are the young boy's hands, horns, a stick and later on, a sword. In some versions of the game there are two easter eggs, where players can get a mace, and even a light saber like the ones in Star Wars (GameFAQs). During the fights, players simply continue to hit the creatures until they all dissipate. It should be noted that the young boy can die in this game. This mostly occurs by falling to your death, or by having the creatures steal away with the girl into one of the dark vibrating pools. But players spend most of their time exploring the castle grounds, and solving environmental-based puzzles that enable them to explore more of the castle. These puzzles are varied in nature, but all are integrated into the architecture of castle surroundings. So players may have to move a block, or pull a lever, or climb a rope in order to get somewhere new.

The gameplay is enhanced by the expressive motion and sound design of the characters. The boy moves around not like a man, but like a young boy, very rough and tumble with yelps and yells. And the girl moves with a willowy grace and has

much more hesitant body movements as well as softer intonations. Granted, these are stereotypical, but they are effective at conveying a sense of the characters involved. And the dark creatures have their own jerky, darting, scary movements. During fights they work as a team, some will try to lead the boy away from the girl so others can get to her. Each character has unique ways of moving on screen, a visual representation that adds to the playing of the game.

One of the most engaging aspects of the game is the relationship between the young boy and the slightly older girl. They do not speak the same language, so players never understand what the girl is saying. In some versions of the game, players can win through the game, and then play the game again and see her dialogue translated (GameFAQs). When not holding hands, players can call out to the girl and she will try to come if she can. She is not as physically capable as the young boy, so players spend a lot of time helping her climb up ledges, and in some heart-stopping moments, catching her as she jumps across chasms. Also, she has some magical radiance within her to which the large portal idol doors react and open. So, without her accompaniment players wouldn't be able to proceed.

If players leave her alone and wander off for too long, the dark creatures will come and get her, effectively ending the game. She does call out in fear when the creatures get her, and she runs from them when they are around, but if players are too far away, they will lose the girl to the creatures. Also, as the game progresses, it seems that she trusts the young boy more and more and runs toward him when there is danger. And at times when players have problems in an area, she will give "hints" by looking at where players should go. Another meaningful gameplay element is the mechanic for saving your game progress. Players have to find little white, glowing benches. They then have to sit down and encourage the girl to do so as well, and they will both fall asleep, resting from the exertions of their adventure (and saving the progress of the game). To continue playing after a save, players move the analog stick on the controller, and the young boy wakes up, then rouses the girl and the game resumes. So players are encouraged in these ways to keep the girl with them and keep her safe. In fact, in some versions of the game, you can play with two players, one controls the boy and one controls the girl. It is a game where the young boy must cooperate with the girl throughout.

One of the most meaningful gameplay elements is the holding of the girl's hand. Players even get a small burst of force-feedback from the controller when the boy and girl join hands. This feedback is a subtle, yet effective way to show players that they now are holding hands and won't lose each other. It adds a meaningful and tactile dimension to the game that illustrates a very haptic part of a relationship, the trust, safety and comfort of holding hands.

. . . You seem to be stuck. You've wondered around for some time now and you can't quite figure out how to proceed. You are in another small courtyard, it seems to be a new part of the castle, so you feel a little lost. There just doesn't seem to be anything to do that could help. Finally, you notice that you can drop down the side of the courtyard wall, and climb out from around it, quickly climbing up the wall and back around to where you can help the girl climb up and join you . . .

The meaningful gameplay of *Ico* described above gives the game has a smooth learning curve in which players are enabled to successfully advance through the game (Crawford, 72). Sometimes, the stage of immersion can become a player's final experience with a game, but a good game will provide an experience in which players gradually get better as the game gets harder. If a game gets too hard, too confusing, or if it's too easy, too boring, or if it's just too long and seems never-ending, players may not finish. For these reasons and more, players can reach a point where they drop off the curve and lose their sense of immersion, becoming bored, frustrated and tired of playing the game. But if a game enables players to stay on course and continues to hold their attention, players will advance to a point where their immersion develops into an investment in which they truly want to successfully complete the game experience.

Investment

. . . You have been making your way through the castle for some time now. Even though it is an extremely large complex, you have begun to learn your way around the place. In a courtyard full of the black creatures, you run toward one of those special portals, sealed by the idol doors across the way. You have learned that these doors have a kinetic response to the girl, if she is near one, she develops a radiance, and the doors respond with a radiant burst and open. A useful side effect of this radiance is the elimination of all the black creatures in the immediate vicinity. Hand in hand, running across the courtyard, you race to the doors with the creatures all around. You successfully reach the doors and at her approach, the doors react, opening and irradiating the pursuing creatures. Through the door you enter a long outer walkway and the main gate lays open ahead of you – freedom! As you approach, the gate begins to close. Together you run for the gate. The girl falls behind, tripping and falling to the ground. Hesitating, with escape so near at hand, you turn and go back to the girl. Behind you, the gate closes, you crouch by the girl asking her if she is okay . . .

| Investment - the final stage in the experience of a game. At this point, players have fully mastered the gameplay and have complete comfort within the world itself. Now, the compelling goal is to actually finish the game successfully. Players are invested in the completion of the experience, an investment that will be satisfied with successfully attaining the end of the game. This stage lasts until the players complete their experience with the game. The ideal end result is a successful

completion of the game. But this final stage is slightly different from the preceding stages, as it can be an incomplete stage of experience. Players move from involvement to immersion, or you don't reach immersion at all. Players then move from immersion to investment, or they don't reach investment at all. Players finally reach investment, the stage in which they're playing to complete the game, or they finally quit without fulfilling their investment. In other words, players can reach a point where their experience with the game ends (they quit playing) without having successfully finished the game experience itself. So the players have an investment that does not pay off, they do not complete the game. In the end, the investment in a game experience is most gratifyingly satisfied with a successful completion.

Ideally, players finally get fully invested in a game. They are over the hump and think they see the light at the end of the tunnel. The game gives players the "illusion of winnability" which encourages them to strive for a successful ending (Crawford, 73). The game should set up situations in which players act to the end, or as Greg Costikyan puts it, games should require decision-making and management of resources in pursuit of a goal ("I have no Words..."). With the final goal in sight, players truly want to successfully complete the game, because it allows them to believe that they can. An interesting wrinkle of the investment stage can be the desire to prolong the gameplaying experience (Gibson). Players can reach the investment stage, and they are enjoying the game so much, that they want as close to a full return on the gameplaying experience as possible. Instead of rushing toward the completing the game, and quite possibly missing parts of the experience, players extend their play by attempting to completely explore everything the game allows them to experience. It seems that part of this urge comes from being so invested that players don't want the enjoyment of playing the game to end, so they prolong the game by trying to engage with 100% of the gameplaying experience, doing everything they can within the game.

In *Ico*, if players experience investment, then they will solve the final puzzles, and seemingly win. They will then have victory, and the girl, snatched away, as they face a final confrontation with the black magic queen. As mentioned above, this is a rather unique stage, and players can reach a final point where they cannot and do not reach a successful conclusion. They lose the game and quit trying to have a successful completion. But if they stay invested, they will eventually persevere and have a satisfying return of their investment in the game experience.

The investment and inspiration for this article comes from the on-going and seemingly ever-changing technological developments of the relatively new industry of videogames and also the wonderful and multi-faceted discussions and debates of the even newer field of game studies. It is an attempt to establish some ground on which to build a "reflective, questioning stance," or a "critical literacy" of games (Warnick, 6). The game industry has been making games for close to 40 years now,

and has developed some proven processes for the best production of games, as well as some given tenets as to what constitutes good game design. Even so, the never-ending technological advances keep enabling, and confusing, the possibility of making new innovative leaps in how games are designed and experienced. This continual cycle keeps the industry almost always on the verge of doing something that has never been done before. Thus, the game industry leans on its past while trying to divine its future.

Now, more academic attention is being to be paid to the medium of videogames. There have been many people studying games for years, but the field of game studies as a whole, is becoming more mainstream, and is being considered as a component of popular culture and media studies. Scholars are now discussing and debating how to best define and describe the phenomenon of playing videogames, and how to best ascertain the place videogames hold in our culture. Throughout this academic dialogue is a common thread of agreement; the desire to find a language, a system, a rubric, that best elucidates and interprets this experience. Some are looking back to other, older forms of interpretation and criticism on which to build, while others are looking to create completely new forms. Games are a remediation of other media (Bolter, 25). So like the game industry, academe has looked back, and around, as it looks forward to what games are becoming. This essay was an attempt to add to the ludology, the study of games, analyzing games as games (Frasca). And in relation to Aarseth's promotion of a methodology of game analysis, I believe these three interactive stages can help articulate connections between the study of game design, the observation of players, and the act of gameplay, aiding with the exploration of the experience of playing a game ("Play Research", 4).

I believe the experience of playing a game has these three stages; involvement, immersion, and investment. I have used these stages to describe the experience of playing the videogame *Ico*. But I think they can be used to effectively describe any game playing experience. By using these three stages as a way to discuss the experience of playing a game, you can look at how effectively a game engages players from their perspective. These stages can also be used as a way to look at how successful, or not, a game is for a variety of players, and can serve as a basis of exploration into why a game engages some players but not others. Analogous to Wayne Booth's rhetoric of fiction, there is also a rhetoric of games, a way in which games apply certain rhetorical devices to help the players through the game (105). Similarly, David Myers discusses game semiotics in an attempt to delineate the common elements of games ("Computer Game Semiotics"). And Michael Mateas and Ian Bogost have written on the importance of procedural literacy, or how the procedural, computational nature of how the playing experience is created. These three stages have more of a focus around a gaming literacy, an exploration of the gameplay and mechanics of a game (GameLab Institute of Play).

These stages are meant to serve as a semiotic framework within which to discuss a rhetoric of games; in other words, they are meant to help us talk about the gameplaying experience people have with games. So we could discuss how well the involvement works. Does it encourage new, casual players? Does it allow hardcore gamers quick access into an immersive experience? These stages could be conjoined with quantitative or qualitative information; demographics, focus groups, recorded playing sessions, etc., to help collect data that could be analyzed as to how people play games, and what factors determine if they complete a game or not, if it is fun or not (Fulton). For example, Aki Jarvinen, Satu Helio and Frans Mayra propose looking at analyzing games with a framework of four interrelated components of playability: functional, structural, audiovisual and social (Jarvinen, et al., 28). And Robin Hunicke, Marc LeBlanc and Robert Zubek developed the MDA (mechanics, dynamics, aesthetics) approach (Hunicke, et al.). Ian Bogost has developed the concept of “unit operations,” an analytical methodology in which the parts of an experience are viewed as various units that procedurally inter-relate together to create the experience as a whole (Unit Operations). Also, James Paul Gee has written about thirty-six learning principles associated with games, which illustrate how a game teaches us to play (What Video Games have to Teach Us about Learning and Literacy). Jesse Schell has discussed interest curves across experiences and the element tetrad (story, technology, game mechanic and aesthetic style) and in his book, The Art of Game Design, lists 100 lenses through which to consider a game’s design. And these are just some of the many concepts people are using to analyze games. Any of these perspectives could be used along with these three experiential stages to look at how a game is played. Others could use these perspectives to help develop a common rhetoric of games to use in the analysis of a gameplaying experience.

Considering an industry standpoint, these three experiential stages could serve a similar function from a different perspective. Henry Jenkins states game designers are “narrative architects” who set up situations in which players have experiences (Jenkins). The teams that make these games could keep in mind that these stages make up the playing experience, and use this “player empathy” with players’ experiences of a game to help make design decisions (Bates, 22). The stages could help game developers determine what players want and expect (Rouse, 8). They could architect their game design to try and insure that players experience each of these stages and complete the game, and they could help keep a focus on user-centered game design (Microsoft Game Studios). Game developers could use these stages as a way to include a range of players from casual to hardcore, or to focus in on a certain type of experience they would prefer a player have with their game. For example, by looking at involvement, developers could explore how to best get people from this stage and into immersion, designing the game experience to accommodate, facilitate and enable players to learn how to play the game, so that they go from the start of a game to becoming immersed in the experience.

Along with this, there are a variety of community-driven and industry-hosted websites that offer up tips and tricks to help players complete games (GameFAQs). These sites do not alter the fact that the game playing experience contains these three stages. Instead, they serve as a way in which to players can get help and learn enough about the game in order to transition from stage to stage on their way to a successful completion. Even so, I believe the developers don't intentionally make their games so impossible that people have to turn to outside sources in order to successfully complete a game. Instead, they strive to create compelling interactive experiences that engage players from start to finish. By keeping these three stages in mind, I think games could be designed to better engage and teach players, and give them a more satisfying and complete game playing experience.

I believe it is useful to consider games from a variety of perspectives. In doing so we can, as Marie-Laure Ryan notes, observe features that remain invisible from other perspectives (Narrative as Virtual Reality, 199). As Julian Kücklich notes, "a literary approach to interactive fiction that reflects the limitations of its critical terminology can provide valuable insights into these games' narrative, and semiotic, structure" (Kücklich). And Lindley and Eladhari discuss object-oriented storytelling as a way to explore the logic in a game ("Causal Normalisation"). So, narratology has illustrated some components of games. Concurrently, ludology is developing and can be applied to other media, revealing features from this new perspective. In fact, I think that these three stages might be useful beyond their application to games. I think these stages could be used in describing and discussing other forms of interactive experiences (for instance, theme park rides, net.art, interactive fiction, etc.). And I think that these experiences also engage us in unique ways that require us to formulate these new methods of investigation. Lev Manovich discusses how when we engage new media, we oscillate "between illusionary segments and interactive segments" that force us to "switch between different mental sets" demanding from us a "cognitive multitasking" that requires "intellectual problem solving, systematic experimentation, and the quick learning of new tasks" (The Language of New Media, 210). Indeed, games and other interactive media require people to assume different roles with varying degrees of control (Newman). Engaging with interactive media is a multi-faceted experience in which we input information, watch cut-scenes, and interactively play with the content. In the end, my hope is that this theoretical set of three experiential stages can help serve as an analytical focus around which discussions of our interpretations and analyses of games can become a part of the discussions of our design and development of games, helping to enhance the diversity and quality and sheer enjoyment to be found in playing games.

. . . You have destroyed the queen, and have been rescued from the imploding castle by a dark spirit, possibly of the girl, but you are not sure. You awake. You've washed ashore on a beach, alone, both horns torn from your head from the violent battle you seemed to have survived (or maybe this is heaven?) You explore the beach some, and see off in the distance - a body? Running across the sand, you come up on the girl, just above the line of the tide. You approach and she opens her eyes . . .

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“

*Reading is a continuous
process of creating
contingent meaning
from potential meaning.*

”

**JIM BIZZOCCHI
& THERESA TANENBAUM**

WELL READ: APPLYING CLOSE READING TECHNIQUES TO GAMEPLAY EXPERIENCES

Introduction

Close reading is a technique from literary theory that has evolved over the years since its early formulations by John Crowe Ransom and the other “New Critics” in the late 1930s and early 1940s. A close reading is a detailed examination, deconstruction, and analysis of a media text. It is the quintessential humanist methodology, born in the study of literature, and adapted to other media forms such as cinema studies.

Sheldon describes the paradox of criticism: the tension that comes from turning a critical lens on a well loved work until it is impossible to see it with innocent eyes.

The purpose was to see beyond the entertainment value each film possessed, to see the seams, to see how all the elements came together to create a unified entertainment experience. If you can get to the point where your favourite game no longer entertains you, you will have taken a crucial step toward understanding how it worked its magic. It can be a sad moment and an exhilarating one all at the same time. (Sheldon, 2004)

In this sense, close reading is a way of laying bare the faults and inconsistencies of a media artifact. However, close reading is at the same time a celebration of the many ways in which a text can create meaning. Through the act of close interrogation and explication, a theorist may use close reading to excavate previously hidden qualities of a media artifact.

In this article we consider several of the unique challenges in reading digital texts and describe close reading methodologies that are compatible with gameplay experiences. These close reading methodologies are used to reveal insights into the design of games, and also into the variety of pleasures afforded by game experience, such as imagination, emotion, kinesthetic engagement, narrative immersion, and ludic flow.

Game and New Media studies have long drawn on interpretive and critical techniques from humanities scholarship, under the guises of textual analysis, structural analysis, autoethnography, and many other names. Aarseth drew on the vocabulary and techniques of literary theory for some of his early work on nonlinear texts (Aarseth, 1994), which in turn led to his seminal work on ergodic literature in *Cybertext* (Aarseth, 1997). Aarseth evaluated how traditional literary notions broke down when confronted with procedural and nonlinear texts, and proposed extending literary theory in ways that allowed it to account for new media texts. Van Looy and Baetens collected a number of close readings that analyzed various forms of electronic literature (Van Looy & Baetens, 2003). These readings address challenges of the mutable and multilineal text that also apply in the close reading of electronic games. James Gee turned to “New Literacy Studies” as part of his argument on games and learning, drawing on theories of reading and context to explicate gameplay experiences (Gee, 2007). Janet Murray drew on literary theory to construct her theoretical framework for participatory narratives in *Hamelet on the Holodeck* (Murray, 1997), and Brenda Laurel situated her work on interactive narrative in a context of dramatic theory in *Computers as Theatre* (Laurel, 1993). More recently, Ian Bogost proposed a theory of “unit operations” for games grounded in a convergence of literary theory and object-oriented programming theory (Bogost, 2006).

Interestingly, while the theories of game criticism draw broadly on literary theories, none of them undertake to closely explore the nuts and bolts of humanities practice and critical reading as they apply to games scholarship. Mia Consalvo and Nathan Dutton describe an analysis technique that is very similar to close reading, however they don’t situate it within a broader methodological tradition (Consalvo & Dutton, 2006). As a result, their “methodological toolkit for the qualitative study of games” does not present a comprehensive analytical technique for games researchers. However, the four areas of analysis they propose – Object Inventory, Interface Study, Interaction Map, and Gameplay Log – constitute a set of possible analytical lenses for studying games. This is an important outcome - we maintain that the construction of analytical lenses is a crucial component of a rigorous close reading methodology.

In one of the few games studies works to engage literary theory for games at the methodological level, Dianne Carr proposes an approach to game studies rooted in three distinct (but interlocking) forms of criticism: structural analysis, textual analysis, and inter-textual analysis (Carr, 2009). Of these techniques, she writes:

The point of using such models is that it allows for specificity. This is necessary given the confusion in the field as to what constitutes ‘textual analysis’ and hence its limitations. According to textual analysis as conceptualized here, meaning emerges when a text is actualized or practiced (read in the case of a novel; played in the case of a game) (Carr, 2009).

Carr's formulation of textual analysis as it pertains to games parallels much of our own work on close reading, and yet, like the other writers applying literary theory to the study of games, she resists drawing directly on the theory surrounding close reading. We regard this lack of a suitably theorised close reading methodology as a critical gap in games criticism. In the first section of this chapter we consider close reading in a literary context, before exploring its utility as a technique for the analysis of games.

Theories of Reading

Within literary theory, the act of reading is a complex phenomenon—a gateway into a rich combination of experience, meaning making, and interpretation. Reading may be regarded as an epistemological act, in which new knowledge bubbles to the surface before being stirred back into the potentialities of future readings. Reading is a continuous process of creating contingent meaning from potential meaning. Discussions of the theory of reading often come across as mysticism and superstition, and not without cause: in a very real sense reading is a magical act of imagination and creation by which a human mind transforms symbolic and representational input into meaningful ideation. Julian Wolfreys uses the metaphor of the *haruspex* for the reader (*haruspicy* being the divinatory practice of interpreting the entrails of sacrificed animals in order to predict the future), thus treating the reading of a text as an act of precognition.

Reading, therefore, is always—always already—connected with some mystical or perhaps telepathic possibility, with the desire to translate in ways which are not reducible to matters of logic or rationality, so as to make sense of events or, in some other fashion, to make sense of events yet to occur...All subsequent acts of reading therefore seek to retrace the traceries of veins, arteries, vessels, and other means of communicative tissue in the form of textile, textured exegesis. And that we term this exegesis suggests, through its classical form, that we wish to rationalise and distance ourselves from the moment of psychic consumption. The grotesque, corporeal aspect of reading is cleaned up, the act aestheticised, given a refiguration in a clean light. Yet in reading there is still, always, regurgitation. In our acts of reading, research comes back via the bodily ruins we call citations.(Wolfreys, 2000)

The metaphors used by Wolfreys here invoke an understanding of reading as a destructive act as well as a creative one. Reading involves vivisectioning texts, in order to trace their workings through a practice of “textured exegesis”. The notion of reading as exegesis is a potent and a relevant one: exegesis involves the critical explanation or interpretation of a text, and is often connected to the reading of a spiritual or theological work. Exegesis is connected to hermeneutics, which also deals with the methodological principles of the interpretation and reinterpretation

of texts, and which arose initially in the study of religious texts. One place that this is perhaps best exemplified is in the practice of reading and interpreting the Torah in Jewish tradition. Judaism has developed a tradition of exegetical discourse surrounding the Torah known as the Talmud, in which Rabbis and scholars interpret and reinterpret the text in an ongoing discussion that is second only to the Torah itself in importance within the religion.

At the heart of these complementary philosophies of the act of reading is the notion of reading to make a momentary meaning, and then of reading again to make a new meaning, and then of reading again, to make another meaning, in a cycle that can not, and should not, be completed or closed. This hermeneutic circle denies the possibility of reaching a final “true” reading, which is indeed counter to the act of reading. Reading is present tense and continuous; to say something has been “read” is to suggest that it has been consumed and that the possibility of meaning creation has been exhausted.

The bad reader (whom Derrida admits to loving, by the way) is the one who rushes with indecent, even journalistic haste, to decision, to decide on a reading, and thereby have done with reading, once and for all. Bearing this in mind, and seeking all the while to avoid becoming the bad reader, to have the last word or to close the book on reading, how do we read so as to avoid having read? How do we learn to read patiently, rigorously, in such a manner that we know all the while that we have not yet read, we have not yet done (with) reading...all we can do is practise acts of strong reading which will be, inevitably, misreading. (Wolfe, 2000)

One example of this process of knowledge creation may be read in Roland Barthes' 1970 reading of Honore de Balzac's *Sarrazine*. In *S/Z* Barthes treats the original short story as a terrain to be traversed in explicit detail, resulting in what has been described as the “most sustained yet pulverized meditation on *reading*...in all of Western critical literature” (Barthes, 1970) In *S/Z*, Barthes identifies five distinct codes, or groupings, of textual signifiers, the Hermeneutic, Semantic, Proairetic, Cultural, and Symbolic.

Each code is one of the forces that can take over the text (of which the text is the network), one of the voices out of which the text is woven. Alongside each utterance, one might say that off-stage voices can be heard: they are the codes: in their interweaving, these voices (whose origin is “lost” in the vast perspective of the already-written) de-originate the utterance: the convergence of the voices (of the codes) becomes writing, a stereographic space where the five codes, the five voices, intersect... (Barthes, 1970)

Barthes is arguing for an understanding of a text as a multi-voice, interpreted experience, where denotational meaning is continually fracturing under the lens of connotational meaning. Diane Carr draws on Barthes' codes in her critique of Resident Evil 4, summarizing them as:

Hermeneutic code – which relates to narrative enigma, questions posed, and truths revealed

Proairectic code – the code of actions, logical sequence, causality

Semic code – connotations, themes

Symbolic code – mythic antitheses and binaries

Referential code – cultural codes, values (Carr, 2009)

We can understand each of Barthes' codes as a distinct "analytical lens" which allows the reader to partially isolate a particular facet of a text. We return to this notion of analytical lenses in section 5.3. Perhaps more importantly, Barthes demonstrates in S/Z how a close reading of a text can reveal important details, not only about that specific text, but about the poetics of a medium writ large. Carr acknowledges that applying these codes to games is not without its difficulty. She asks:

Would the code of enigma relate to mysteries presented in the back-story, as well as the enigmas (challenges, puzzles, delays, and obstructions) presented by the game's ludic elements? What of the enigmas that are the result of player error, such as getting lost? Would the proairectic code refer to the actions in the back-story, the actions called for by the game, or the actions taken by the player – or all of these? Would accidental or unsuccessful actions differ from deliberate actions? (Carr, 2009)

To help to grapple with the issues raised by the associative context in which a game is played, and in particular the relationship between the connotations embedded in the text of the games, and the associations made by the player, Carr turns to Bennet and Woollacott's work on inter-textuality. Inter-textuality, in this case, refers to "the social organizations of the relations between texts within specific conditions of reading" Bennet and Woollacott, as cited in (Carr, 2009). Of their work, she writes:

The authors argue that texts cannot be understood in isolation, but rather than proposing a straight switch to audience studies on that basis, they consider aspects of the relationship between text and user, finding that the reading or viewing subject arrives at a text with a set of 'reading formations' in place, and these will influence if (or which) aspects of that text will have resonance for that subject (Carr, 2009).

This notion of reading formations is a valuable bridge between theories of textuality that focus solely on the text or solely on the reader. Close reading, thus, is a process-driven practice rather than a product-driven one. Knowledge which emerges through this methodology is situated within the particulars of each reading, in context of all other readings. Interestingly, the need to understand a reading within its own context did not extend to a need to understand the text which was being read within its authorial and cultural context, at least not at the methodology's onset. New Criticism introduced a form of reading that placed all critical emphasis on the text itself, rather than contextual elements of the text, such as historical context and authorial intent. As James Inman writes:

Although the concept of close reading may be said to have broad historical roots, its rise to prominence clearly came in the mid-20th century American academy with the emergence of the New Critical school of textual interpretation...The New Critical approach suggests more or less that text may be analyzed as an object itself and, thus, that it is best understood in terms of its central elements, like symbol and image—these are, so the thinking goes, what holds any text together. The identification of these elements, then, is close reading, and the implicit suggestion is that history, economy, and other human conditions are less important in any interpretive transaction. (Inman, 2003)

The technique of close reading changed as literary theory grew and evolved. In more recent times, close reading has been turned back towards an investigation of the text in context, with approaches that draw on feminist theory, Marxist criticism, and post-colonialism. These approaches take a particular perspective or filter and apply it to a text, looking at specific themes within the text such as the treatment of women or of ethnic minorities.

With the additional incorporation of the techniques of deconstructionism, developed by Jacques Derrida, close reading once again becomes hermeneutic exegesis, but a secularised hermeneutics.

In essence, deconstructionists practice close reading by searching for and locating moments at which a text appears to contradict itself; many times, this questioning and dismantling involves the problematizing of binaries, such as the man-nature and self-other; or even something more seemingly simplistic like large-small and outside-inside. (Inman, 2003)

This perspective on close reading returns us to Lee Sheldon's observation that achieving a critical awareness of a media object can be both "sad and exhilarating." (Sheldon, 2004) Sheldon's remark describes how he was trained to

perform close readings, and is indicative of a further broadening of the methodology into a technique for the analysis and critique of film. We believe that anyone who has undertaken a close reading of a work is familiar with this feeling of expansive loss that we encounter when delving into a loved work. The sadness that Sheldon describes comes from a change in the relationship to the text, and from a loss of innocence that prevents it from working its magic in the same way that it did before it was laid bare through the close reading process. However, even as the naive pleasure of the unexamined text recedes, there is an exhilaration that comes from learning how a text casts its spell. In section 6.2 we will discuss in greater detail how this occurred in our process of close reading Oblivion.

Textuality and Digital Media

As games and new media become more prominent in our culture we are presented with an opportunity to further expand close reading as a methodology, which first requires expanding our notion of what constitutes a text. A text, in the most traditional sense, is written words on a page. In theatre studies, the term text is often used to refer to the scripted and spoken dialogue, as distinct from the performances of the actors, or the movements of the camera. In order to perform a close reading of a digital media artifact such as a game or a piece of new media art we must first consider how these forms might be considered texts to be read, and what—if any—differences exist between novelistic and filmic texts and interactive digital texts.

Medium, message, and poetics

Each medium privileges certain types of communication, as observed by Harold Innis in the 1950s, and extended by his student Marshal McLuhan in the famous, or perhaps infamous, phrase, “the medium is the message”. (Innis, 1991; McLuhan, 1995) This is consistent with that facet of literary theory that has been concerned with the formal aspects of a text.

If we approach media from a formalist perspective, then it seems that new digital media technologies must be treated differently from old media technologies, in the sense that the form varies wildly with the introduction of computational mediation. However, work has been done that supports the possibility of extending the notion of textuality to media technology, even if the narrative content of some digital media never manifests as literal, written words on a page or as dialogue in the mouth of actors.

When close readings are performed, they are not performed in an observational vacuum. The scholar-reader brings her own set of theoretical issues and observational lenses to bear in the analytical process. These lenses were originally

based in literary traditions, but later came to include the traditions of other media, as well as concerns drawn from the broad tide of cultural studies. As discussed above, close readings were used in the analysis of texts drawn from a variety of media, and the analytical perspectives were broadened to include feminist theory, Marxist criticism, and post-colonialist analysis—among others.

This broadening was—and still is—critically important, but the perspective in our work has a narrower focus. Our interest lies in understanding the development of form—the poetics—in emergent media. According to Bertens, narrative formalism focuses on structure (form) over content (meaning), and is thus consistent with the media scholarship advanced by McLuhan and Innis. (Bertens, 2008)

Winthrop-Young has a more nuanced argument, claiming that there is a relationship between meaning and form that he frames as a relationship between narrative and media technology. Where McLuhan argues for the primacy of medium over content, Winthrop-Young suggests that both exist in a reciprocal relationship, arguing that:

1. Narrative is a media technology;
2. Narratives depend on media technology;
3. Narratives deal with media technology, particularly their own. (Winthrop-Young, 1997)

Winthrop-Young uses media technology as a broad term that positions narrative as a cultural tool, one that is instantiated and inflected across a range of “hardware” from cuneiform tablets to computer screens. We suggest that his use of the word “narrative” in this argument can also be understood as a shorthand for the broader notion of “content” or “message”. His positioning of narrative (message) in an overlapping relationship with a specific media technology (medium) pushes against a binary division of form from content. McLuhan holds that the medium is as salient to the experience as the message which it communicates, if not more so. Winthrop-Young leads us to see the dynamic relationship that binds the two.

What does it mean for something to be a text, then, from this perspective? To describe a text as words on a page or as the lines spoken by characters in a film is to describe the medium of communication only. If medium and message are so entangled, then textuality must be likewise entangled, not just in the apparatus for communication but also within the message which is being communicated. Thus, a text might be understood as a gestalt of medium and message.

Our claim is that the nexus for this reciprocal relationship is found in the design of each work. A creator’s design decisions instantiate her content within the form of a particular medium in order to afford the user experience that she intends. This specific engagement with the form, design, content, and experience of an individual

work is at the same time an engagement with the general form and the overall design dynamics of the chosen medium. Aristotle’s seminal work “Poetics” bears witness to this connection. In modern terms, Aristotle “reverse engineered” the poetics—the design principles—of Greek tragedies through his own close readings of its classic works (Aristotle, 1951).

This process of understanding poetics and form through deep reading and analysis is particularly useful during moments of media transition and emergence. Cavell argues that a medium begins to exist when it is instantiated by concrete works, and that it has no existence that is independent of these works (Cavell, 1979). In order to fully understand a medium, we need to have a deep understanding of how it functions in praxis. Henry Jenkins argues that for new media such as video games, serious critical and scholarly analysis is a vehicle for the maturation of the medium, for the training of its practitioners, and for the education of its audience (Jenkins, 2000).

Digital Humanities

Winthrop-Young’s contributions to the broadening of the notion of textuality coincided with a growing scholarly interest in digital media, in particular Murray’s *Hamlet on the Holodeck* (Murray, 1997) and Bolter and Grusin’s *Remediation* (Bolter & Grusin, 1999), and is indicative of a movement to adapt traditional humanities methodologies for use in the study of new media. In his essay on *Electronic Texts and Close Reading*, Inman proposes several key consequences of the close reading of digital media, which he derives from a set of collaborative close readings of web pages, held in an online chat room among fellow scholars and other participants. He writes:

- Access matters, both in the way readers physically encounter electronic texts and in how they function within various discourse evident.
- Close readings are social in nature.
- Reading is as much about the “shape of the page” as it is about any individual elements in a page.

Multimedia, like graphics and audio files, may draw significant attention from close readers, whether intended for such scrutinization or not.
(Inman, 2003)

By performing readings in a collaborative environment, he explores the ways in which the methodology of close reading may be shared across multiple participants and perspectives. He also highlights some of the particularities of reading a digital artifact—in this case web pages. His assumptions about the textuality of the sites

extend to the tangible presence of “multimedia” artifacts as well as less tangible aspects of the site design such as layout and colour. Inman proffers the following explication of the relationship between close reading of traditional texts, and close reading of electronic media:

The brief conclusion I offer is to remind readers that the contemporary close analysis of electronic texts intersects with print-based close reading practices, giving the two a rich and diverse shared tradition, not erasing either from disciplinary consciousness or memory. More, the two are mutually informing. An individual who has performed close analyses of both print and electronic texts will be a much different reader than some who has only done one or the other; I strongly advocate that everyone finds value in both (Inman, 2003).

Within the canonical work of Interactive Narrative studies and New Media theory there is plenty of evidence of hybrid readings that draw on more traditional narrative texts in order to explicate digital media. For instance, Janet Murray, author of *Hamlet on the Holodeck*, has a background in Victorian era literature. Lev Manovich, author of *The Language of New Media*, is a scholar of film in addition to being a classically trained artist and graphics programmer. Both of these authors use previous media as touchstones for their discussion of the emergent digital forms. Murray uses the metaphor of the Holodeck from the TV show *Star Trek* as her prototypical future media experience, but she also often turns to her roots in literature to describe her vision of the future, dedicating lengthy discussions to the implications of the lives and writings of the Bronte siblings. (Murray, 1997) Manovich uses Russian filmmaker Dziga Vertov’s *Man with the Movie Camera* to guide his discussion of new media forms. (Manovich, 2001) Marie-Laure Ryan structures her book *Narrative as Virtual Reality with framing examples from both traditional linear fiction, and more recent procedural texts including Neal Stephenson’s The Diamond Age and Baudelaire’s Artificial Paradises* (Ryan, 2001). While these works do not devote very much discussion to the epistemological stance of the authors, the practice of close reading can be observed at the heart of their analyses.

Challenges for Reading Digital Media

The close-reading of even a simple non-digital work is a highly interpretative process. Careful attention to fine details can cause the analysis of relatively small texts to seem cumbersome and unwieldy. Audiovisual media and digital media like film and video games add a complexity to the close reading process because of the necessity to simultaneously read across several modalities of communication. Interactive digital media, such as games, further complexify this process due to

three medium specific factors that must be grappled with in any reading. Interactive digital media in general, and digital games in particular, are challenging to read due to their indeterminate and shifting natures, their size, and the inherent difficulties of engaging with the medium which are built into them. In this section we consider each of these challenges to reading digital media.

Indeterminacy

New media and games suffer from a certain degree of indeterminacy: one cannot guarantee that two readers will encounter the same media assets while interacting with a game, or that they will experience them in the same order. Nor can one guarantee that they will observe and attend to the same details of the experience. In traditional literary discourse, the text is a fixed point to which the critic may safely refer.⁵⁹ Digitally mediated texts, on the other hand, have the potential to shift aspects of their form, making it problematic to refer back to any element of a reading as representative of a singular, unified text. This may take the form of changing the ordering of a reading, as is the case in hypertext fiction, or it might take the form of traversing a virtual environment in a different way on different readings. In a digital text, the reading must be able to account for the indeterminate nature of the experience. This is further exacerbated in games where players are often forced to choose between multiple exclusive paths without the option of backtracking to see the other potential outcome. This indeterminacy is a different phenomenon from the notion of shifting interpretations and readings of the same content discussed in the above section. Rather, the instability of digital texts is rooted in an explicit and literal restructuring of the content and presentation of the experience in conjunction with a shifting set of reader interpretations.

The procedural nature of digital environments, coupled with the unpredictability of the reader conspires to transform digital texts into “moving targets”. In single-player games, the emergence of new experiences occurs within the relationship of the player and the simulation. In multi-player games this is extended by the relationship of the players to each-other. In Massively Multiplayer Online Role Playing Games (MMORPGs) such as World of Warcraft the presence of other people within the digital environment introduces the potential for emergent social dynamics far beyond what any author might have anticipated. In more open ended Virtual Worlds (VWs) this is even more pronounced, especially in environments such as Second Life where user created content is constantly reshaping the environment and its inhabitants. Close reading of these digital spaces enters into a difficult gray area in which “text” and “world” intertwine, perhaps because these worlds exist at an intersection of Humanities and Social Sciences. In VWs close readings become more like autoethnography or participant observation.

Scope

As if this were not already problematic enough, the very size of many of these texts often defies rigorous explication, with some computer Role Playing Games (RPGs) requiring upwards of 400 hours of gameplay time to traverse the narrative from beginning to end (compared to the time it takes to watch a film or read a novel). In RPGs, one of the measures of a game's quality is the number of hours of play afforded. One of the best examples this can be found in Grand Theft Auto: San Andreas (GTA:SA). GTA:SA is one of a growing genre known as "sandbox" games, in which the player is deposited in a large seamless environment with only a loose mission framework to govern her actions – a framework which she may disregard entirely if so inclined. In a sandbox game, the size of the world substantially impacts the game experience, and thus as these games have evolved, so too has the scope of their environments. GTA:SA takes place in an environment that is 6km by 6km, or 36 million square meters – a measurement that excludes the interior environments in the game (GameSpot 2005). GTA:SA doesn't just include a single urban environment, like its predecessors: it includes three distinct "cities" separated by rural environments and small towns, bordered on one side by miles of ocean. In a physical environment of this size, it can take a reader many weeks of play to begin to feel as if she has fully apprehended it.

Often in games it is possible and even necessary to replay the game several times in order to experience all of the possible available content (such as variations to playstyles across different character types, or variations to the game narrative that are contingent upon different player choices). Replayability is also one of the ways that games measure success: many games often intentionally limit the player's ability to experience everything the first time through in order to encourage multiple playings. Furthermore, many games provide only minimal "bookmarking" ability, which limits the reader's ability to return to previous points in the gameplay and explore them fully. Some games, such as Fable II, maintain only a single, automatically updating, savegame of the player's progress, thus preventing players from backtracking to previous points in the game's story. By contrast, it is relatively easy to return to a section of interest in a novel or film and examine it closely. All of these factors add up to an artifact that requires a substantially larger time commitment in order to read and which problematizes the process of reading closely.

Difficulty

The final factor that sets digital artifacts apart from older media is the skill level of the reader, and the difficulty of the experience. Games require highly specialized skills ranging from hand-eye coordination in order to manipulate the controller to complex

modelling of the interrelated dynamics of a game system in order to understand the impact of player actions in the game world. A player who is busy struggling with the controls and mechanics of a game is likely to attend to very different details than a player for whom the interaction has become automatic. Similarly, a player who is immersed in the interplay of challenge and success in a game (Csikszentmihalyi, 1990) will attend to different details than a player who has grown so skilled as to render the challenges of the game trivial.

One game where this is particularly evident is Rock Band. In Rock Band players must develop a different set of reflexes and muscle memory than those needed to succeed at many other games, due to the novelty of the three different instrument controllers. While first grappling with these new controllers, it is difficult to pay attention to other aspects of the game, such as the performances of the digital band in the background. As a player grows more and more comfortable with the interface, and with the routines, more and more attention is freed up to attend to the other visuals on the screen, as well as the performative embodiment of the musician that the game supports outside of the screen. At conferences and parties we have observed players grow more physically engaged in their performance as they get better at the basic interactions, jumping up and down and dancing to the music: as the skill levels of the players changes, so too does the core experience.

Readings of games must contend with the changing skill level of a player over time. Careful repeated play, such as that practiced in a close reading of a game, has an inherent danger of distancing the player from the pleasures of the game. In order to address this, a reader of games must learn to oscillate between a position of critical distance and one of immediate pleasure.

Successful Oscillation: Techniques for Reading Games

A final, and more subtle, complication to the technique of close reading in games is the stance of the scholar with respect to her own reception of the work. Close-reading traditionally entails a deep immersion into the experience of a work. From an epistemological standpoint, it relies on the highly idiosyncratic insights of the individual theorist in order to explicate nuances of the work that might not be apparent to the average reader. In the context of game studies, the strength of the method is that the analysis can be deeply grounded in the defining core of the medium—the experience of gameplay. We propose that for this reading to remain true to this play experience there must be room for the theorist to engage the game in an authentic manner, while still generating close observations and insights. By “authentic manner” we mean that it is not sufficient for a scholar to engage a game solely as a critic: he must also engage the game as a player or a “gamer” playing the game on its own terms.

In order to undertake a close reading, then, the scholar assumes a specific dual stance in relationship to the play. This type of reading involves a form of role-play on the part of the scholar, who must maintain two different levels of cognitive attention.

On one level, the scholar enacts the play of a naïve gamer—one who is encountering the game as a fresh participant. This perspective is open to all nuances of the experience and ready to absorb the game without preconceptions. In Bolter and Grusin's terms, she must commit to a complete state of immediacy—unconditional surrender to the experience (Bolter & Grusin, 1999).

At the same time, the scholar is—and must be—distanced from the experience. She must bring an objectivity to the observation of her own experience and faithfully remember and record a wide range of critical details. From this perspective, she plays the game in a state of hypermediation—an awareness of the fact of mediation.

The close-reading scholar must successfully oscillate between these two states in order to build the necessary data set of reliable, consistent, and comprehensive observations. This paper outlines examples of specific observational strategies that make this dialectical process more effective for the identification and collection of relevant gameplay data.

The Imagined Naïve Reader

Current methodological trends in game studies often emphasize empirical observation of game playing situations. (Gardner, 2003) While this approach can provide much information about the situation in which people play games, it does not have much traction in the analysis of the games themselves. The observational approach treats the game experience as a series of social and mechanical interactions to be observed and measured, rather than as a meaningful experience to be interpreted. While this approach may have the advantage of being more scientifically verifiable, it is only able to evaluate the surface layer of the play experience. In our approach to close reading, we are able to generate much more nuanced and deep observations, but at the potential cost of empirical objectivity. One of the strengths of this method is a reliance on interpretation; however our ultimate goal is to create a play experience that is authentic enough to give rise to valuable insight and interpretation. One approach to this issue is for the theorist to construct a phenomenological study of an imaginary reader or interactor. Bizzocchi describes his process of reading as role-play in his analysis of Ceremony of Innocence, a “lost masterpiece” of multimedia art.

My observations form the basis for the Close Reading sections that follow. The observations can be treated as a data set built through multiple reviews of the books and the puzzles, constant referencing and modification of my notes, and repeated screenings of a videotape of the cut sequences. Despite the considerable amount of information I had at my disposal, I tried to write the descriptive sequences of the close reading sections as if they represented the perspective of a naïve interactor. The naïve interactor whose voice I created is someone who has not read the books, and is playing the game for the first time. These descriptive sequences therefore represent a constructed phenomenology. It is completely based on my own experience, but it approximates the experience of a different and theoretical interactor. This theoretical interactor is far less informed than I was, but has considerable power to observe and comment in detail on his own reactions to the event. (Bizzocchi, 2001)

By creating an imagined reader, a theorist is able to address issues of variability and of perspective in a close reading of a digital text. This theoretical interactor is imagined as an individual who has not yet encountered the text, and who is interacting with the digital environment as someone exploring a new experience. This naïve interactor has the freedom to shift his perspective from a broad evaluation of the experience to a narrow look at details that compel him. By imagining the reading from the point of view of a naïve interactor, theorists can avoid the temptation to shift perspective away from the experience of reading and toward mechanical details of the medium, except where they are of relevance to the experience.

There is a close connection between this notion of the imagined naïve reader and Janet Murray's criteria for immersion in media experiences. Murray constructs immersion as a cognitive act in which the reader not only suspends her disbelief, but in fact actively creates belief in the fiction of the experience. (Murray, 1997) This active creation of belief permits the readers to build a relationship with media experiences which is immediate while remaining firmly within a fictional reality. Murray's notion of immersion does not propose that the reader forget that she is engaged in a fictional experience, but instead allows for this knowledge to be safely held to one side. In other words, the process of genuine immersion is supported by the exercise of a powerful imaginative and creative faculty. In this way it is quite similar to the process of role-playing that we advocate for the close-reading game scholar.

Close reading using this approach remains a phenomenological investigation of the critic's reading process, but as Bizzocchi points out, it is a constructed phenomenology; it is a reading of a performative experience. It represents a single reader's experience of an artifact that can conceivably generate an infinitely varied set of possible experiences and readings.

A Performed Player Stereotype

In addition to the generic stance of the imagined naïve reader, we have also found it valuable to construct more specific fictional readings, as seen through the eyes of imagined player types. Close reading has grown and changed much in the years since its original formulation. One thing that distinguishes its current form from previous incarnations is the post-modern emphasis on the explication of the bias of the reader. Close readings are no longer performed solely under the guise of presenting a neutral, objective view of a work. Instead, practitioners of close reading often select a particular perspective from which to read; thus we see feminist readings or Marxist readings of texts. Similarly, when reading games closely, it is advantageous to explicate the particular play style or bias being brought to bear.

While it is possible to imagine a player who has never encountered the game and is approaching it from a naive or neutral perspective, research in game studies has long acknowledged that different players have different preferred ways of playing the same games. This notion of player types, or play styles, has been formalized in a number of different systems. Richard Bartle divided players into four primary types—killers, socializers, explorers, and achievers—by observing common player behaviours in text based MUDs. (Bartle, 1996) Batemen and Boon used Meyers Briggs typologies from psychology to identify a number of different playstyle preferences in game players. (Bateman & Boon, 2006) Craig Lindley surveys a number of player typologies, including one from vernacular theory for Live Action Role Playing games which divides players into dramatists, gamists, and simulationists. (Kim, 1998; Lindley, 2005)

To a theorist performing a close reading of games, what this means is that a neutral reading may not always capture the variety of possible play experiences. This is especially true for games which are targeted at specific gamer demographics. Much like the act of performing an imagined naive reader, reading with player stereotypes in mind requires theorists to role-play a particular type of imagined player. However, unlike the above technique, the goal is not to construct a neutral unbiased experience, but instead to construct a particular bias in order to discover a specific thing about the game play. This might mean subverting the ways in which the game is intended to be played, or it might mean acting within carefully constructed play constraints in order to experience a specific facet of the game's design.

Focusing Readings with Analytical Lenses

So far we have described techniques for *reading* games during the play experience, emphasising the shifting nature of the scholar's attention during play. After the play ends it falls to researchers to *make sense* of the reading. In the subsequent

analytical phase, the scholar steps back from immersion in *the experience*, instead becoming immersed in the *data set* of observational notes and the memory of the gameplay. The scholar is now a sleuth, sifting through the observational data in order to unriddle the salient facts and insights that best inform a deeper understanding of the game. In effect the close reading now becomes a process of using the experience to reverse-engineer the mechanisms and dynamics of the design. This often means having to sift through an unwieldy collect of notes, recordings, and observations, which can quickly threaten to overwhelm the researcher. One way to make this process more manageable is to use carefully constructed *analytical lenses* to constrain and direct the interpretations of the data.

Dianne Carr arrived at this notion, in her argument for textual analysis in games, writing:

It would be a mistake to categorize in-game elements as either structural or textual depending on their particular properties. It is more productive to regard each element in the game as potentially viewed through analytical lenses. Their interpretation will depend on the analytical lens employed (structural, textual, or inter-textual, for example). There is no reason to assume that one of these meanings would be definitive or dominant, although particular interpretations might be more or less likely or appropriate in different contexts. (Carr, 2009)

As discussed above, readers of games must grapple with media experiences that are often comprised of many hours of playtime. In order to make sense of the often vast amounts of data gathered during a close reading, it is often necessary to identify a specific aspect of the play to focus on. Isolating specific phenomena to read allows theorists to limit claims about the contribution of the reading. In the same way that a literary theorist might focus on the use of metaphor or imagery in a text, a game scholar may choose to focus on the dynamics of reward and motivation, or the believability of the game's non-player-characters. This constrains the types of analyses that any one reading may accomplish, allowing game scholars to fruitfully explicate smaller sections of gameplay experiences, rather than attempting to catalogue and evaluate the entirety of a game.

Choice of lens is idiosyncratic, often resulting from some combination of researcher expertise, preliminary early-stage insights, specific qualities of the game, and intended goal of the reading. The nature of the lens can and often does evolve during the process of the reading. As the scholar examines the work, fresh insights inform the process of analysis and modify the analytical tools. The dynamic between the reader, text and methodology is therefore an evolutionary process. Because of this, it is impractical - and perhaps counter-productive - to attempt any exhaustive survey of the possible analytical lenses available to game scholars. In the following examples we will consider some of the different lenses and perspectives used in our own work, to focus close readings of games.

Close Readings in Game Studies

Close reading is a methodology that is gaining traction in the game studies community. The first volume of *Well Played* provides a sampling of close readings of games, in which many of our reading strategies are evident. Drew Davidson writes that “this book is full of in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game...Video games are a complex medium that merits careful interpretation and insightful analysis”. (Davidson, 2009) Davidson proposes the concept of “well played” which he uses in two senses: to be skilled in the playing of and interpretation of games and to be skilled in the design and execution of games. Thus, Davidson’s book takes us to both playing experience and poetics. In keeping with this tradition we present two examples of close reading from our own work. In our first example, Bizzocchi describes his process of close reading in *Ceremony of Innocence*. In our second example, Tanenbaum describes her close reading of the video game *Oblivion*.

Bizzocchi’s Account: Close Reading in *Ceremony of Innocence*

I relied on close reading as the heart of my analysis of the design of *Ceremony of Innocence*. (Real World Multimedia, 1997) *Ceremony of Innocence* is a lost masterpiece—an interactive CD-Rom adaptation of Nick Bantock’s *Griffin & Sabine* Trilogy. The books are a love story told in a series of fifty-eight post cards and letters exchanged between the protagonists. Each book is an interactive experience in its own right, with pull-out letters and rich graphics, penmanship, and font choices that reflect the characters of the lovers, both of whom are graphic artists with visual styles as distinctive as their personalities. The interactive work retains the entire narrative structure, and all component media of the books. It adapts the visuals of the postcard graphics into fifty-eight separate interactive puzzles, each of which must be solved in order to hear the text on the reverse side.

I framed my scholarly engagement as a quest, the heart of which is the close reading of *Ceremony of Innocence*. For a close reading, the traveler becomes a hunter, a tracker seeking clues and signs in the details of the work. Based on his sharp look at the territory, the hunter *sketches* a map that *echoes* the journey. All of the paths in the map share a similar approach. Each looks for the trace of narrative concerns as instantiated in the work: plot, story, character, emotion, theme. Each concentrates on the nature of the instantiation: what is actually happening, what does it feel like, what is its role in the complete work? Finally, each looks for the relationship between interactive craft and narrative. These close readings become data, which forms the background and provides the raw material for the theoretical work of the thesis. (Bizzocchi, 2001)

I began my examination with a general idea of my starting direction. I knew I was interested in the relationship between gameplay and narrative, and I was determined to discover if there were substantive relationships between the interactive design—the poetics of the gameplay—and my experience of significant story variables. As I played the puzzles, I kept notes on my gameplay. The notes were organized into categories, so my notetaking took the form of populating a database. The database design was an active and iterative process; as my understanding of the game design grew stronger, I would add categories and subcategories. Where it seemed critical, I would return to earlier puzzles in order to add notes within the new database categories. I didn't fill every category for every puzzle, but my notes were reasonably inclusive and complete. My final database had the following four major categories: narrative, theme, gameplay, and media. I had between three and nine subcategories within each of these four major categories. In the process of compiling the data, I played the game through a number of complete and partial iterations.

My analysis addressed the question of a possible disjuncture between suspension of disbelief and the pleasure of story on the one hand, and the interactive media on the other hand. Active participation in the decision-making required for most interactive narrative experiences has the potential to interfere with the pleasure of surrendering one's self to deep immersion within a rich narrative storyworld. I identified two design directions in *Ceremony of Innocence* that helped to suture this disconnection. The first was a consistent attention to a pervasive "narrative texture" distributed across all the component media of the experience: graphics, font choice, music, sound effects, voice, and animations. Innumerable creative decision across these media components all helped to develop significant aspects of the overall narrative experience: character, storyworld, emotional context, or narrative theme.

The second direction I identified was the incorporation of narrative sensibility within the heart of the interactive experience—the game's interface. I identified two aspects of interface design directions that reinforced the experience of character. The first concerned the look of the interface. The cursor's visual design is transformed relatively frequently in *Ceremony*: sixteen cards/letters out of fifty-eight change the look of the cursor. I identified systematic differences in the look of the cursors associated with the two protagonists—Griffin and Sabine. Griffin's cursor iconography tends to be relatively prosaic: mammals, things, people. Sabine's are less grounded, more other-worldly: birds, insects, angels, familiars, a ghostly paintbrush. I argued that these design decisions reflected and amplified differences in character. Griffin's cursor designs evoked the ordinary, the mechanical, the limited. Sabine's visuals manifest an ethereal quality, such as the lightness of flight, as well as an exotic attraction. The graphic re-designs of the various cursors supported the respective character directions within the main narrative.

I then examined a more significant direction for the incorporation of narrative within the interface design. I reviewed the re-design, often to the point of subversion, of interface functionality. The standard conventions of the desktop GUI are based on a clear and transparent relationship between the hand on the mouse and the cursor on the screen. However, in many of the puzzles in *Ceremony of Innocence*, this transparent and reliable functionality has been subverted. In these cases, understanding the new relationship between the mouse and the cursor is part of the process of solving the interactive puzzle. The puzzles associated with Griffin tended to have more substantive and numerous subversions of the interface functionality than those associated with Sabine. I argued the resultant difficult and indirect nature of user action within these puzzles reflected the emotionally crippled, indecisive, and indirect nature of Griffin's own personality. This is a critical extension of narrative expression. Diegesis and mimesis are augmented with a third narrative mode – that of praxis. Story is developed not just in the telling, or the showing, but also in the doing.

My close reading revealed specific strategies for addressing and reducing disconnection between narrative pleasure and interactive decision-making: the infusion of “narrative texture” across all media channels of the interactive work and the incorporation of narrative sensibilities within both the look and the functionality of the interface design. In the next section we will see how Tanenbaum extended my work on narrative and interactivity in her own close reading of *Oblivion*.

Tanenbaum's Account: Close Reading in *Oblivion*

I performed a triad of interconnected close readings in the RPG computer game *Oblivion*. (Tanenbaum, 2008) The qualities that made *Oblivion* successful and groundbreaking—an enormous virtual world and a sophisticated AI system for controlling the behaviours of the NPCs—are also responsible for making the game extremely difficult to read. Prior to beginning my analysis, *Oblivion* had been one of my favourite games: I logged hundreds of hours of playtime in the fictional world of Tamriel prior to attempting to study it formally without feeling like I had experienced even a small portion of what the game had to offer. In order to render the reading manageable it was first necessary to construct a set of useful analytical lenses. I began with a list of ten lenses, addressing various aspects of the game. As the research progressed I narrowed this to the three analytical lenses which best allowed me to explicate some of the unique phenomena particular to *Oblivion*: Believability, Adaptivity, and Performativity. (Tanenbaum, 2008)

Each of these lenses required a slightly different approach to close reading. In assessing the game's *believability* I took a broad look at the behaviours of the NPCs in the world, breaking believability down into several sub-lenses, which were derived

from a survey of the theories of believability in psychology, artificial intelligence, and animation. This analytical lens allowed me to consider a wide range of ways in which the characters and world of *Oblivion* were believable (and unbelievable). The lens broke believability into three different dimensions, each of which was further decomposed into three sub-dimensions for a total of nine different aspects of believability. These included lenses that addressed the gameworld in ontological terms (such as the extent to which the characters and environments had material, conceptual and temporal realness), lenses that addressed the extent to which the game satisfied the internal expectations created by the fiction and the simulation as well as the external expectations I brought to the game as a player. I also looked at believability in terms of the causal consistency of phenomena within the world, such as character personalities, emotional responses, and response to changes in the world's internal model of the player character and narrative events over time. (Tanenbaum, 2008)

I alternated between time spent within the game world playing and exploring and time spent reflecting and writing on my experience of the game using my sub-lenses to isolate and identify these different aspects of character and storyworld believability in the game. For this reading, the act of oscillation happened between play and analysis: while playing I endeavoured to suspend my critical self seeking to engage the game from a place of observant immediacy. I processed these observations in the time immediately following play, writing out a narrative account of my time in the game world, much like an ethnographer reflecting on a day of observations. My experience of believability in *Oblivion* was a mixed one. On the one hand, there were plenty of brilliant and nuanced details in the gameworld's response to the actions that I took during my play: NPCs spread rumours of my exploits, regarding me with fear or awe depending on my choices, and the history of the world had a materiality that pervaded the experience from the design of the environments to the packaging of the game. On the other hand, there was an inescapable tension between the dynamic and emergent systems in the game world and the static embedded quests and stories which structured much of the play. The game's inability to reconcile my actions and choices with the various narrative threads running through the world was jarring, ultimately undermining my ability to suspend my disbelief. (Tanenbaum, 2008)

For my reading of *adaptivity* in *Oblivion* I took a very different approach. In a sense the entire game is a large adaptive system, which slowly transforms itself in response to the actions of the player. However, I was interested in looking at a particular instance of adaptation in the game. In the very beginning of the game, players are taken through an introductory dungeon which serves to train them in the basic skills needed for play, and to introduce the core narrative of the game. At the same time that this is happening, the game is also assisting the player in the creation of the character that she will play for the rest of the game. Some of this character

creation process is conventionally transparent: the player creates and customizes her avatar and selects some special abilities. Where *Oblivion*'s opening sequence becomes interesting is in the selection of a character "class", which will govern the playstyle of the character for the entire game. *Oblivion*'s primary adaptive conceit is that the game "observes" the actions of the player during the introductory dungeon and at the end recommends a character class based on its interpretation of her preferences. The first time I played the game I was blown away by this mechanic. "*How does the game know I am a bard?*" I thought. As I became more interested in player modelling techniques, I knew I wanted to open the "black box" of the opening sequence.

For this reading I needed a different approach. Instead of a broad and immediate playing of the game, I instead engaged in a series of performative playings of the opening sequence. Each playing represented a performance of a different "player type", covering the three primary playstyles in the game (Warrior, Thief, and Mage) as well as a number of more hybrid and idiosyncratic performances. My goal was to reverse-engineer the game's adaptive system within this carefully bounded opening sequence. For these readings I was in perpetual oscillation between the imagined player perspective which I was enacting and the analytical perspective that was constantly surfacing in order to record the details of the play as data. Not knowing which choices were being measured by the system I established a rigorous coding system for tracking every action that was evident and measurable to me as a player. These included what I termed as "Major Choices" such as the selection of race, gender, and special abilities, and also more "Minor Choices" such as fighting with a sword instead of an axe, using magic or stealth, and selecting different options in conversations. I also created a high-level narrative account of each of my play-sessions, describing the character that I had created, and the broad strokes of how I had conceived of that play/performance. For example, for my warrior run, I picked the Orc race for their strength, and endeavoured to charge headlong into danger, swinging the heaviest weapons I could find. For my Mage run I selected the magic-using Elf race, only used magic, and only wore the cloth robes. I used the game's internal feedback to track some quantitative data, such as skill point increases, tracking everything in a large spreadsheet, (Tanenbaum, 2008)

I was surprised by what I discovered. Certain choices, such as race and gender, had no impact on the class which the system recommended. In other cases, my actions were mismapped to the responses of the system (in the most extreme of these, playing the game in stealth mode prevented the system from being able to recommend any of the thief or rogue classes). The system also contained several playstyle biases which made playing the opening as a non-warrior an exercise in frustration. In opening the black box for my adaptivity reading I discovered only broken parts, and none of the magic that I had experienced during my naïve playthrough of the game.

My final interest in the game was to explore the play experience through the lens of *performativity*. My understanding of performativity in this context was as an intersubjective emergent process that arose from my first person experience of the world and its responses. For this reading I needed a system for understanding the game experience as a dialogue between myself as a performer-player and the game artefact as a co-performer. To do this I adopted a framework from improvisational theatre which broke performative knowledge into five different types including communication, playfulness, sedimentation, sensuality, and vulnerability (Lockford & Pelias, 2004). For this reading I neither role-played specific playstyles, nor did I attempt to play the game in a purely immediate space. Instead, I approached the game the way I would approach an actor in an improvisational scene, making dramatic offers (via actions within the game world) and accepting the offers made by the game. The first thing that made this problematic was the very limited means of communication which were available to me as a performer within the game: I could engage in a wide variety of violent actions, but had only a limited palette of non-violent options available, such as re-arranging objects in the world, or interrogating the inhabitants of the cities about quest related information. Of these options, only the violent actions elicited any meaningful response from the game world and the NPCs. In improvisational theatre terms, the game was “blocking” most of my dramatic offers.

While each of these readings was performed in a different way, using a different analytical lens, each one uncovered specific aspects of the game that provided insight into the other two phenomena, which in turn pointed to bigger issues in the game’s design. For example, the breakdown of believability across the emergent and the embedded content in *Oblivion* could be framed as a conflict between adaptive and non-adaptive components of the game. Likewise, the failure of the adaptive system to accurately incorporate player action into its player model could be seen as undermining the game’s believability both by violating the player’s external expectations, and through internal causal inconsistency. Finally, the game’s limited affordances for performative play arise from both the limitations of the game’s adaptive mechanisms and the tension between simulation and hard-coded content which underlie the issues with the game’s believability.

Conclusions

Close reading is an effective humanities-based methodology with a long pedigree. It is a versatile approach which has been applied under a variety of labels against a number of works across a variety of media. It can incorporate a range of analytical perspectives, and yield results in various conceptual directions. The close reading of the poetics of an individual work will reveal insights into its design and experience.

More substantively, close reading of the poetics of an exemplary work will yield deeper and more focused understandings of the nature of the medium itself. This is particularly useful in moments of media emergence and transition. Close reading of poetics can also directly align digital media scholarship with two cognate domains: artistic practice and engineering research. Bizzocchi's close reading of slow-motion in experimental cinema and video art informed his own art practice in the creation of ambient video art. This in turn revealed the need for engineering research in slow-motion video algorithms, carried out by his colleague Ben Youssef (Bizzocchi & Youssef, 2009; Youssef & Bizzocchi, 2008). In a technologically based medium, both creative insights and technical innovations are revealed by the focused attention to media design inherent in the practice of close reading poetics. Close reading is also methodologically versatile. It can be applied loosely and informally, or in a more careful and systematic fashion. Any of these variations can be useful in the service of a particular argument. However, we are particularly impressed with results that may be achieved through a more complete commitment to a rigorous and systematic use of this methodology.

In this chapter we have outlined a number of techniques for adapting close reading to games and interactive experiences. These include the construction of analytical lenses to focus and guide the reading, the performance of an imagined naive reader, and the construction of performative player stereotypes. Each of these techniques provides the scholar with a different tool for engaging in the oscillation needed to simultaneously read critically and authentically. We believe that our approach demonstrates the value of a rigorous formalized system for reflective practice in games.

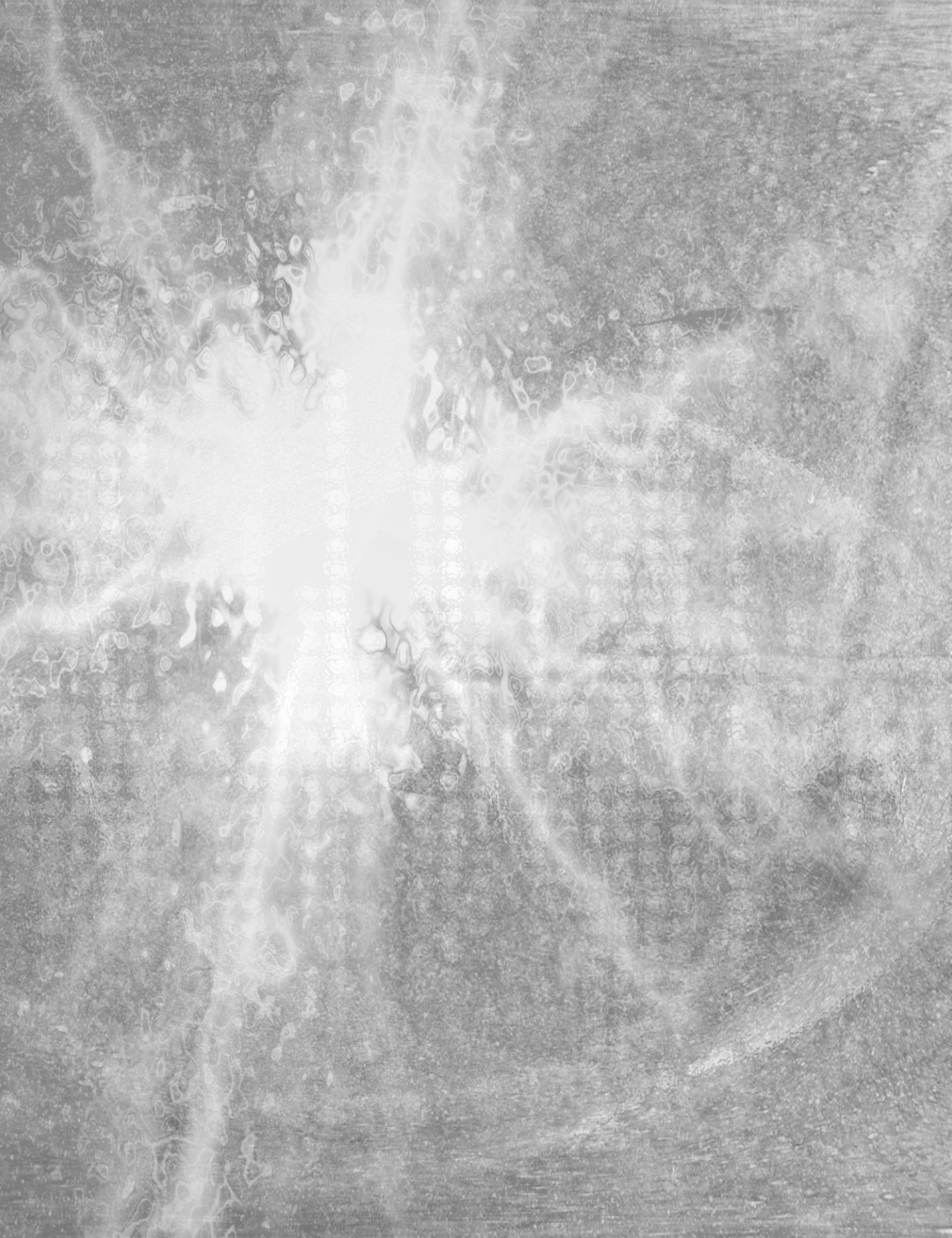
We do not pretend to have closed the book on close reading in games with this chapter. There will be important new directions for this work which we believe will further expand the effectiveness and the utility of this technique. One example is the pedagogical applications of close reading. In particular, close readings that focus on the design of exemplary games will reveal the poetics of the emergent medium to the students who will soon become the scholars and lead practitioners of the maturing medium. Bizzocchi has engaged his undergraduate students in the close readings of video games as part of his courses in both Narrative and Game Design for ten years. The process of close reading has served to objectify the mediated experience, and in the process to reveal the design decisions of the individual game and the design parameters of the medium. In another example, while attending a recent conference we learned that a colleague has been using collective close reading in the classroom to conduct shared group critiques of games (Boluk, 2009). Students would take turns playing the game in front of the class, while everyone participated in picking apart the game using a variety of lenses. This form of collaborative social reading is perhaps uniquely suited to games, due to their performative dimension. It is possible to utilize a direct and reciprocal loop between the audience and the player that is not possible in the analysis of other media,

such as literature. By collectively reading, it is also possible to simultaneously develop a multitude of potential readings in dialogue with each other, thus collapsing much individual iteration into a single reading cycle. We believe this has utility as a pedagogical tool, and as an alternative method for better understanding the increasing sophistication of game design and the corresponding complexities of game experience. This example also highlights the versatility of the close reading methodology, and the importance of sharing its many variations within the scholarly and pedagogical discourses of game studies.

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BIOGRAPHIES

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Sarah Chu is a doctoral student in Curriculum and Instruction at the University of Wisconsin-Madison. Her research interests are centered on video games, education, and visual culture. In particular, she is interested in the design of digital exhibits and games in science museums and how visitors learn in and around them. Prior to attending UW-Madison, Sarah worked as a learning technology consultant at Ryerson University. She holds an MEd in Educational Technology from York University and an Honors BA in Visual Studies from University of Toronto. She has worked on Constance Steinkuehler's Pop.Cosmo research team to examine learning and literacy in and around massively multiplayer online games. Currently, she works at the Morgridge Institute for Research where she develops video games for learning science.

Drew Davidson

Drew Davidson is a professor, producer and player of interactive media. His background spans academic, industry and professional worlds and he is interested in stories across texts, comics, games and other media. He is the Director of the Entertainment Technology Center – Pittsburgh at Carnegie Mellon University and the Editor of ETC Press. <http://waxebb.com/>

Simon Ferrari

Simon Ferrari is a doctoral researcher in digital media at the Georgia Institute of Technology, where he studies expressive game design, criticism, and competitive play. His first book, co-authored by Ian Bogost and Bobby Schweizer, is *Newsgames: Journalism at Play* (MIT Press, 2010).

Alex Games

Alex Games is Education Design Director at Microsoft Game Studios. He is deeply interested in the inseparable relationship between play and learning, and in ways to undo the artificial divide that the educational systems of most nations have created in them. He was formerly Assistant Professor in **Telecommunication, Information Studies, and Media**, and Adjunct Professor in **Educational Psychology and Educational Technology** at Michigan State University. There he conducted research focused on the relationship between game design and learning at the **Games for Entertainment and Learning Lab**, and co-chaired the **Meaningful Play Conference**. While conducting his doctoral dissertation with the Games, Learning and Society group at the University of Wisconsin, he played a key role in the design and implementation of Gamestar Mechanic. He is gamer at heart and has an extensive background in game design, software engineering, and robotics.

Stephen Jacobs

Stephen Jacobs is an Associate Professor in the Department of Interactive Games and Media and the Director of the Lab for Technological Literacy at the Rochester Institute of Technology where he teaches courses in game history, analysis, design and writing. He also currently serves as the Visiting Scholar at The International Center for the History of Electronic Games at the Strong National Museum of Play where he assists in exhibit design and collections interpretation. He is Editor-in-Chief of the Journal of Game Design and Development Education (<http://gameeducationjournal.org>).

Andy Jih

Andy Jih is a producer and game designer living and working in Pittsburgh, PA. He most recently was the VP of Production at Evil Genius Designs, a Pittsburgh start-up company focused on bridging the gap between game design and location-based entertainment through the use of mobile devices. Prior to Evil Genius Designs, Andy was a producer at Schell Games where he worked on projects ranging from Nintendo Wii titles and an original IP Nintendo DSi game to an interactive theme park attraction at Epcot.

Adrian Avery “Dee” Johnson

Adrian Avery-Johnson is a graduating senior at Malcolm Shabazz City High School in Madison, WI. He has always wondered about the mystical, behind the scenes machinations of the modern library, which has led him to his current pursuit of a Masters in Library and Information Sciences. For much of his life gaming has served as an outlet for energy and emotions that he did not have the tools to deal with. As he approaches the close of his high school career and moves forward with his education, he has decided to limit the time he spends in MMORPGS to weekends, while re-initiating a previous weekly devotion to Dungeons & Dragons.

Scott Juster

Scott Juster is a writer and a graduate student studying History. Along with Jorge Albor, he produces essays and podcasts for www.experiencepoints.net <<http://www.experiencepoints.net>> , a website dedicated to the serious, but not humorless, analysis of video games. He also posts bi-weekly on the PopMatters blog, “Moving Pixels,” in which he writes about game design and the cultural significance of video games. His interests also include video game preservation and the historical relationship between video games and other media.

Richard Lemarchand

Richard Lemarchand is a Lead Game Designer at Naughty Dog and is currently working on the studio's forthcoming game, *Uncharted 3: Drake's Deception*. He was the Co-Lead Designer of the award-winning, critically praised *Uncharted 2: Among Thieves*, which was widely acclaimed as the Game of the Year for 2009. Richard has been a professional game designer since 1991, working mainly in the field of character-action console games. He worked on *Uncharted: Drake's Fortune*, *Jak 3* and *Jak X: Combat Racing* for Naughty Dog, and helped create the successful game series *Gex*, *Pandemonium* and *Soul Reaver* at Crystal Dynamics. He organizes the annual GDC Microtalks, is on the faculty of the GDC Experimental Gameplay Sessions, is an Advisor and sometime Conference Co-chair of IndieCade, and is involved with GLS and Games for Change. Born in England, he grew up in a small rural town, dreaming of ancient civilizations and outer space. Perhaps as a result, he has a degree in Physics and Philosophy from Oxford University.

Crystle Martin

Crystle Martin is a doctoral student in Curriculum and Instruction – Educational Communications and Technology at University of Wisconsin-Madison studying with Professor Constance Steinkuehler. She is a researcher on Professor Steinkuehler's PopCosmo research team and a member of the Games+Learning+Society group. Crystle's research interests include information literacy, online reading comprehension, informal learning, online communities, and MMOs. Her upcoming dissertation will focus on information literacy in online affinity spaces. She has a Master's in Library and Information Science from Wayne State University and Bachelor of Arts degrees in English and Latin/Classics from Michigan State University.

Matt McLean

Matt McLean has earned a Bachelor of Science degree in Mechanical Engineering Technology from Central Michigan University and a Master's degree in Entertainment Technology from Carnegie Mellon University. He currently resides in San Francisco, California working as a producer in the games industry. He is also a writer, photographer, designer, artist and daydreamer. Matt believes in the power of interactive experiences to help make the world a better, inspiring, and more playful place. He can be contacted at matt.m.mclean@gmail.com, and he invites you to visit his website at <http://mmclean.webs.com>.

Eli Neiburger

Eli Neiburger is the Associate Director for IT & Production at the Ann Arbor District Library, where he is responsible for IT, software development, marketing, and events, including AADL's industry-leading videogame tournament series. He is the creator of gtsystem (<http://wiki.gtsystem.org>) a free web service for libraries to run gaming tournaments, which has been used to organize multi-library simultaneous tournaments for the American Library Association's National Gaming Day @ Your Library. Eli produced videogame venues for the Sandbox Symposium and SIGGRAPH 2009, and is the author of "Gamers... in the LIBRARY?!" published in 2007. He serves on the board of Bricks for Brains (a small LEGO events & education nonprofit), Library Renewal (working to solve the challenges of digital distribution for libraries) and is the chairman of the Jhai Foundation, working to bring internet-powered telemedicine and economic development to rural villages in the developing world.

Amanda Ochsner

Amanda Ochsner joined Games+Learning+Society group and the department of Curriculum and Instruction at the University of Wisconsin–Madison in the fall of 2010. She is working with Constance Steinkuehler and her PopCosmo research group. Amanda's research interests focus around games for adolescent girls, as well as issues of identity formation through video game play and by participating in online gaming communities. For the past few years, she has worked as a freelance writer and editor on the press side of the games industry as an editor for IGN's Green Pixels site and as a freelance writer. Currently she spends much of her time writing for the family-focused game site What They Play. One of her more recent projects is a series of interviews with parents who play video games with their children. Amanda received her undergraduate degree in English from the University of Minnesota, Morris in 2008.

Charles Palmer

Charles Palmer serves as director of the Center for Advanced Entertainment & Learning Technologies, at Harrisburg University, where he leads developments in digital storytelling and entertainment technology. As a creative educator, administrator, and producer with fifteen years experience in New Media development, his current work focuses on the learning side of games and how games can shape STEM educational initiatives.

Arthur Protasio

Arthur Protasio is a writer, researcher and producer of narratives and games. As a bachelor of laws with an additional degree in digital media and technology from the Pontifical Catholic University of Rio de Janeiro, he coordinates CTS Game Studies, a game research and development project from the Center for Technology and Society at the Getulio Vargas Foundation in Rio de Janeiro. Given his interdisciplinary profile, his law and game studies involve the analysis of game prohibitions in Brazil and the importance of advocating free speech and proper ratings for the game medium. As a speaker, Arthur not only gives talks on these academic topics and the value of games as works of expression, but also runs the LudoBardo videolog aimed at discussing narrative in games. Additionally, he organizes, along with fellow independent producers, Gamerama, a game design collective, dedicated to integrating the Brazilian game design community, focused on developing experimental projects through prototype oriented methodology. His fictional and academic writing are available at **www.vagrantbard.com**.

Chris Pruett

By day, Chris Pruett is a Senior Game Developer Advocate at Google, focused on Android. Under the cover of night he writes indie games and blogs about horror game design. The views expressed here are his alone and not those of his employer. Chris lives in Cupertino, California with his wife and daughter.

Matthew Sakey

Matthew Sakey is a freelance games journalist, consultant, and industry analyst, and is a sought-after guest speaker at university games curricula and gaming conferences. For the past seven years he has been a featured monthly writer for International Game Developers Association, where he writes about the influence of gaming on culture in his column Culture Clash (www.igda.org/culture-clash). Matt also owns and maintains the popular gaming and entertainment website Tap-Repeatedly (**<http://tap-repeatedly.com>**), and works as an e-Learning developer, helping corporations bring games-based training to life. He lives in Michigan. Reach him at steerpike@tap-repeatedly.com.

Mark Sivak

Mark was born in Groton, Massachusetts in 1983. During his childhood he cultivated a love for games, play and competition with his two brothers, Seth and Scott. Mark received education from Northeastern University, where he currently teaches in the Creative Industries Program. His love for games was not sated in the engineering field so he clawed his way into the video games industry with research in games for rehabilitation, education, and player experience. He currently lives in Boston, Massachusetts.

Francisco Souki

Francisco was born and raised in Caracas, Venezuela and moved to Pittsburgh, PA in his early twenties to pursue his Masters at Carnegie Mellon University. He currently works in Pittsburgh as a Game Designer and is a co-creator of Friends on Play, a podcast about game design. His work has been shown in Pittsburgh, New York, Las Vegas, Italy, South Korea, Singapore and Spain. He enjoys games of all kinds, traveling the world, European soccer and media-based, unconventional storytelling. If you wish to know more about him, Google might be a good starting point. <http://www.franciscosouki.com>

Constance Steinkuehler

Constance Steinkuehler is an Assistant Professor in the Educational Communications and Technology (ECT) program in the Curriculum and Instruction department at the University of Wisconsin–Madison. She is a founding fellow of the GLS Initiative at UW–Madison and chairs the annual GLS conference held each summer in Madison. Her research on cognition, learning, and literacy in MMOs has been funded by the MacArthur Foundation, the Spencer Foundation, and the Academic ADL Co-Lab, including research on such commercial titles as **Lineage I**, **Lineage II**, **Star Wars Galaxies**, and **World of Warcraft**. She earned her PhD in literacy studies in curriculum and instruction in 2005, her M.S. in educational psychology in 2000, and three simultaneous B.A.s in Mathematics, English, and Religious Studies in 1993. She teaches graduate courses in research in online virtual worlds, analyzing online social interaction, critical instructional practices on the Internet, and gender and technology, and an undergraduate course in digital media, pop culture, and learning. She sits on the editorial board of several journals including the **Journal of the Learning Sciences**, the **International Journal of Gaming and Computer-Mediated Simulations**, and **Second Nature: The International Journal of Creative Media**. She is the Chair of the AERA SIG “Media, Culture, and Curriculum,” sits on the National Academy of Sciences (NAS) Committee on Gaming, Simulations, and Education, and recently received a NAS/Spencer Post-Doctoral Fellowship.

Theresa Tanenbaum

Theresa Tanenbaum (www.thegeekmovement.com) Theresa is a PhD student in the School of Interactive Arts and Technology at Simon Fraser University, studying games and narrative. Her research seeks to understand the narrative pleasures of interactive experiences through a combination of close reading and design research methodologies. Her work bridges the worlds of performing arts theory, embodied interaction, tangible and ubiquitous interfaces, wearable computing, nonverbal communication, and literary theory. When not writing about (and playing) games, Theresa also enjoys game design. One of her projects – a multi-touch tabletop game called Futura, the Sustainable Futures Game – was showcased in the City of Surrey’s Sustainability Pavilion at the 2010 Winter Olympics. Futura has since become the subject of an ongoing research project investigating the effects of a serious game on public engagement around sustainability issues. Theresa has also won design awards for her costume and prop creations, her short films, and for her writings on social media. Theresa is currently editing a book on Nonverbal Communication in Virtual Worlds, to be released by ETC-Press in 2012.

Alice Taylor

Founder, Makieworld

Alice Taylor has worked with internet-delivered content for entertainment and education since 1995. Outgoing Commissioning Editor for Education at Channel 4, Alice spent the last three years commissioning award-winning digital products targeting teens and tweens. In December 2010, Alice announced her intention to leave Channel 4 in order to pursue a 3D printed network-aware toymaking startup: Makieworld. Alice writes a personal blog, Wonderland at www.wonderlandblog.com and has contributed variously on the subjects of games, new media and technology for the BBC, New Statesman, The Guardian, Paste, and more.

Greg Trefry

Greg Trefry has wide array of experience designing games—everything from web-based MMOs to hit casual games to alternate reality games. He co-founded the game design studio Gigantic Mechanic to explore the bounds of game design through mobile games that interact with the real-world. He serves as director of the Come Out & Play Festival, a festival of street games in New York City. Greg teaches at New York University and recently wrote the book, *Casual Game Design: Designing Play for the Gamer in All of Us*.

Jason Vandenberghe

Jason Vandenberghe is a Creative Director at Ubisoft. He has been designing and producing games for about sixteen years, with tours of duty at EA, at Activision, and now at Ubisoft. He has no plans to stop any time soon.

Much of his time had been spent working on big licenses (James Bond, Lord of the Rings, X-Men, and the like), but recently he's been branching out and making actual *game* games, which is a nice change of pace. His latest effort was the semi-critically-acclaimed Red Steel 2, which was all about swinging the Wii Remote around like a sword, and defied the skeptics by being pretty darn good.

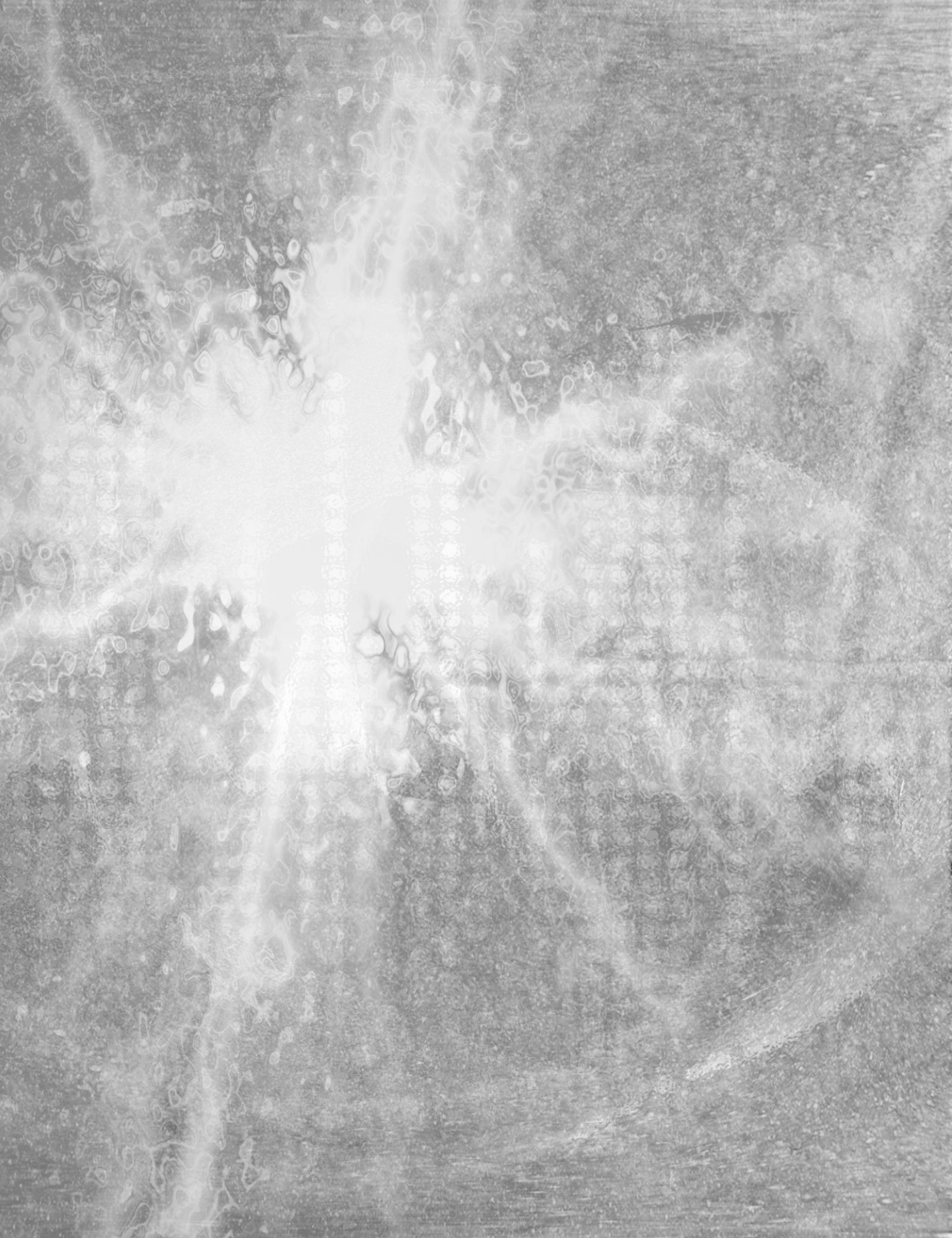
Jason is currently working on not-very-secret Ubisoft projects, but hasn't told anyone which one(s) yet. He lives in Paris, which is really weird, man.

Caroline “Caro” Williams

Caroline “Caro” Williams is a PhD student in Curriculum and Instruction at the University of Wisconsin-Madison, with a focus in Mathematics Education and a joint Masters in Mathematics and Mathematics Education. Her adviser is Dr. Amy Ellis, whom she works with on two major research projects: the Inductive and Deductive In-and-Out of Mathematics (IDIOM) grant with Drs. Knuth and Kalish (www.idiom.wceruw.org); and the Supporting Proof in Algebra through Reasoning with Quantities (SPARQ) grant. Caro studies cognition and learning in Massively Multiplayer Online games (<http://gameslearningsociety.org/research/cognition-and-learning-in-mmos>) as a member of the Games+Learning+Society group and Dr. Steinkuehler's PopCosmo research team. Caro's many interests bridge the worlds of math education and gaming, with particular interest in: (a) virtual worlds that are designed as supplemental to classroom content, as well as what types of mathematics learning are intended and actually instantiated within those dynamic environments; (b) commercially produced virtual worlds that have mathematics content and learning quietly embedded in the game structure, and the types of learning that occur as a result; and (c) the general constraints and affordances that games may have for different populations as they enter and participate within the designed “worlds.” Currently, she is working on a design-based research project focused on the design, evaluation, and iteration of Little Big Planet (www.littlebigplanet.com) worlds that support an informal understanding of the Cartesian coordinate plane.

José P. Zagal

Dr. José P. Zagal is a game designer, scholar, and researcher. He is Assistant Professor at the College of Computing and Digital Media at DePaul University where he teaches game design, online communities, and ethics. His research work explores the development of frameworks for describing, analyzing, and understanding games from a critical perspective to help inform the design of better games. He is also interested in supporting games literacy through the use of collaborative learning environments. His book on this topic, "Ludoliteracy: Defining, Understanding, and Supporting Games Education", was recently published by ETC Press. Dr. Zagal is on the editorial board of Games & Culture, the International Journal of Gaming and Computer-Mediated Simulations, and the Journal of the Canadian Gaming Studies Organization. He is also a member of the executive board of the Digital Games Research Association (DiGRA). José received his PhD in computer science from Georgia Institute of Technology in 2008, his M.Sc. in engineering sciences and a B.S. in industrial engineering from Pontificia Universidad Católica de Chile in 1999 and 1997. Further information on his work is available at: <http://facsrv.cs.depaul.edu/~jzagal/>



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- 34 The scene I will describe may or may not occur depending on earlier events in the game.
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- 37 This number is based on the current difficulty level. See Table 1 "Difficulty Settings" for more details.
- 38 Elite mode is only available after you've complete each level.
- 39 Visit <http://www.stanleopardmusic.com/> for more information on Stan LePard.
- 40 Players get to revisit Langemarck later in 1917 as German forces move through the village. Visit Wikipedia to read Langemarck's fate <http://en.wikipedia.org/wiki/Langemarck>.
- 41 All times include 30 second loading screen.
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- 43 Source: <http://www.signalstudios.net>
- 44 Source: <http://www.signalstudios.net>
- 45 Dan Cook has a great article about the Two Factor Theory as applied to game design. http://www.gamasutra.com/view/feature/1992/constructing_artificial_emotions_.php?page=1
- 46 *The Misadventures of P.B. Winterbottom* was later released for Windows via Steam.
- 47 Based on the number of players who rate games on Xbox Live, as of writing, *Limbo* has 49,066 ratings (<http://marketplace.xbox.com/en-US/Product/Limbo/66acd000-77fe-1000-9115-d802584109d1?cid=search>) while *The Misadventures of P.B. Winterbottom* has 4,681 ratings (<http://marketplace.xbox.com/en-US/Product/Winterbottom/66acd000-77fe-1000-9115-d802584109d9?cid=search>)
- 48 <http://gamesareevil.com/2010/03/pies-philosophy-music-pb-winterbottom/>

- 49 http://en.wikipedia.org/wiki/Limbo#Limbo_in_literature
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- 51 Patch notes can be found quite tidily arranged at <http://www.worldofwarcraft.com/patchnotes>.
- 52 Talent trees are the tree structure in which a player can spend talent points earned through experience in the game
- 53 Death Knights are a class but also—in some ways—a race. As a strange case, we will not be considering them here.
- 54 Chat channels are different text and voice chat streams that have specific purpose, allowing you to communicate with certain people or groups of people depending on the channels you and they are signed in on
- 55 “Pots” is short for potions, and “mats” is short for materials, such as herbs and cloths.
- 56 “Wipe” is short for wipeout, which is to cause the entire group of players to be killed.
- 57 A newbie or novice.
- 58 The Leeroy Jenkins video can be found at <http://www.youtube.com/watch?v=LkCNJRfSZBU>.
- 59 This is only in comparison to a piece of digital media. Readings of print media can suffer from a shifting point of reference, such as multiple editions and translations of the same material; however, the variability is not implicitly (and explicitly) built into the work, as it is in digital media.

