

**An Exploration of Narrative Design in
Story-Driven VS Mechanics-Driven Games**

by

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TABLE OF CONTENTS

Reflective Analysis.....	1
Act I - An Introduction to Narrative in Interactive Media.....	1
Act II - So You (I) Want to Write for Games?.....	11
Act III - The Future of Game Writing & Why It Matters.....	21
Document Showcase.....	24
Introduction.....	24
<i>What Is Ethra?</i> - A Diegetic Document from <i>Incursion</i>	25
<i>RTS Tutorial</i> Script from <i>Incursion</i>	26
<i>RTS Tutorial</i> Engineering Hand-off Document from <i>Incursion</i>	32
<i>FPS Tutorial</i> Script from <i>Incursion</i>	33
<i>FPS Tutorial</i> Engineering Hand-off Document from <i>Incursion</i>	39
Works Cited.....	40

ACT I

An Introduction to Narrative in Interactive Media

As I sat in a dark, air-conditioned soundstage at USC's School of Cinematic Arts in the scorching hot summer of 2015, our young and serious film professor described worldbuilding with an analogy that clicked. It was Tarantino, he said, who likened designing the world of a film to creating an entire melon, then slicing it, only showing one slice to the audience. It's important to fully develop the whole fruit, even the parts the reader, viewer (or player) "never sees," because their existence makes the "slice" they do see that much more believable.

In all my narrative research, the only Tarantino quotes I've ever come across about melons relate to the way heads explode in his films. Still, it sounds like something the legendary *Pulp Fiction* creator might believe. Regardless of who said them, these words stuck with me as I journeyed through creative media, diving into the study and creation of short stories, novels, films, and now games & interactive media, where the analogy looks more like passing the knife off to the player and allowing them to slice the fruit themselves, a scenario where the melon's verisimilitude makes all the difference.

Authors like Alexander Chee point to trauma as a driving factor for those who turn to the art of storytelling. In *How to Write an Autobiographical Novel*, he discusses, among other influences, how the loss of his father and the suppression of his sexuality transformed into ink on the page (Chee 202). In my own life, I find it more difficult to pin down a catalyst. Perhaps it was simply the boredom inevitable in the life of an only child with working parents — the hope to avoid the creeping temptations of a kind of existential dread — that forged my love for the art

of escape. I struggled to imagine a better use for my time than fleeing to worlds far more magical and grand than my own, where the action unfolded minute by minute, and the messages sung more true than reality itself. Lured by the effects of the written word, which, though a visual medium, depended on my own imagination to construct the scenes, I chased down appeals to the senses, first into graphic novels, where the word and image collided to fill in more of the story, and then to films, where artists took hold of the moments that occurred between the panels, along with the sounds and songs that accompanied them. Still, I ultimately desired something that would take me deeper, an art I could have more of an impact on, one which reflected more of myself.

To date I have never encountered an industry more maniacally obsessed with the pursuit of “immersion” than games. When studios open up their products for players to create their own content, half of these user-created modifications, or “mods,” begin with the word “immersive.” On the front lines of game technology are products like eye trackers, body-suits, and omni-directional treadmills, propelling us closer and closer to a real-life *Ready Player One*. Across the industry, software and hardware continue to stretch each other’s boundaries, giving rise to increasingly powerful generations of consoles and computer graphics cards, all which render games with visuals more and more semblant of real life.

But it wasn’t only this enchanting ability to immerse players in another world that drew me to games. I was searching for an experience of that same pathetic fallacy that the great Transcendentalists identified in nature, only I sought it out in story. While I gravitated towards fantasy role playing games like *Dragon Age* and *Skyrim*, or alternate life simulators like *The Sims 3 & 4* — games where players have the freedom and customization tools to play as a near

identical copy of themselves, or inhabit a completely new and foreign character of their own imagining — I found that all games were incomplete without the player contributing at least some element of their own identity.

In games, this idea of the player-character’s incompleteness is often referred to as the “empty vessel.” This concept doesn’t function as a binary, but rather sits on a spectrum, with players supplying their own personalities and experiences to varying degrees depending on how open ended or pre-scripted & deterministic the game might be. Personally, I was captivated by this — the way games reacted to me, whether I was moving a joystick to the left or right, or deciding whether or not to turn my ship around to respond to a distress signal. Games moved when I touched them, like a living thing would. Biologists often identify response to external stimuli as one criterion for life. Games were alive to me.

It’s only natural, then, that the characters I encountered in games felt the most real. They revealed themselves to me through their dialogue, actions, appearance, and even the sound of their voice. I had opportunities to ask them my burning questions, and to make choices that would directly impact their journeys. As a result, adventures with characters in games have been some of the most memorable in my experience of fiction. I’ll never forget what it was like to rescue the young Ellie, whom Joel had come to love as a daughter, from a fatal medical experiment in *The Last of Us*. Neither will I forget the memories Max and Chloe made as they rediscovered their childhood friendship, surrounded by perils in *Life is Strange*, and I will continue to be inspired by the dedication of Dr. Alexandra Drennan of *The Talos Principle* to the question of what makes us human, and her devotion to the preservation of human thought and culture until her last waking moment.

Of course, until computer programmers crack the Turing test and text-to-speech software successfully traverses the “uncanny-valley” — at which point we’ll likely be pre-occupied by the existential problems of what it means to be human, which our popular media is has been obsessed with from its beginnings (see the writings of Isaac Asimov or Phillip K. Dick, films like *Her*, *Blade Runner*, *Alien*, and *Ex Machina*, shows like *WestWorld* or even games like *Detroit: Become Human* and *The Talos Principle*) NPCs, or non-player characters, in games will still fail to fool us. Players will continue to arrive at some question they’re dying to ask, but can’t because it wasn’t pre-programmed into the dialogue tree, or cry out vainly at their screens when their favorite companion charges hopelessly into the line of fire, or wanders inadvertently off of a cliff. Perhaps they’ll also want to pull their hair out when a quest giver leads them to their next objective, moving only slightly slower than the player’s own running speed.

The challenges of these technological constraints on verisimilitude extend beyond characters into the actual gameplay and narrative content of games themselves. Real life will always have a greater number of possible choices than any video game. A game simulating the childhood joy of purchasing ice cream, for instance, might allow you access to an extensive amount of flavors (particularly if you purchase the “Salt & Straw” expansion), but in our actual lives, we also possess the freedom to order that ice cream in a polite or disrespectful manner, to either purchase or attempt to steal the ice cream, hold up the store (a feature likely only possible in *Grand Theft Auto* or *Saints Row*), or take off our shoes and do a dance to Yankee Doodle Dandy. In a game about ordering ice cream, it’s unlikely you’ll see any of these features developed. While actions like these may seem too obscure to warrant building in a game, in real

life, the knowledge that we can respond to the events of our lives by doing absolutely anything gives more weight to anything that we actually decide to do.

In many cases, game developers tend to avoid working on content that only some of their players will see. The reason for this is fairly intuitive. Why spend valuable dollars and hours developing an experience that might simply be overlooked by a majority of customers who purchase the game? Doing so would likely only drive up the price and filesize of the game, neither of which are good for business. Still, as obvious as the approach seems, such an attitude has direct implications on narratives in games. It's the reason why so many monumental and cataclysmic choices are left for the last few minutes of gameplay.

WARNING: SPOILERS AHEAD!

It's the reason why "The Final Decision" in *Infamous* allows you either to save all super-human conduits by wiping out the remainder of humanity, or to activate a device that kills all conduits but allows humanity to survive. It's the reason why the last choice in *Life is Strange* allows you either to save your best friend's life or the rest of your hometown of Arcadia Bay. And it's the reason the final battle in *Dragon Age Origins* holds the power to decide who lives and who dies (including the player's own self!) as well as who might eventually sit on the throne and come to rule over all Ferelden.

END SPOILERS :)

Leaving big decisions for the end of a game, rather than the beginning, often means the difference between creating two different ending cutscenes, and creating two completely separate games, with players essentially playing only one of them depending on the first choice that they make. Some story-focused games that do allow for more choice earlier on, like titles from Quantic Dream such as *Heavy Rain* and *Detroit: Become Human*, tend to have shorter playthrough times and a high emphasis on replayability (in the hopes that players will eventually experience the majority of content developed for the game). Still, across the board of video game narratives, the trope of the big final decision dominates, and arguably it contributes a problem at least equally as significant as the one that it solves: *sequels*.

When, at the culmination of your first game, a portion of your player-base has chosen to entirely eradicate humanity and another portion has chosen to sacrifice their characters to save it — hypothetically speaking, of course — how do you begin to develop a story that picks up where the last one left off? While no conclusive strategy has yet emerged as the standard answer to this question, game store shelves and virtual marketplaces abound with varied attempts to address it. *Life is Strange 2* solved the problem by focusing on the stories of different characters altogether. Sucker Punch Productions pulled from player savegame data to determine which final decision the largest percentage of its players made, and then developed their sequel, *Infamous 2*, as a continuation of that timeline. BioWare developed an online service called Dragon Age Keep, which allowed players to upload their save files and enter details about characters and choices from previous games. When players synced future Dragon Age games with these online services, they found little references to their past choices scattered throughout the new lands that later games explored.

With respect to choices contained within a game, writers and directors have worked throughout the years to come up with strategies for responding to players in meaningful and satisfying ways. When I discussed this problem of meaningful choice in games in an interview with Richard LeMarchand, a professor of Interactive Media and Game Design (IMGD) at USC's School of Cinematic Arts and former lead designer for the first three games in the critically acclaimed *Uncharted* series, he made reference to the "string of pearls" concept. Like a necklace, which might branch out into a couple threads and then return to one, some games attempt to balance the experience of meaningful choice with practical game development by allowing players to make choices which lead, regardless, to the same outcome. Players, however, are often curious about interaction and comfortable with trying out different options and loading past saves to explore differing outcomes. As a result, they're often quite good at seeing through the "illusion of choice" when it's presented to them.

These unsatisfying experiences of choice are often more memorable than the satisfying ones. I still remember the ending of *Firewatch*, where, you guessed it, a fire sweeps through the forest. The evac team comes for Delila first, your only source of human connection in your forest-service-solitude — the woman you've been communicating with through a small walkie-talkie for the entirety of the game. As you head to the evac site yourself, the game presents you with a choice: tell Delila to go on without you, or ask her to wait for you so you can leave together. In the hopes that after the experience of this entire game I might be able to see the face of my mysterious companion, I asked her to wait. As it turns out, the developers never built her 3D model into the game, so there was nothing to show. When I arrived at her tower, all I got was an excuse from her about not wanting to wait.

A similarly unsatisfying experience comes to mind from the highly anticipated Bethesda title, *Fallout 4*. At the start of the game, in the calm-before-the-nuclear-apocalypse, a Vault Tec employee comes to your house to notify you that, because of your military service, you qualify for entry into the local vault. I was immediately impressed with the game's choices. I could react positively to this and agree to sign up, or I could tell the yellow-hatted con-man that I wasn't interested and ask him to go away. But, as it turns out, the player needs to fill out his registration form, because that's how the character's stats get set, and the player needs to consent to registration, because escaping to the local vault is the only way to survive the nuclear devastation beginning just moments later. So, as you might expect, the choice to refuse is a false one. If you do tell the salesman to "go away," your spouse gets up off the couch and insists that a little paperwork is worth the peace of mind, just as the salesman reassures you that it'll only take a few moments, and all of a sudden you're looking at the character stat creation screen.

Good implementations of the "string of pearls," however, often modify some variable based on the player's choice so that, regardless of what event occurs next, the choice they made affects some part of the game later down the line. In *Life is Strange*, for example, while the game doesn't split into to completely separate narratives depending on whether or not Max successfully convinces Kate to come down off the roof, if she does, the player unlocks a later scene where they may visit Kate in the hospital as she recovers, as well as several texts thanking Max for saving her life. Otherwise, the player bitterly finds out about Kate's funeral, which she is not invited to attend. In this way, the game honors the player's choice and makes it feel meaningful, without compromising the general narrative structure of the rest of the game.

The Stanley Parable, an incredibly meta “video game about video games,” critically examines this complicated relationship between game makers and players, specifically around this issue of choice. It does this by pitting the office-worker player-character against a morally ambiguous, omniscient narrator, and then responding to the player based on whether or not they obey their narrated instructions. Early on in the game, Stanley comes across a room with two doors, at which point the narrator says “Stanley entered the door on his left.” Should “Stanley” instead decide to take the door on his right, the narrator will express his thinly veiled sarcastic frustration at the player’s inability to follow directions, and then nudge the player back on the “correct path” by suggesting he enters the next “first open door on his left.” If the player should disobey the narrator again, he enters a construction zone, symbolizing a part of the world or story not fully “built” by the developers, but simply designed to terminate this path or get the player “back on track.” At this point, the game’s narrator becomes openly hostile towards the player in a fashion that ridicules the frustration of game creatives when players choose to experience something other than the story they want to tell.

If Elon Musk is right, and “we are most likely in a simulation” (Wall), then perhaps some day we’ll develop technology powerful enough to simulate reality and all of its possibilities in a convincing and satisfying way. If, however, the theoretical physicists at Oxford are right in that simulating only a few hundred electrons “would require a computer memory that would physically require more atoms than exist in the universe” (Masterson) the birthday of our very own “Matrix” may, at the very least, be far off, in which case game makers will have to find their own solutions to these natural constraints.

As I critically analyzed my own favorite games, I picked up on a strategy which worked consistently for me — a strategy I call “aligning constraints.” It bears remembering that constraints exist not only at the limitations of technology and games, but in our everyday lives as well. You can’t buy that car without the cash for the down payment, and you can’t drive it off the lot without gas in the tank (Teslas excepted). When games line up their own constraints with those we’re familiar with in real life, they can better mask their game-native limitations and come across as more authentic and real. Many games achieve this by allowing players to interact with pre-created artifacts like notes, videos, and recordings in the place of direct dialogue with NPCs. In *Tomb Raider: Anniversary*, Lara comes to a deeper understanding of her late and estranged father by solving puzzles at Croft Manor, reading her father’s notes, and acquiring his artifacts & effects. Likewise, audio recordings, like the science logs of Dr. Drennan in *The Talos Principle*, videos, like the found lab footage of Dr. Darling in *Control*, or even audio-visual holograms like those of *Star Wars Jedi: Fallen Order* and *Horizon Zero Dawn*, all give players glimpses of characters from the past, avoiding altogether the possibility that the player might be ripped out of immersion by poorly constructed dialogue options. It’s akin to stumbling upon a dictation tape of a late relative. The tape is all that remains of that person — there’s no opportunity to ask questions, to respond, to pursue clarification. As in the game, all one can do is absorb the information or simply play it again.

ACT II

So You (I) Want to Write for Games?

With all that can go awry in interactive storytelling, some attempt to avoid the narrative component altogether. Perhaps not every game requires a story. A 2017 article in the Atlantic entitled “Video Games Are Better Without Stories” even went as far as to suggest games abandon them altogether, claiming “the best interactive stories are still worse than even middling books and films” (Bogost). What is the narrative of a game like Solitaire? Brick-breaker? Tetris? Aren’t these games incredibly popular without an encumbering narrative? If these games have stories at all, it’s the ones we tell each other when the game is over — the one time we actually won a game of Solitaire without cheating, or the game where we got 10 of those pesky “L” shapes in a row. This is where USC’s IMGD Chair and former Electronic Arts & THQ senior executive, Professor Danny Bilson makes a distinction between “scripted” and “emergent” storytelling. In his co-taught class on Character Development & Storytelling for games, he defines “scripted” storytelling as the process of planning and designing a pre-written story for the player to experience, while “emergent” storytelling, a subject which interests him more, refers to those player driven narratives which rise from their experiences as they interact with different gameplay subsystems within the game. Another definition of this approach comes to us from the Center for Games and Playable Media at the University of California at Santa Cruz, whose researchers defined emergent narrative as “an application area of computational narrative in which stories emerge bottom-up from the behavior of autonomous characters in a simulated storyworld” (Ryan et al.).

Moments of emergent storytelling can often be equally, if not more, memorable than scripted ones. I'll never forget when I thought I lost my orc follower companion, Lob, in a *Skyrim* dungeon forever, only to have him come charging back into battle later in the game when I needed him most, presumably because he simply got "unstuck." Neither will I forget waiting for my friend Mark to evac me from an enemy starship in the original *Star Wars: Battlefront II*, only to hear "I'm here," and watch our Republic dropship come crashing into the hangar upside-down. Because stories come so naturally to the human mind as we relate to one another, games that attempt to avoid being interpreted or transformed into one face an incredible challenge. It's the reason why gameplay videos of open-ended, unstructured, "sandbox" style games like *Kerbal Space Program* and *Minecraft* garner so many views on YouTube. People desire to know the stories of others: *What happened to you last time you played that game?*

No matter how you define a story, it turns out that most games, even simple ones, come prepackaged with them anyway. *Minesweeper* has a beginning: staring down that wall of squares, deciding, randomly, where to make your first move. It has a middle: the process of interpreting the numbers, flagging potential bombs, and continuing to clear out blank spaces. And it has an end, the victory screen, or a BOOM. *Pac-Man* (originally Puc-Man, before vandals ruined that name for everyone by changing the P on arcade machines to an F) has a protagonist: Pac-Man himself, antagonists: the ghosts Blinky, Pinky, Inky, and Clyde, a setting: an 8-bit, neon-flashing möbius strip, and a conflict: the life and death stakes for both Pac-Man and the ghosts as the player attempts to gobble up all the little yellow dots. You can apply the same rules to other classic games like *Snake* and *Space Invaders*.

It's no coincidence that breaking away from narrative in a game proves almost as futile as the Suprematists' attempts to create art that depicted nothing. There is good reason to tie together gameplay mechanics with a compelling story, because there's much that narrative can do to enhance the gameplay experience. Co-teaching Character Development and Storytelling for Games with Professor Bilson, Marianne Krawczyk, the BAFTA-award-winning lead writer for the first three world-renowned *God of War* games, breaks down the contributions of narrative to games into four categories: context, meaning, catharsis, & emotional connection.

Context provides players with an immediate answer to the question of why they're doing what they're doing. Take *Space Invaders*: don't just move the joystick and smash the buttons to "get the points" and "win." Instead, fly your starship and shoot to defend humanity from an alien invasion (isn't that way more exciting?).

Meaning addresses the same question on a deeper level. It's the answer to the *why should I care* question that writers with any experience in a workshop setting are so familiar with. Convincing players of real and personal stakes, like when Cole's girlfriend Trish's life is on the line during an early boss battle in *Infamous*, helps increase player investment in a game, and provides an extra layer of satisfaction to the win condition.

Like in all art, catharsis refers to the power of games to effect change in their audiences, or bring about a change of heart. To see this at work, look no further than games like USC's own *Plasticity*, a puzzle-platformer which carries with it a call for environmental protection and advocacy (Cable), or *That Dragon, Cancer*, which offers players a glimpse into the real-life heartbreaking hardships of a family grappling with the diagnosis of their 12-month-old son.

Similarly, as in any other medium, game stories possess the power to create an emotional connection. Anyone who's ever laughed or cried at a song, musical, play, or film, can rest assured that the right game would pull at those same heart strings. At times, these are the reasons we turn to creative media, because we need a good laugh, or a good cry. (On the tears front, I can confidently recommend *Life is Strange* and *The Last of Us*. It's hard to go either wrong or dry-eyed with those.)

Because of story's power in games, many studios and developers attempt to leverage this as the selling point of their products, tagging their games as "story-rich" or "narrative-driven," hoping to draw downloads from gamers who are actively looking for a story. Game award ceremonies often recognize games and writers alike for outstanding narratives. This year The Steam Awards honored *A Plague Tale: Innocence* as 2019's "Outstanding Story-Rich Game," and The Game Awards honored *Disco Elysium* with its Narrative award for "outstanding storytelling and narrative development in a game." As is the case in other industries, from this attention, great writers emerge with fan bases that follow them from project to project, figures like Neil Druckman, Amy Hennig, David Cage, and others, many of whom I've had the chance to learn from directly and whom I've already mentioned in this research.

But even games with powerful stories are not always so neatly organized into different categories of development. For many years in the early history of the games industry, stories were overlooked, and there was little justification for permanent writer positions at large game studios. Many game designers and directors simply wore multiple hats to address a game's story needs. Some of the most beloved independent games on the market today emerged from such "auteurs" of a sort, one man/woman show games that were largely written, programmed,

designed, sometimes even art directed and scored by one person. Lucas Pope has earned such a status for himself with games like *Papers Please* and *Return of the Obra Din*, just as Toby Fox has with *Undertale*.

Still, in the E-Sports and multiplayer arena, games continue to sell primarily for their competitive mechanics, large audiences & playerbases, and the hype that surrounds their competitions. But many of the most successful titles in this space make significant investments in the story elements of their games. *Magic: The Gathering*, primarily a physical trading card game with a now ever-growing online version in *Magic: The Gathering Arena*, has seen multiple ebooks on Amazon accompany releases of major card sets, and its developer, *Wizards of the Coast*, posts regular short stories to its website, expanding upon the background of its major characters. Likewise, for its team-based, first person “hero shooter,” *Overwatch*, Blizzard Entertainment employs entire teams of writers to come up with backstories and narrative justifications for “skins,” essentially alternative styles and outfits for standard characters in the game, which are available for purchase on virtual marketplaces. Efforts like these have given rise to an entire sub-field of “skin-writing,” which values a specific, in demand, marketable skill-set. On the flip side, some competitive multiplayer online battle arena games, or “MOBAs,” like Riot Games’ *League of Legends*, have given attention to story too little too late and suffered as a result. Teams of writers at Riot devote much of their efforts to sifting through characters originally created for their appearance or cultural popularity with their audiences, forced to come up with convoluted backstories for how gods from different religions could occupy the same universe, or how discrepancies in timelines, that only the most devoted fans notice, can make sense in the larger picture (And they do! It’s quite impressive work.).

Overall, the mistakes and victories along the way have brought about a new era, where the game writer has risen to a higher place of respect and prominence, where companies recognize the monetary value of stories in games, and where creatives from different backgrounds seek to better understand each other, to learn from and value each others' skills. In as early as 2010, Marianne Krawczyk made note of this in an interview at the Game Developers Conference: "In the 6 or 7 years I've been doing this, the writer has become a more key component. You see more writers on staff at places... People are starting to recognize the value of story, because gameplay is fun and emotional, but you can get more mileage out of that gameplay with a good narrative" (Krawczyk). As a result of this shift in the industry's approach to game making, players get better games on their shelves with, hopefully, more compelling stories. Some titles upcoming in the near future, like *Cyberpunk 2077* and *The Last of Us Part II*, carry the promise of just that.

It's common for writers interested in interactive media to gravitate towards story-driven games. We're often excited by the prospect of leveraging the unique features of the games medium to flesh out our characters and worlds, features ranging from the voicelines, 3D renders, and animations which can bring characters to life, to the wikis, codexes, and lore bibles which can detail the universes in which these stories take place. In successful story-driven games, many of these features often help propel game narratives into trans-media franchising, where characters see their journeys expand into novels, comic books, TV shows, and more. Several of the games already mentioned, like *Life is Strange*, *Dragon Age*, and *Horizon Zero Dawn*, have graphic novel or comics content either published or in the works, and games like *The Witcher*

franchise, which originates in the novel medium, have seen their expansions from the written word to games and now, in their case, into a Netflix original show.

The process of learning to contribute one's writing to a game that doesn't pivot around its story, however, often involves a wake-up call. Some, like game writer Tom Jubert, with credits on *Faster Than Light*, *The Talos Principle*, and *Subnautica*, make a distinction here between "writing" and "narrative design" jobs. In an interview with Gamreactor at Gamelab 2015, he described his own moment of realization when contributing to *Faster Than Light* early on in his career. "I wanted to take it in a more fleshed out direction for the narrative," he recalled. "I wanted to have a codex describing the world... multi-part quests which could only be completed over various playthroughs... alternate endings, and all of this. And it would've been doable in so far as *FTL* is very text driven, so it's not too expensive to add those things, but the guys sat me down and they said, 'Look, that is not the game we're making. We're making an arcade game. It's about fighting people in space. The story is there to *flavor* it'" (Jubert), an idea which ties back to the concept of narrative providing "context" for gameplay. Like Tom, I myself have had to learn how to scale my work on game narrative to meet the needs of whatever project I'm working on, especially as I've had the opportunity to work on games that span the spectrum of narrative emphasis.

At USC, the first game project I ever worked on was a wanna-be-game-writer's dream come true. By the time Professor Lemarchand introduced me to the graduate student game design thesis program, I was already late to the show, and a project called *Ascension VR* was the only one still accepting writers. On their website, I read, "An investigative virtual reality experience that promotes engagement with science within a narrative where the player

manipulates time and interviews characters to find out why a space shuttle crashes.” Needless to say, I was intrigued.

When I showed up to my first workshop, I was shocked when, rather than handing out instructions, our game director, Mari Kyle, who works now as a Content Launch Manager at Oculus VR, asked me, “What do you want to do? What are you most passionate about? What kind of experience do you need for your resume and future career?” Mari understood that by empowering her team members to do what they loved, they would consistently bring their A-game, be invested in the project, and make it something great. Somehow, she was able to build an entire team of people all eagerly pursuing their passions, which led to the construction of a polished project for USC’s Games Expo. This was no easy task, as *Ascension VR* pushed the boundaries of technology, utilizing IBM’s Watson to transform player speech into data that the game’s NPCs could interpret and respond to in real time.

In the midst of this ambitious attempt to employ cutting edge technology to bring characters to life, I was given the reigns for one of the game’s crewmember’s entire story arc, working to bring Fr. Thomas Sani, S.J., M.D., to life on a team of other writers under our narrative lead, weaving our stories together to create a cohesive story for our players’ experience. Mari assigned us writing exercises and detailed character sheets to help deepen our understanding of the game world, and I still use many of those same exercises with the writers I work with today. In no time, I was jumping at the opportunity to help our artists, designers, and engineers by supplying them with the background and narrative context that they needed to inform their own tasks, and Mari soon noticed. “I feel like you know the story of my game better than I know it myself,” she remarked to me, and soon asked me to serve as her creative director.

While the game has yet to go commercial, the thrill of engaging in the game writing process alone had me hooked, and when the next school year came around, I was determined to take on another project.

It was a late afternoon in my storytelling for games class when my next opportunity came. Professor Bilson had joined us for a guest lecture, and began class by talking about a project he was assigned to in the Advanced Games Project program. “It’s a massive game, and it has absolutely no story,” he said. “You’d be creating everything from scratch. So, go ahead and raise your hand if you’re interested.” It sounded like a monumental task, but that meant it was an opportunity for growth. I knew I had enough experience to serve as a foundation to build on, and, taking with me everything I learned from Mari, I knew I wouldn’t have to do it alone. I raised my hand.

It was on this project, finally titled (after many iterations) *Incursion*, that I had my own writer’s wake-up call. Yes, the game needed an entire story developed, and yes, this was my first experience stepping into the role of narrative lead, but unlike *Ascension*, this was not a narrative game. *Incursion*, at its core, seeks to engage e-sports audiences in a new and interesting way, combining the best mechanics of both the first person shooter (FPS) and real time strategy (RTS) genres. It took a while for my new workflow to become clear. User feedback, balance concerns, engineering scope and interesting gameplay mechanics would dictate what the game looked like. Then, at the end of the day, the job of the narrative was to justify it — to explain why the characters were where they were, why they needed to complete their objectives, how many times, and why the world around them looked and functioned the way it did. This was a new challenge for me, and involved many rewrites of the entire world’s backstory (at which point

Marianne officially welcomed me to the club of “game writing in the real world”), as we wanted to make sure we got the game’s narrative foundation right so we wouldn’t have the need to backtrack later and rework elements that were incompatible with each other. But eventually, I put together my own team of talented writers to help me get the job done.

Practically speaking, once the general backstory was locked down, we moved to the creation and maintenance of an internal “wiki” which our team members relied upon for reference in their work, essentially, building out the “watermelon” in preparation for providing the player with a richly detailed, juicy slice. The writing assignments quickly moved beyond our hyperlinked system of Google Docs on the games characters, locations, technology, and history. Soon, we were developing what I call “diegetic documents,” or texts which exist within the world of the story itself, such as logs, communication transmissions, research reports, and journal entries. As we began to build out the gameplay itself, I partnered with our engineers and game designers to develop a fully scripted for both FPS and RTS players, which, once finalized, provided me with the opportunity to direct talented voice actors. There’s always something magical about watching a character you created come alive after providing a skilled actor with a script and the right character motivation. Soon, even the dreaded “spreadsheet writing” that game writers eventually face as they prepare hand-off docs for engineers, and develop dynamic callouts or “barks” for the game’s characters, became enjoyable for me.

ACT III

The Future of Game Writing & Why It Matters

Still, while I was able to apply the skills I had fostered in one project to another, the two projects illustrated just how different the story needs of two games can be. For a moment, let's consider how narrative may differ from some of the other functions of a development team, such as programming or art. What programmers and artists create will vary from project to project, just as the tools they use or styles they employ also might. But, the basic concepts of workflow and pipelines in these roles are essentially transferable from game to game, whereas in writing, these workflows differ greatly. This partially accounts for the incredibly diverse set of job titles that span the narrative field. In my own job search I've seen and applied for a wide array: freelance/staff writer, narrative designer, content designer, narrative writer, story lead, etc. It's not uncommon for studios to tweak the titles of these positions in attempts to convey the specific needs the role is designed to fill. Some content and quest designer jobs, for example, require not only the plotting of content or quests for a game, but actually the use of the game's engine to build them, which increases demand for writers with more engineering and technical experience. The relative ambiguity of what being a "game writer" means has also led to an absence of development programs in both the professional and educational world.

Yet some promising programs do exist, with more on the way. While there's not yet a major within USC's games program devoted entirely to narrative, there are classes, such as Character Development & Storytelling for Games, which focus solely on the subject, and similar classes exist elsewhere like *BioShock*, *Tomb Raider*, and *Far Cry* writer Susan O'Connor's Game

Writing course at the University of Texas at Austin. The industry itself has also produced efforts to beef up the available pool of skilled writers in the job market. ArenaNet, the development studio of the Massively Multiplayer Online Role-Playing Games, *Guild Wars 1 & 2*, has a Narrative Mentorship program currently in its 3rd iteration, designed to give professional writers in other industries the coaching and experience necessary to make the transition into games. Some participants have even graduated the program into full time positions on ArenaNet's narrative teams. According to an interview with gamesindustry.biz, program pioneer Bobby Stein & recent program graduate, now full-time hire, Novera King, hope to see similar programs springing up at other studios, either in partnership with ArenaNet, or as separate iterations. Pioneers like Stein and King continue to make barriers to entry more accessible to talent across the board, lessening the limiting impacts of privilege or special connections.

But such a growth in development programs will take time, and many similar efforts are also in their infancy. Narrative designers like Jubert continue to show an increased willingness to speak on panels at game conferences, or give guest lectures at universities. E-sports game developers like Respawn Entertainment have begun to invest in narrative staff for games like *Apex Legends*, and interactive media is beginning to bleed over onto other platforms, with the advent of content like *Bandersnatch* on Netflix's original *Black Mirror*.

Ultimately, the growth of both narrative content in interactive media, as well as new opportunities for the creators of such content to hone their skills, is good for everyone, even for those who don't consider themselves "gamers." Next time you find yourself on a plane, or perhaps even the subway, take a look around at the other passengers. Odds are, you'll find them consuming stories, whether their reading a book or a newspaper, watching a movie or a show,

playing a game, or recounting memories with their friends in a messenger. Many of us consume stories more often than we consume food and water, and I've always been told "you are what you eat." If that holds true, that means the content we consume matters, and higher quality content will have its ripple effects in the ordering of our daily lives, our cultures, and our societies. Simply as a human, I find this promising. Stories that will make us consider new perspectives, think, and feel more, are on the way, and they'll come to us in new and interesting ways. And as a writer, I find this exciting. If I play the game of life right, perhaps some of those future stories will come from me.

DOCUMENT SHOWCASE:

Introduction

In the following pages, I've included several documents produced during my time as narrative lead on the *Incursion* team.

The first of them, entitled *What is Ethra*, is an example of a “diegetic document,” or a text that exists within the world of the story. This particular document is a research log, which details one of our character’s theorizing about a powerful substance he has come into contact with, called Ethra. This resource and its demand serves as the central conflict for our RTS v. FPS game.

Following this document are two scripts, first, one which describes the sequence of events for the tutorial designed for the real time strategy players, and then the tutorial for the first person shooter players. Appended to each script is the corresponding “eng handoff” document, which showcases how a script in a “screenplay” type, sequential format might transform in the development process to assist a programming team as they work to build the necessary story elements into the game.

My hope is that the inclusion of these documents helps to shed some light on the writing process, what elements of it might be unique to games, and what this journey has looked like through my eyes.

Chief Science Officer's Log #54B08D-€

Title: "What is Ethra?"

What actually is Ethra?

It's the question I've been asked most since The Jump.

Some worship it like a god. Others insist we should revere it like an intelligent being, totally sentient, deserving of rights, negotiations, all the rest of it.

But after all of our experiments and observations, I think it's best understood by one simple property: its tendency to contain threats to the material universe. It's what makes The Guardians so damn good at what they do— what keeps our anti-matter in a usable state.

Somehow, understanding it this way doesn't make it any less wondrous to me. I still can't wrap my mind around *how it knows*— what's a threat to the universe and what isn't?

Hunches don't carry much weight in science, but if I got one, it's that the Ethra saw The Roanoke as a threat before the end.

Possibly right before...

Gameplay Loop
RTS Player

LOADING SCREEN:

Incoming Transmission...

Looks like Dr. Kepler was right. Again. I'll never hear the end of this one. But right now, you've got a bigger problem.

No doubt these invaders are after our Ethra. Don't worry about specimen preservation. Just destroy everything you don't recognize. They'd do the same to you.

Remember, you need that Ethra to survive.

Make good use of those bios and minerals. The entire planet's resources are at your disposal. Good luck.

--Dr. Adrias

FADE IN:

DOCTOR ADRIAS

You awake out there, officer?

It's time to put your
experiments to the test.

Camera moves to first objective

Arrow points to first objective

DOCTOR ADRIAS

It looks like these invaders
are targeting this crystal first.
Get some mutes to the site ASAP!

ON SCREEN:

Keep units on the enemy's objectives to slow their progress. You can corrupt it when no enemies are nearby.

Arrow points to the
objective on the minimap

ON SCREEN:

Objectives are highlighted on the minimap.

Camera moves back to base

DOCTOR ADRIAS

You should find your
mech waiting for you back
at base. Hopefully it's still
in good shape. See if you
can get it moving.

Arrow points to builder

ON SCREEN:

Left click and drag over
your mech to select it.

Player selects mech

Arrow points to ground close to Nexus

ON SCREEN:

Right click on the ground to move the builder.

Player moves builder close to the Nexus

DOCTOR ADRIAS

Good. Now you'll need
to get the ore production
up and running again. Use
your mech to repair the
Central Nexus.

Arrow points to Nexus

ON SCREEN:

Right click your Nexus to make the mech reactivate it.

Player clicks Nexus
Mech reactivates Nexus
Nexus start gaining minerals

DOCTOR ADRIAS
Excellent. I'm seeing a
steady supply of ores
coming in. You'll need those
for better armor and equipment.

**Arrow points to increasing
resource count**

ON SCREEN:
Your Nexus automatically mines ores. You can use them to build
and upgrade your army.

Arrow points to barracks

DOCTOR ADRIAS
Your mech can repair other
buildings too. Let's open up
one of these Labs and
set some mutes loose!

ON SCREEN:
Move the mech to the bio lab.

**Player moves the builder
to target barracks**

Arrow points to the barracks

ON SCREEN:
With the mech selected, click on the lab to repair it.

**Player clicks on barracks
Builder finishes repairing barracks
First unit wave spawns**

DOCTOR ADRIAS
Heh - I wouldn't want to
come face to face with
those things. These creatures
are wild, and you won't be
able to control them, but they're
pretty devastating when they

strike as a group.

Rally point of AI
units highlighted

ON SCREEN:

These melee units are low-level and uncontrollable. They will move to the active objective and attack invaders.

Camera moves back to barracks
arrow points to the barracks

DOCTOR ADRIAS

Now, if you've been following instructions all these years, your labs should have additional capabilities. Try to make something that packs a little more punch.

Player clicks on barracks

Arrow points to button
for ranged unit

ON SCREEN:

Click this button to produce a ranged unit. These units are more costly, but can be controlled.

Player clicks on button

Unit is produced

DOCTOR ADRIAS

Very good. Thanks to our tech, these mutes can strike from a distance. Move them in range of the enemy to put them to use!

Player engages enemy
for the first time

Arrow points to enemy

DOCTOR ADRIAS
Your units have made contact
with the enemy-- eliminate
them!

First unit dies

Bio fuel added to resources

Arrow points to
Bio fuel count in HUD

DOCTOR ADRIAS
Blast. They're destroying
our experiments. But
it's not a total loss.
When mutes die, they
release biofuel which goes
directly into your stores.

Camera moves to research building

Arrow points to research building

DOCTOR ADRIAS
In your Research Facility,
you can repurpose the fuel to
discover and apply upgrades
to any units you produce in
the future.

RTS repaired building
gets destroyed

Camera moves to destroyed
building

DOCTOR ADRIAS
Dammit! These invaders are
stronger than I thought. But
don't give up! When your buildings

are destroyed, you can use
your mech to repair them again.

Arrow points to destroyed building

ON SCREEN:

With the mech selected, click on the building to repair it.

RTS defeat

DOCTOR ADRIAS

Oh, this is *not* good. And
I suppose *I'll* have to break
the news to Dr. Kepler since
by then you'll already be dead!
(Game ends: LOSS)

RTS player eliminates FPS

DOCTOR ADRIAS

Well done. Let's hope
that's the last we see
of those ruffians.
(Game ends: WIN)

Line ID	Trigger	String	Speaker	.WAV file	nOTES	Retake	
RTSD_1	Loading Screen closes	You awake out there, officer? It's time to put your experiments to the test.	DOCTOR ADRIAS	RECORDING 64			
RTSD_2	RTSE_2 executes	It looks like these invaders are targeting this crystal first. Get some mutes to the site ASAP!	DOCTOR ADRIAS	RECORDING 10			
RTSD_3	RTSE_4 executes	You should find your mech waiting for you back at base. Hopefully it's still in good shape. See if you can get it moving.	DOCTOR ADRIAS	19-21		11	
RTSD_4	Player moves builder close to the Nexus	Good. Now you'll need to get your ore production up and running again. Use your mech to repair the Central Nexus .	DOCTOR ADRIAS	35, OPTIONS BEFORE 31 HAVE "YOUR ORE"	CHANGED TO "THE ORE PRODUCTION" SO I DIDN'T SAY RUN YOUR AND ORE TOGETHER		
RTSD_5	Reactivated Nexus gains minerals for the first time	Excellent. I'm seeing a steady supply of ores coming in. You'll need those for better armor and equipment.	DOCTOR ADRIAS	45		13	
RTSD_6	RTSE_10 executes	Your mech can repair other buildings too. Let's open up one of these Labs and set some mutes loose!	DOCTOR ADRIAS	57		15	
RTSD_7	RTSE_13 executes	Hah - I wouldn't want to come face to face with those things. These creatures are wild, and they're pretty devastating when they strike as a group.	DOCTOR ADRIAS	66 deleted " and you won't be able to control them"		17	
RTSD_8	RTSE_16 executes	Now, if you've been following instructions all these years, your labs should have additional capabilities. Try to make something that packs a little more punch.	DOCTOR ADRIAS	72		18	punch?
RTSD_9	RTSE_18 executes	Very good. Thanks to our tech, these mutes can strike from a distance. Move them in range of the enemy to put them to use!	DOCTOR ADRIAS	81		23	
RTSD_10	RTSE_19 executes	Your units have made contact with the enemy-- eliminate them!	DOCTOR ADRIAS	83 OR 85			
RTSD_11	RTSE_21 executes	Blast. They're destroying our experiments. But it's not a total loss. When mutes die, they release bio fuel which goes directly into your stores.	DOCTOR ADRIAS	92 OR 93		25	
RTSD_12	RTSE_23 executes	In your Research Facility , you can repurpose bio fuel to discover and apply upgrades to any units you produce in the future.	DOCTOR ADRIAS	99		30	
RTSD_13	RTSE_24 executes	Dammit! These invaders are stronger than I thought. But don't give up! When your buildings are destroyed, you can use your mech to repair them again.	DOCTOR ADRIAS	103, 104, OR 106			
RTSD_14	RTS defeat	Oh, this is not good. And I suppose I'll have to break the news to Dr. Kepler since by then you'll already be dead!	DOCTOR ADRIAS	113 or 114			
RTSD_15	RTS player eliminates FPS	Well done. Let's hope that's the last we see of those ruffians.	DOCTOR ADRIAS	119, 121, 122			

Gameplay Loop
FPS Player

LOADING SCREEN:

Writ of Instruction

Commander Kagari,

After moons of scrying, I found the origin of the pulse: a world from the acolytes' vision. Our archives name it **Sahravan**. From a distance, the planet seems barren and devoid of life, though the sheer concentration of energy clouds my sight

We've never attempted a jump this far before, but the mages should be able to open up a portal long enough for at least one of your knights to get through. Though if they hope to return, they'll have to find an energy source on-world. Pray the visions hold true.

You've never let me or The Communion down before...
Don't start now.

FADE IN:

COMMANDER KAGARI

Looks like you made the
jump. Am I coming through
OK? Show me some movement
so I know you're alive.
Maybe take a look around
while you're at it.

ON SCREEN:

Use WASD to navigate and  to look around.

Player gives movement and camera input

ON SCREEN:

Press F to roll while moving
Or standing

Player rolls

COMMANDER KAGARI

Good. Now there's only
So much I can do from here.
You'll need to monitor
your own conditions.
A good soldier is always
on top of her vitals.

ON SCREEN:

This bar displays your health.
It regenerates over time if
you don't take damage.

COMMANDER KAGARI

Now, let's get to the
Mission. You're looking for
a powerful energy source
from the Goddess's visions.
She thinks it could be "ethra,"
the missing link in her
Alchemical theory. Oh-
and you'll need to find
something if you want to
open a portal back home.

Player leaves starting zone

**Camera lifts and focuses on
final objective zone**

COMMANDER KAGARI

Check it out! Seems like
you've landed near a
convergence point. If you
charge it up with enough
power, you should be able
to use it as a focus

for a return portal.

Camera snaps back to FPS view

COMMANDER KAGARI

What's that I'm sensing up
ahead? Looks like lifeforms!

**Two enemies appear as
radar blips**

ON SCREEN:

Your radar displays nearby threats and objectives.

**Player moves within
range of enemies**

COMMANDER KAGARI

Those things look hostile!
Remember your training and
take 'em down, quick!

ON SCREEN:

Right click to fire your weapon.

Player kills enemy units

COMMANDER KAGARI

The creatures you killed
released a kind of energy
that's fusing with your
body! Do you feel any
stronger?

ON SCREEN:

Killing enemies increases your
active ethra levels, improving
your stats.

Four seconds pass

COMMANDER KAGARI
They seem to be spawning out
of that pod. See if you
can destroy it!

ON SCREEN:
Press E to use an explosive spell
that deals extra damage

Player destroys pod

ON SCREEN:
Destroying pods slows
the spawn of enemy units

COMMANDER KAGARI
Nice work! That should give
you a clear path to the
energy pulse ahead.

**A radar blip appears
On the first objective.**

**Player enters cap zone of
first ethra crystal**

COMMANDER KAGARI
Whatever energy is trapped
inside that crystal appears
to be trying to get free!
See if you can protect it long
enough to absorb its power.

ON SCREEN:
To capture an objective,
Closely guard it until the
progress bar is full

**Player caps first
ethra crystal**

COMMANDER KAGARI

Wow... I've never seen anything like this. Its energy seems to be pulsing through you! Is there some way to channel it with your weapon?

ON SCREEN:

Press Q to allow your weapon to charge your enemies with energy. Then press Q again to detonate the charges.

Enough time passes for player to try out ultimate

HIGH ACOLYTE

Commander Kagari, this is it, the ethra we've been looking for. The Goddess will be pleased. Have your knights collect as much as they can and return at once!

COMMANDER KAGARI

Yes sir! You heard him, soldiers. I'm seeing one more crystal in your AO. Once you have it, head to the focus, open up a portal and get out of there!

FPS captures a 2nd crystal

COMMANDER KAGARI

You got it! Now take those crystals to the focus and get the hell out of there!

FPS defeat

COMMANDER KAGARI

Without those crystals there's
no way for us to get you
home. I'm sorry... You're on
your own, soldier...
(Game ends: LOSS)

Player successfully opens the portal

COMMANDER KAGARI

Great work out there, soldier.
You've made The Communion proud.
I have a feeling what we found
here is about to change
everything.
(Game ends: WIN)

Line ID	Trigger	String	Speaker	.WAV file	.WAV alternates
FPSD_1	Loading Screen closes	Looks like you made the jump. Am I coming through OK? Show me some movement so I know you're alive. Maybe take a look around while you're at it.	COMMANDER KAGARI	FPSD_1.wav	
FPSD_2	Player has given movement && camera input && used roll	Good. Now there's only so much I can do from here. You'll need to monitor your own conditions. A good soldier is always on top of her vitals.	COMMANDER KAGARI	FPSD_2.wav	
FPSD_3	FPSUI_3 on screen for 5 seconds	Now, let's get to the mission. You're looking for a powerful energy source from the Goddess's visions. She thinks it could be "Ethra," the missing link in her alchemical theory. Oh- and you'll need to find <i>something</i> if you want to open a portal back home.	COMMANDER KAGARI	FPSD_3.wav	
FPSD_4	During event: FPSE_2	Check it out! Seems like you've landed near a convergence point. If you charge it up with enough power, you should be able to use it as a focus for a return portal.	COMMANDER KAGARI	FPSD_4.wav	
FPSD_5	FPSE_3 executes	What's that I'm sensing up ahead? Looks like lifeforms!	COMMANDER KAGARI	FPSD_5.wav	
FPSD_6	Player moves within close range of enemies	Those things look hostile! Remember your training and take 'em down, quick!	COMMANDER KAGARI	FPSD_6.wav	
FPSD_7	Player kills first 2 enemies	The creatures you killed released a kind of energy that's fusing with your body! Do you feel any stronger?	COMMANDER KAGARI	FPSD_7.wav	
FPSD_8	FPSUI_6 on screen for 5 seconds	They seem to be spawning out of that pod. See if you can destroy it!	COMMANDER KAGARI	FPSD_8.wav	
FPSD_9	FPSUI_8 on screen for 3 seconds	Nice work! That should give you a clear path to the energy pulse ahead.	COMMANDER KAGARI	FPSD_9.wav	
FPSD_10	Player enters cap zone of first ethra crystal	Whatever energy is trapped inside that crystal appears to be trying to get free! See if you can protect it long enough to absorb its power.	COMMANDER KAGARI	FPSD_10.wav	
FPSD_11	Player caps 1st ethra crystal	Wow... I've never seen anything like this. Its energy seems to be pulsing through you! Is there some way to channel it with your weapon?	COMMANDER KAGARI	FPSD_11.wav	
FPSD_12	FPSUI_10 on screen for 8 seconds	Commander Kagari, this is it, the Ethra we've been looking for. The Goddess will be pleased. Have your knights collect as much as they can and return at once!	HIGH ACOLYTE	FPSD_18.wav	
FPSD_13	FPSD_12 executes	Yes sir! You heard him, soldiers. I'm seeing one more crystal in your AO. Once you have it, head to the focus, open up a portal and get out of there!	COMMANDER KAGARI	FPSD_13.wav	
FPSD_14	FPS captures a 2nd crystal	Well done, soldier. Keep it up! We just need one more crystal!	COMMANDER KAGARI	FPSD_14.wav	
FPSD_15	FPS defeat conditions met	Without those crystals there's no way for us to get you home. I'm sorry... You're on your own, soldier...	COMMANDER KAGARI	FPSD_15.wav	
FPSD_16	FPS captures the 2nd ethra crystal	You got it! Now take those crystals to the focus and get the hell out of there!	COMMANDER KAGARI	FPSD_16.wav	
FPSD_17	Player successfully opens the portal	Great work out there, soldier. You've made The Communion proud. I have a feeling what we found here is about to change everything.	COMMANDER KAGARI	FPSD_17_1.wav	FPSD_17_2.wav

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