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STRATEGIES OF INTERACTIVE NARRATIVE IN GAMES FOR NARRATIVE DESIGNERS

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BY
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Introduction

Importance of Learning Theory of Interactive Narrativity

In order to continue pushing the medium of interactive fiction forward, it is essential that writers understand the ways in which different methods of interactivity can be used within a narrative, why they are used, and the audience expectations associated with them. In my capstone I endeavor to define the ways in which a narrative can be interactive in order to produce the most engaging player interactions within a narrative system.

While opinions on interactive narratives have trended more positively in the past two decades, there is still work to be done in gaining the approval of both general audiences and the development community. In David Kushner's book recounting the development of the original *Doom*, lead programmer John Carmack is quoted as saying: "Story in a game is like a story in a porn movie. It's expected to be there, but it's not that important" (Kushner). He has since walked back that statement to a degree in a 2018 statement: "This old quote still pops up, but I caveat it today -- there are undeniably lots of games where the story is the entire point, and they can be done well. I do still hold that the most important games have been all about the play, not the story" (Carmack). While his attitude towards interactive narratives is not nearly as derisive, the key word in his amendment is the word *important*. Narrative is still less than, not equal to, gameplay. If prolific figures within the game development community still maintain this point of view, then there is clearly still some work left to be done in elevating interactive narratives as an art form equal to other long established forms of narrative.

From an artistic perspective, there is a considerable amount of interest in writing interactive narratives. Over the last five years I have had the privilege of attending the Rochester Institute of Technology as both a Game Design & Development and English major. I have

spoken to many faculty and students passionate about creating interactive narratives as well as enrolled in classes related to the subject. There is, however, a lack of knowledge in breaking into this field. Many hear stories of the past where writers and designers, previously unaffiliated or lacking any experience within the game design and development field, were able to leave their day jobs to pursue this artform at AAA levels. At this moment in time, that could not be further from the truth. Narrative design jobs in the gaming industry have become sparse compared to other roles and require a high level of experience as a result. I have heard multiple writers unacquainted with the industry say more or less the same thing: "I want to write for games. I know there's not a lot of jobs right now but it shouldn't be that hard, it's just fiction writing", disregarding both the form they desire to write in as well as what is actually required from the role. Narrative designer is not just a fancy way of saying writer, it entails far more. It is the role of the narrative designers not only to write, but to design the ways in which the player receives the narrative and interacts with it as well as implementing that into a game. It is paramount, then, that those who aspire to design interactive narratives understand the full scope of what they must be able to accomplish as well as how to accomplish it.

Even from a purely economic standpoint, there is a clear market for the development of pieces of interactive narrative. As of December 2023, four of the ten best selling games (of those that report updated sales) that have major elements of interactive narrative have sold over 366 million units (Sirani). Assuming the standard price point of \$60 per copy, this totals to nearly \$22 billion in revenue. Should writers want a piece of this market, they need to know what they're doing.

No matter which way you choose to look at it, there is an apparent vested interest in the development of this medium of storytelling from those who want to tell stories and those eager to experience them.

What to Expect From this Text

This text will serve as a collection of common strategies and structures used in the past by writers and designers of interactive narratives and a discussion on the perceived success they have had. In no way will this be a comprehensive list of every strategy used before nor should the methods discussed be taken as objectively “right” or “wrong”. Success in storytelling is subjective to both writer and audience. Proposing a steadfast set of rules that must be followed at all cost is also completely dismissive of experimental narratives that play with or invert these strategies to wild success. It is my belief that, in order to take full advantage of a medium, you must first look to the past to see what has worked, what hasn’t, and the reason for that. Only then can you make intentional decisions regarding the way in which your story is told.

This text will not serve as a way to teach the fundamentals of storytelling. Rather, it will discuss the ways in which the medium of interactive narratives can include the player in the story being told. Should you wish to learn more about storytelling outside of this form, I would recommend the following literature that has been helpful in my own development as a writer:

- *Story* by Robert McKee
- *Characters, Emotion & Viewpoint: Techniques and Exercises for Crafting Dynamic Characters and Effective Viewpoints* by Nancy Kress
- *Plot and Structure* by James Scott Bell
- *Collaborative Worldbuilding for Writers and Gamers* by Trent Hergenrader

What is an Interactive Narrative?

In order to dive into the strategies for writing interactive narratives, I must first set the boundaries of what I plan to analyze and draw from. In other words, what makes a narrative interactive? It's a hotly contested debate. Some believe that interactive narrative can only be created through what a writer sets out for the player to experience, or, the embedded narrative. This is the truest vision of what a writer intends for the story to be, and the rest is just a vehicle to get there. Others believe that narrative can also come through gameplay, or, emergent narrative. The story told through interactions being just as important as what is formally written. This will be investigated further in the section on emergent narrative, but for now let's work under the assumption that both embedded and emergent narrative exist to form an interactive narrative.

This then begs the question: is a game such as *Tetris* an interactive narrative? The game has no narrative theming; the player is never given a reason to do what they do, however one could tell a story solely from the emergent narrative that comes from playing it: I placed a O-block at the bottom left of the screen and then an L-block directly to its right and then... etc. Not quite a riveting story, however it does form a coherent sequence of events that can be recounted in the form of a story. There is no set narrative that the author has put forth, only narrative created through interaction.

What about blackout poetry? Does that count as a form of interactive narrative? While the author most likely didn't intend for the reader to alter their written narrative, one can certainly erase words in a way that would create a new narrative from what's left. There is a narrative set forth by the narrator, however this narrative, now divorced from the author, is created through interaction as well.

These examples highlight a larger issue: to what extent does audience participation matter? Marie-Laure Ryan, in her article “The Interactive Onion: Layers of User Participation in Digital Narrative Texts” proposes a spectrum of interactivity where the audience has increasing agency in the contents of a story and how it is told. This spectrum encompasses many forms of interactivity with the most basic form of interaction being through an interactive interface: the user must do something in order for the contents of the story to be revealed. No value is placed on one method of interactivity over the other either; each method is valuable on the basis that the user can interact with the narrative in some way.

Using this, I propose that interactive narratives are any narrative in which individual participation is required in revealing or altering the path that a narrative takes. More specifically they contain these characteristics:

- They are a collaborative effort between author and audience and require a clear and intentional way for the audience to interact with them. Returning to the blackout poetry example, while the process is interactive, I would not consider it an interactive narrative as the author does not intend for a reader to alter their work. A work intended to be altered by the author in this way, however, could be considered an interactive narrative.
- The narrative’s presentation or content needs to be influenced in some way by user agency. If a user is instructed to act in a certain way, then there must be a reaction that comes as a result.
- They must have some sort of narrative content outside of the interaction itself.

An interactive narrative cannot solely come from the production of emergent

narrative, the user must have a narrative reason to interact with a system's mechanics.

- The status of an interactive narrative can be fluid. Should the method(s) of interactivity be removed, a work is no longer an interactive narrative. The 1988 Batman story arc, "A Death in the Family" was, for a brief time, an interactive narrative as readers were able to vote on the fate of the character of Jason Todd. This was the first time readers were ever given control over the narrative, and after voting was finished, readers were never again given the power of agency within the story. Should you read the story today, you would have no agency in the path the story takes, therefore, it is not currently an interactive narrative.
- They are independent of medium. They can be told through books, film, television programs, graphic novels, video games, etc. If there is a way for an individual to interact with the narrative in some way, then it is an interactive narrative so long as it also adheres to the above conditions.

Definition of Terms

Now that I've defined the boundaries of what I will be talking about, I also find it important to define some of the terms I will be using to discuss and evaluate interactive narratives and their strategies.

Player

Throughout this text, I will be referring to the person(s) participating in an interactive narrative as a player. This term stems from the gaming lexicon, and while a core characteristic

of interactive narratives is their independence of medium, a large amount of discourse surrounding interactive narratives uses the term in this way, so I have chosen to as well for the sake of clarity and consistency.

Mechanics of Narrative Interaction

The mechanics of narrative interaction are the ways in which the player is able to interact with a narrative. They are a subset of the broader category of gameplay mechanics that are focused on player interaction as a whole. For example: killing an enemy to score points is a gameplay mechanic, however, if killing an enemy alters the story in some way, then it could be considered a mechanic of narrative interaction

Engagement

This refers to the player's willingness to participate in interacting with a narrative. If a player is engaged, they are more likely to continue interacting with a narrative (barring external circumstances that would interfere with their ability to). Engagement typically comes as a result of interest or entertainment and creates a desire to continue engaging with a narrative.

Impact

Impact is a value measurement of how meaningful or effective an aspect of an interactive narrative is to a player. Impact is tied to an emotional response within the player. If someone says that a certain plot point was impactful, then they felt as if something important happened. Likewise if something isn't impactful, then it had little to no meaning to them and lacked effectiveness.

Immersion

Immersion is a state of being where the player feels as if they are a part of or have control over the story in which they are experiencing. This leads to a story feeling impactful to a player. Marianne Krawczyk and Jeannie Novak elaborated on this idea: “In order for the player to get the most out of the game experience, it is necessary to make the player feel as much a part of the world as possible” (Krawczyk and Novak 93). Immersion can allow players to experience simulated realities, realistic or not, and make them feel as if they exist within them. They are not just controlling a character, they *are* the character. Game designer Jenovah Chen likens immersion to being within a flow state, where the player is so focused on the experience that they have become one with it: “During the Flow experience, we lose track of time and worries. Indeed, our level of focus maximizes our performance in and pleasurable feelings from the activity. Flow is also called the optimal experience, or being in ‘the Zone.’” (Chen 31). Immersion in a narrative is essential for it to be impactful for a player.

The Illusion of Control

The illusion that the player is in control comes as a result of immersion. This happens when a player has been made to feel as if their actions and their actions alone are what determines the outcome of a narrative. In reality, all that is to come has been predetermined by a writer, however, immersion makes a player feel as if they have control. In order for player choices to be impactful, one must be under the illusion of control. Once this illusion has been broken, either due to logical inconsistencies within the plot or a feeling of unimportance within the narrative, it is hard to recover.

What Interactive Narratives Will I Choose to Discuss?

At a recent presentation of my work, I was asked why I hadn't included a specific title in my discussion of interactive narratives. It was a great question! My simple answer was that I hadn't played it. I'd certainly heard of it before, it was just not accessible to me at the time of conducting my research. An unfortunate result of platform exclusivity is that not all titles are available for everyone to experience. This research is self funded and it is a difficult and expensive task to amass all possible gaming platforms. An alternative solution to this is attempting to experience the narrative second hand through online videos like *Let's Plays* where a content creator plays through the game in full. I decided against this method as I would not have agency in the narrative decisions made, defeating the point of interactive narratives. Being a passenger in a fast car can be exhilarating, however it doesn't compare to driving the car itself.

The narratives discussed in this work, then, will be ones I have access to. While I have access to a plethora of them from my many years of collecting them, there is an inherent bias in the works discussed due to them only being ones that I am personally interested in. While I will make my best attempt to remain objective in my analysis of the works included, I think it is important to highlight the potential for my unconscious bias to skew my view of these titles both in a positive and negative way. The strategies highlighted will also come from video games as a result, although strategies used in this sub genre of interactive fiction can still be applied in other works of interactive fiction as well.

With that out of the way, we are now on the same page and ready to begin discussing interactive narratives and the potential strategies a writer may use in creating one.

Player with Choice

The defining feature of interactive narratives is the control that it gives to players through decision making. It is currently the only medium to allow its audience to have any influence over details both big and small. This then spawns two big questions regarding player choice: what kinds of choices can a player make, and what makes those choices engaging for the player?

Types of Choices

In their work, *Fundamentals of Game Design*, Ernest Adams and Andrew Rollings outline three different types of choices that the player can make: immediate choices, deferred choices, and cumulative choices. Immediate choices refer to choices that have immediate influence on the story. Deferred choices are choices that have influence over the story at a later time. Cumulative choices are choices made as a result of multiple choices.

Let's take a scenario where the player character has a gun and is forced to defend himself from an assailant. An immediate choice the player could make would be to fire the gun, injuring or potentially killing the attacker. A deferred choice the player could make would be to flee from the enemy, leaving the enemy to potentially reappear in the narrative later on to continue their pursuit of the player character or help them as a result of the mercy they were shown. A cumulative decision the player could make may be related to the amount of ammunition they have remaining. If the player was trigger happy earlier on in the narrative, they may not have the bullets remaining to defend themselves from their foe, forcing the player to find a different path in resolving the confrontation.

How a Narrative Reacts to Player Choice

The trick with allowing player choice is that there must be reaction from the narrative for the decisions the player has made. This is at the core of what makes participation in interactive narratives engaging for a player: the ability to make decisions and have the narrative respond back. Actions must have consequences as a result of player agency. This does not mean that there needs to be reality altering consequences every time a player does something. In fact, some decisions do not need to have any real consequences, so long as the player feels as if they do. When a player customizes their character, they feel as if they have control over the reality in which they inhabit. Most time this does not have any influence over the direction a narrative takes, however the important result of this interaction is that the player feels as if they have agency. This creates the illusion of control discussed earlier. Through an establishment and maintenance of this illusion, a writer can create decisions that feel impactful for the player as a result of the agency they feel that they have over the path the narrative takes despite that path ultimately being predetermined.

A simple example of this can be seen in *Far Cry 4*. At the beginning of the game the player character is kidnapped and finds themselves sharing dinner with a murderous dictator of the island they have visited, Pagan Min. When Min is briefly called away from the dinner, the player is urged to escape, kicking off the events of the game. If the player decides to remain at the dinner table for more than ten minutes, however, Min will reappear and thank the player for their patience, allowing them to accomplish their goal early and ending the game prematurely. While this choice circumvents the entire narrative of the game, it has been praised by fans. Players enjoyed the fact that there was a meaningful narrative consequence as a result of the active choice they made to not escape.

Player Interactions With Self

Introduction

The first thing a player will be drawn to when interacting with a narrative is the role they are trying to fill; from whose perspective are they experiencing things and what is the character's role within the story world? The player must understand their new persona and its capabilities before they are ready to interact with the story world around them. Perhaps their character is someone with a strong sense of self, or someone left entirely up to the player's creation. Either way, the player needs to know as these details will help them to glean information on the ways in which they may interact with a game's systems or narrative. Interactive narratives generally contain three types of player protagonists: the silent protagonist, protagonists with a strong sense of self (established protagonists), and protagonists created by the player.

Silent Protagonists

Silent protagonists are player characters that stay silent throughout a narrative that typically have limited interactivity within a narrative. It is the player character's actions, then, that influence the narrative rather than words. *Dishonored's* assassin Corvo is one of the best examples of this player character type. He has no dialogue options that affect the narrative (outside of obtaining optional world lore). Instead, the narrative is determined solely by the number of enemies that he kills or spares with three different endings that the player can obtain as a result of their choices.

Established Protagonists

Established protagonists are player characters that have immutable personality traits. Player's may be given multiple differing ways in which the character can interact with a narrative, however these decisions are always in line with the kind of decisions that the character would make. The player experiences a version of the character, however the specific ways in which he or she may act is still ultimately determined by the writer. *The Walking Dead's* Lee is an example of this kind of character. The player is allowed to make decisions within the narrative such as the way he interacts with other characters (kindness or hostility) as well as the fates of several non-playable characters, however, any decision that the player makes is one that is believable that Lee would make independent of the player's influence. While there is less player agency granted, it allows for the writer to hone in on a few story paths rather than needing to account for the many ways in which a player would choose to interact with a narrative.

Player Created Protagonists

Player created protagonists are those in which the player has a much higher degree of agency over the way the character interacts with the narrative and the non-playable characters around them. The player is often provided with a large quantity of dialogue options and styles of play when interacting with a game's systems. This allows for the player to choose the ways in which they want to roleplay within a narrative rather than being forced to roleplay in few specific ways. Characters such as *The Mass Effect Trilogy's* Commander Shepard are given options that are labeled as "Paragon" (good) or "Renegade" (bad) while character's such as *Baldur's Gate 3's* Tav (the default name given to the player character if a custom one is not entered) are given a

slew of different options that are used to highlight different potential aspects of the character's personality and exist on a broader spectrum of emotions.

The most important aspect of choosing which player character type is best for your narrative is that the player must be able to connect with the character on some level in order to have the continual desire to inhabit their headspace. If a player cannot align with a character in any form, through motivations and desires, personality, or some other characteristic, they will not have a reason to continue wanting to experience a narrative. Outside of writing compelling characters and narrative, one of the easiest ways to get a player invested in what you have to offer is through the ways in which they interact with their avatar. Through this type of interaction, they can gain a deeper connection with the player character and form a personal stake in the character's identity.

Personalization

The most simple way to include player character customization is through allowing the player to edit surface level features such as the player character's physical attributes, so long as those attributes are not essential to the narrative being told. Some games like *Helldivers 2* include options to change the player character's body type, voice, and armor while games such as *Baldur's Gate 3* allow the player to change a broader variety of attributes ranging from race, hair, facial features, body proportions, and even genitals. While this changes nothing about the way in which a player interacts with the narrative or world around them, it allows the player to become emotionally attached to the character they puppet as they have physically become a creation of their own design. These systems also allow for games to be more inclusive of diverse player

characters. One of the largest criticisms aimed at game narratives over the last two decades is the lack of inclusivity in protagonists that deviate from the straight white cisgender male archetype. Giving the player the ability to create their own protagonist that deviates from these norms allows for a wider range of people to identify with the protagonist on the basis of racial or gender identity.

Customization and Interactivity

Player character customization becomes even more impactful when that customization comes as a result of the player's interactions with the narrative. This creates a sense of natural growth in the player character as they evolve over time.

Metal Gear Solid V: The Phantom Pain shows physical character growth by giving the player the option to shower after their missions. The player character can become bloodied (with their own blood or the blood of their enemies) or caked in dirt as a result of the play style in which they employ. This is done to show the negative effects that the war has on the player character while the player's choice to shower highlights their ambivalence towards the violence they commit, tying in to the narrative's anti-war messaging.

Star Wars Jedi: Fallen Order encourages the player to explore areas of the game's world that they otherwise might not have in order to collect customization items such as ponchos for the player character as well as different parts and colors for the character's weapon. The game goes as far as to make weapon customization a central plot point within the game's narrative. During a moment of substantial character development, the player character comes to terms with the trauma of his past, and as a result, unlocks new customization options for his weapon that allows the player to physically see the ways in which the player character has grown.

One of the more recent innovations within games that have modifiers attached to customization options is transmogrify systems (transmog) that allow players to assign statistical bonuses to pieces of clothing for aesthetic purposes. Previously, players were forced between making their player character look stylish or choosing a more functional approach that improved their skill sets as statistical bonuses were tied to specific customization options. Players often complained that their characters were made to look unfashionable in order to gain the best advantages within a game. Games such as *Cyberpunk 2077* now allow players to equip themselves with their favorite aesthetics without needing to sacrifice the bonuses that enable the type of gameplay they favor most after a recent patch to the game. Player outcry for customization systems such as transmog, in a first-person game where the player can only see their character in a menu, shows how important customization is to a player's level of attachment to the player character they control. This also allows for a greater level of cohesion between the game's mechanics of interaction and the player's own desires for how their character is represented in the world.

On a more mechanical level, player character customization can extend to the ways in which the player interacts with the world around them. A staple of role playing games is skill-based perk systems where players assign points into different skill sets (ex: lock picking, hacking, athletics, persuasion) that determine how proficient a player is at that action. Players are then allowed to use those skills to interact with the world. Some games leave the outcome of these interactions up to chance, with more advanced skills giving a higher chance of successfully completing the interaction while other games keep players from being able to initiate the interaction unless they have a high enough skill level. This allows players to determine the ways in which they intend to interact with a game's world or story without constraining them to one

specific playstyle. This also creates growth within a player's character as they acquire more skills or advance their prowess in a specific skill. Similar to transmog systems, games have begun to include re-specialization systems (respecing) to allow players to reset their skills and reallocate points into different skills, allowing them to explore other ways of interacting with the world instead of pigeonholing them into just one playstyle.

Design Considerations

The decisions of what kind of player character to create for your story and to what extent a player may interact with them is entirely up to the writer. Each has its own advantages and disadvantages as well as impacts on the scope of a project. Allowing the player to customize every single minute detail of the player character may allow the player a deep level of immersion within a narrative, however, creating the systems to accommodate this are extremely complex. A lack of customization allows the writer of a narrative greater control over the player character and their path through a story, however, some players may not connect with a writer's vision. This can happen over seemingly inconsequential details. One of the designers I frequently collaborate with refuses to play *Resident Evil 4* (2023) without putting unlockable cat ears on the player character. This has no effect on gameplay and hardly changes the appearance of the character, but to them, it is the difference between playing the game or not.

The simple solution to this is to create player characters and systems of customization around what fits the story best. It is an impossible task to create a game or narrative that will appeal to every single player. A game such as *Gone Home*, where the player character has few lines of dialogue and the main method of interactivity is through puzzle solving, does not call for a deep system of character creation. The focus, instead, is placed on the environmental design of

the story world as well as the characterization provided to non-playable characters that the protagonist seeks to learn about. If a system works to enhance the overall narrative or systems of interaction, then include it. If not, focus your attention elsewhere.

The more complex solution to this problem is to compromise. In recent years, narrative games that have established protagonists as their player character have allowed for players to customize the character with unlockable (or purchasable) skins that change their appearance. It has no effect on narrative beats or interactivity, however it allows for the player to feel as if that character is their own. It gives players the illusion that they have agency over the character's decisions, namely what they wear when they get up in the morning, when in reality they are locked in to whatever possible narrative paths that the writer has provided for them.

Summary

Player characters are the conduit with which the player is able to project themselves onto. Each narrative demands its own unique voice, however some general rules can be applied to their design:

1. The three main player character archetypes are the silent protagonist, the established protagonist, and the player created protagonist
2. Personalization of player characters can be used to immerse the player within the role they fill, can be used as a reward for the player, and can show how the player character has grown over the course of a narrative
3. Design gameplay mechanics in a way that doesn't interfere with player customization

4. Provide customization options that make sense for the type of narrative and mechanics your story will have

Player with Plot

Introduction

One of the main draws towards interactive narratives is the ability of the player to influence the plot of the narrative they are experiencing. Players want to be able to control their fate and feel as if their choices have meaning within a story's world. This provides a unique problem for narrative designers: how do you maintain the illusion that the player has control of the progression of a narrative while still telling a coherent story that feels cohesive in its themes and logical in its progression?

For linear narratives, Carolyn Handler Miller defines the critical story path: "This path contains all the scenes a user must experience, and all the information that must be acquired, in order for the user to achieve the full story experience and reach a meaningful end point" (Miller 126). This essentially defines the minimum experience that a user will have by the time they have reached a narrative's conclusion. While players are allowed to explore a world and participate in activities that are not required to advance the plot, they are not included within the critical story path. Outlining a critical story path is crucial in understanding what events the player must encounter as it informs the writer what story beats and information they have to work off of while expanding the narrative forward. If the end of your story takes place in the depths of a dark cave, the player should learn this information somewhere along the critical story path or else you risk them never getting to experience the end of your narrative.

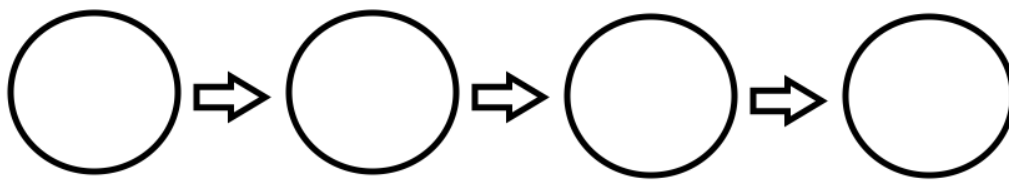


Figure 3.1.1: Graph of a Linear Story Path

Each story beat on this graph is a node, with the path the player must take connecting all nodes in a linear narrative together. This story path structure is often called a string of pearls.

Applying this concept to non-linear narratives, those in which all players may not experience the same critical events in the same order or at all, the critical story path must expand to include multiple paths. In this narrative structure, story beat nodes can branch off and lead to multiple different nodes as a result of player choices. In this section I will discuss how non-linear story paths form and the type of choices the player makes in order to progress down a non-linear story path.

Branching

Branching occurs when the player makes a decision that alters the plot order of a narrative. Branches may potentially lead back to a plot beat if the player is allowed to make more than one decision. They do not always have to progress in one direction, although some decisions require it. This creates a tree-like narrative structure.

At first this structure looks daunting. Choices lead to multiple story beats which lead to more choices that lead to even more story beats, quickly creating a narrative that has grown out of control and has lost its focus. The remedy for this is to merge branches and funnel players back towards a narrative that is still branched but more focused. The issue that comes from merging, however, is that players can quickly feel as if their choices have no meaningful consequences if they feel forced into going down a certain path. The art of branching and merging is to make the player feel as if the choices they made were impactful in deciding the

events of the narrative without seeing the guiding hand of the writer. Two methods for doing this are folding back and shrubbing.

Folding back is the process in which a branched narrative folds back onto one event that resets the narrative onto one story beat. Adams and Rollings describe the process as, “the plot branches a number of times but eventually folds back to a single, inevitable event before branching again” (Adams and Rollings 200). In order to pull this off, the event that all nodes lead to must feel like the logical next step in the narrative for all, otherwise, the player will feel an artificial bottleneck or a gap in the logic of the plot. Adams and Rollings warn that this process can “offer players dramatic freedom but in more limited amounts... If she [the player] plays the game more than once, however, she will suspect that some events are inevitable and that the apparent control she enjoyed on the first play-through was an illusion” (Adams and Rollings 202). This method manages to alleviate some issues, but not resolve them completely. It makes a branching narrative more manageable for a writer, however, the threat of a lack of control being exposed to the player still persists if not done well. The burden here is placed on the separate branches of the narrative that are forced to converge. They need to each feel different from one another so that each experience going through the story path feels unique.

Shrubbing helps to facilitate the differentiation of branches. Miller describes this as a process in which designers create independent branching paths that can be taken in order to reach a main goal (Miller). Shrubbing works to obscure branch merging by making each path unique from the others. This way players can reach an inevitable story beat in a way that feels dictated by them. Each path needs to be different, however. If paths are too similar, the player can feel as though their choice had little meaning, defeating the purpose of shrubbing. This can also be used to accommodate a variety of different interaction styles depending on what the player has at their

disposal. *Baldur's Gate 3* uses shrubbing in an encounter where players must enter a goblin camp. The player is left to handle the situation in any way they want to including:

- Talking your way into the camp
- Sneaking into the camp
- Fighting your way into the camp
- Help a goblin so she will allow you into the camp
- Pretend to side with the goblins so that they let you into the camp

Through shrubbing, the player is presented with a variety of different interaction styles that are tailored towards their preferences. This also allows the player to choose the way in which the story plays out, obscuring the fact that no matter what path they choose, they will end up in the same place.

Endings

Eventually, a story will need to reach its end and the branches must reach their final plot beat. Endings can be tricky to write. Converging onto only one point can feel dissatisfactory as, regardless of decision, the player is forced into one outcome. Allowing for multiple endings brings its own problems, however. Jesse Schell highlights two: players may speculate if they are on track to reach a “true” or “canon” ending, or, players unsatisfied with the ending they reached will be forced to restart the entire narrative in order to reach something more satisfactory. Schell’s first issue is an inevitability. If there are multiple endings, then all endings are valid. Player’s searching for “true” endings comes from a need for validation that the choices they made were the “correct” ones or that they are superior to those that made different choices. Ending a branching narrative is a tense balancing act of meeting player expectations.

The *Mass Effect* trilogy of games are infamous for the way the third game wrapped up. As one of the first mainstream non-linear narrative games, the *Mass Effect* titles were pitched to players on the basis that their choices would matter and change the course of a three game long story. Its ending, however, failed to deliver on expectations. While the ending is affected by the player's choices, each ending feels similar as players are shown a cutscene that's only visual difference is the color grading of the scene. While each ending has wildly different implications for the state in which the world is left in, players felt unsatisfied as they no longer have access to this world; they can't explore the consequences of their decisions nor can they see the ways in which things have changed. There was no feeling of resolution. This decision was so detrimental to the narrative of the world that the follow up to the trilogy, *Mass Effect: Andromeda*, was forced to take place in an entirely new universe completely divorced from its events.

Baldur's Gate 3 was able to tackle this same dilemma in a way players felt more satisfied by. *Baldur's Gate 3* contains 17,000 different endings, all based on fourteen different plot and character decisions the player has made. *Baldur's Gate 3*'s open secret is that there are really only three different distinct endings to the story, the 17,000 number relating to the number of different permutations of these three endings. This allows for the writers to end the narrative in a way that coherently wraps up the plot and themes of the game while still allowing the player to feel as if they had agency in arriving at that ending. While decisions the player makes change the state of the world in drastic ways, *Baldur's Gate 3*'s endings act as more of an epilogue rather than the universe altering climax of the *Mass Effect* trilogy. Players are given moments with all of the living characters they have met along the way and chosen to take on their adventure in order to conclude their stories as well as a special scene with the romantic partner they may have

chosen. The player is given resolution to both plot and characters and are allowed to reflect on the ways their choices have affected their outcome.

Endings don't necessarily have to make the player feel as if they had control, so long as it is done intentionally. Telltale's *The Walking Dead Season 1* allows players to make decisions regarding the fates of multiple characters as well as how the player's group navigates a zombie apocalypse all while taking care of and bonding with a six year old child, Clementine. Despite this, the game ends nearly the same for all players: the main character is bitten by a zombie and gradually succumbs to his affliction throughout the climax of the narrative. The game only has two different endings: telling Clementine to shoot you to put you out of your misery, sparing you from becoming a zombie but further traumatizing her, or telling her to leave you behind, sparing her from having to kill her father figure. Either way, the game ends with the player character's death, completely taking control out of the player's hands. This connects well with the main themes of the narrative, themes of bleak hopelessness and a lack of control over the character's own lives while the feeling of inevitability adds to the tragedy of the player character's death. No matter what you do, your life is always forced to end the same way. The game allows the player a modicum of control to make a choice over the player character's final moments and resolve his relationship with one of the most integral characters in the narrative.

Pacing

When writing a story, it is important to keep in mind both the length and the medium in which it is being told. Narrative pacing refers to the timing of plot beats within a narrative. Interactive narratives allow for players to progress at their own pace, much like novels have chapters and shows have episodes. Interactive narratives, however, progress at a more varied

pace as the player is in control of how quickly they progress through a story beat. Writers, then, must plan the contents of their story with this affordance in mind. Players may get bored and drop a game if their session only consists of monotonous downtime, regardless of the action it may be building to. On the opposite side, players may feel as if they must rush through an encounter in order to fit it within the time they have, causing them to miss important details or narrative progression.

The basic model of narrative pacing, Freitag's Pyramid, shows the flow of an overarching narrative and how it builds to a climax before being resolved. Similarly, each story beat should be its own Freitag's Pyramid, building in intensity before resolving. This is modeled in novel chapters and television episodes as they tend to have their own individual pacing that builds the pacing of the overall narrative. A 2022 survey shows that on average, a play session lasts between one to two hours (Clements). The length of story beats, then, should try to match this so that each play session feels individually rewarding, progressing the narrative in an interesting way. Writers of other longform mediums have resolved this issue by considering the pacing of each beat of a story and how it advances the whole.

A revised model of Freitag's Pyramid, the Fichtean Curve, demonstrates this theory of pacing. Isolated, each beat escalates and resolves. Put together, they create a narrative that gradually rises in intensity before culminating in its climax. This creates two distinct phases of plot with varying degrees of player control. The first phase is one in which the player is interacting with a system of mechanics and making choices. This happens within the contents of a narrative beat. The second phase happens in between narrative beats, as the narrative takes a stronger lead in this phase. While players can make decisions that will affect the ways in which they approach future story beats, this is where more established plot occurs to set up what's to

come. This phase also functions as down time for the player as they aren't having to engage as heavily with the game's core mechanics. This model was first implemented in action games such as the *Halo* franchise, where the player would complete a set of objectives and then experience plot through cutscenes while the next level loaded.

There are multiple pitfalls to avoid when considering the pacing of a narrative. If pacing is too slow, players will get bored. In an industry where hundreds of new games a year are vying for your limited attention, boring is the worst thing you can be. If pacing is too fast, players may begin to feel rushed and get burnt out. Pacing must gradually grow in intensity as well. If every beat is at a maximum intensity, players will get accustomed to it and get bored by a lack of growth. Sten McKenzie, a level design professor at the Rochester Institute of Technology, summarizes it best: "If players are bored, confused or lost, then that may indicate a pacing problem".

Another common issue related to pacing is pushing the player forward in a narrative as pacing is partially determined by the speed in which a player chooses to experience plot beats or gameplay encounters. This happens most often in between story beats if the player is allowed to choose when those beats occur. While the choice is in the player's hands, they will often pin the blame on the writer if the pacing becomes too slow. In order to mitigate this, the player must be guided or encouraged to progress the narrative. Subtlety is key; if you have a character that just says "PLAYER, PLEASE MAKE YOUR WAY TO THE NEXT STORY BEAT AT YOUR EARLIEST CONVENIENCE" every few minutes, the player will be taken out of story. They may even become annoyed, feel nagged to do something, or feel as if they have no choice in what they are allowed to do, all immersion breaking experiences. While players should be

encouraged to experience the story world you have crafted, it is also important to make sure they know what to do or where to go when they are ready to move on.

Jesse Schell, a designer for *Pirates of the Caribbean: Battle for Buccaneer Gold*, describes the issue his team had when players were given freedom to explore the world they had created: “We were sure that these big islands would draw a lot of player interest. Boy were we wrong... The players have been told that their goal is to sink the pirate ships. Here they are surrounded by large, threatening pirate ships with bright white sails. Look at that poor volcano in the distance. It is hardly noticeable and has nothing to do with the player goals” (Schell 330-331). Schell and his team were having issues getting players to engage with the content they had created due to the fact that it was being overshadowed by gameplay interactions and a lack of knowledge of where to go. While areas of story content existed, players had no clue what it was they were supposed to do besides fight enemies. He continues, “If we just set people out on the ocean to battle enemies, they had great fun for about two minutes and twenty seconds. Then their zeal would wane, and they would sometimes ask, ‘So... is this all we do?’” (Schell 330). In order to remedy this, Schell and his team designed a system where ships would flee mid battle and lead players directly in front of areas for them to explore so that once the battle was over, they knew exactly where to go next. This system is elegant in the fact that the player is unaware that they are being explicitly led to new areas and allows them to still feel as if they have control in deciding if they want to engage with the content in the areas they were led to.

How Plot is Conveyed to the Player

Plot can be expressed in three distinct methods: cutscenes and action. Cutscenes occur whenever all control is taken from a player. They instead watch as the plot unfolds in front of

them. These often take the form of film-like scenes, either pre-rendered or created in-engine. In-engine cutscenes are less taxing on a player's system and are usually cheaper to produce, as pre-rendered cutscenes tend to have a higher fidelity of animation. Creating well produced cutscenes requires a knowledge of cinematography. The in-game camera can be manipulated to create different shot types that convey different emotional information to the viewer. The way that an environment is staged and how it is lit can have an effect on this as well. Cutscenes are not required within an interactive narrative. Some lack them entirely, especially if they are text based narratives.

Plot that comes from action occurs any time that a player is interacting with a system of mechanics. Actions are the main content of a plot within an interactive narrative as it is where players will spend a majority of their time. Action can progress a narrative forward and can create branches as a result of player decision making. Dialogue systems are an example of an action mechanic. While dialogue can happen within a cutscene, it lacks player choice and remains separate from a dialogue system. Dialogue systems are a subset of player action as it is a method of interaction that a player can take. Dialogue systems allow the player the ability to interact with non-playable characters which can change the course of a narrative as well as give the player information they can use to inform the ways in which they interact with the narrative in the future based on choices the player makes. Dialogue and interactions with non-playable characters will be expanded upon further in a future section.

Writers should take caution in how plot is conveyed through action. If a player is too focused on interacting with a set of systems or the actions they need to perform are too intensive, they may miss out on plot details being communicated to them. This requires a delicate balance; The more action intensive an encounter is, the more the story should be told through interactions.

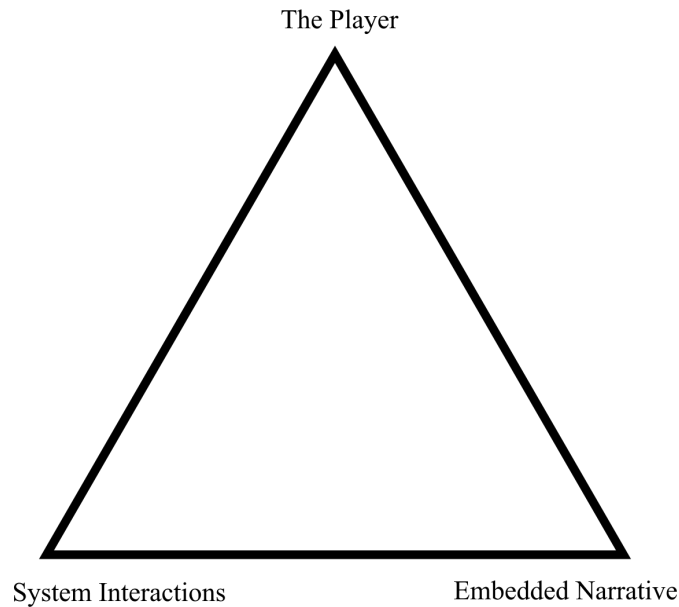
Games from the *Halo* franchise are good examples of how this is done. During moments of action where the player is running, shooting, or driving, the story is conveyed through a non-playable character over a radio transmission. This usually takes the form of updates to mission objectives as well as exposition. Through this, the player is allowed to make the gameplay they are engaged with and the story that comes from it their primary focus while still experiencing written story as a secondary focus. This also allows for the player to remain immersed within the experience while receiving important information that may change the way in which they choose to interact with the game's mechanics or narrative.

Emergent Narrative

Introduction

As defined by Marc LeBlanc, emergent narrative is “storytelling produced entirely by player actions and in-game events and without any narrative blocks created by a writer” (Adams and Rollings 202). This differs from the previous strategies of storytelling discussed, all of which fall under embedded narrative, or, a story that is predetermined by a writer. While I believe this definition is a good basis for understanding emergent narratives, I disagree with LeBlanc’s assertion that all emergent storytelling is produced completely independent of a writer’s input. The definition works at a theoretical level assuming that some system has been created that can create the context of a story free of a writer’s input. There is an argument to be made that tools such as ChatGPT can create interactive stories between the AI and the user, however, a technology that understands the fundamentals of storytelling and can procedurally generate interactive story beats has yet to be created. In a practical sense, most emergent narratives contain some level of embedded narrative to at least set the context for the world in which the player is interacting in, but a larger importance is placed on the interactions and stories that emerge through a player’s participation.

I prefer Fraser Allison’s amendment to LeBlanc’s definition of emergent narratives. Allison proposes that story in interactive mediums comes from three sources: the game designer, the player and the computer (a system’s mechanics). Each element is on a spectrum together; as one element takes prominence in a narrative, the other two’s influence declines. This addition allows for elements of embedded narrative to still have importance within an emergent narrative while still allowing for player interaction with game mechanics to take the forefront.



(Figure 4.1.1: The Narrative Triangle Graph. Each vertex on the triangle involves a party responsible for the creation of a story. A point on the graph closer to a vertex indicates that that party has more agency in story creation. In emergent narratives, the endpoint tends to lay closer to The Player and System Interactions)

In terms of Ryan’s interactive onion, this type of storytelling would exist on her fourth layer: real-time story generation. This layer posits that “stories are not predetermined but rather generated on the fly from data that comes in part from the system and in part from the user. Every run of the program should result in a different story, and the program should therefore be replayable” (Ryan 48). I believe this highlights another key component of emergent narratives: that they are unique and replayable. Due to the high number of potential elements interacting at once (the player, physics engines, artificial intelligence, etc.), it is unlikely that the exact same

outcome can ever be replicated perfectly. Players can choose the same routes, however their experiences are wholly their own.

I believe that the best definition for emergent narratives comes from a combination of these three arguments. I propose that emergent narratives are stories produced by a player's interactions with a system's mechanics, often set within the context of an embedded narrative, that produces a unique outcome as a result of player choice. The following examples demonstrate the ways in which games have used their mechanics in order to create emergent narratives.

Metal Gear Solid V: The Phantom Pain

Metal Gear Solid V: The Phantom Pain is a third-person military action game where players are sent on missions that range from hostage rescue to the destruction of bases. These missions are often presented with a small narrative introduction to explain the context of the encounter as well as the player's objectives, but provides little guidance on how the player should handle the encounter. Instead, players are left to their own knowledge of the game's systems and their ability to determine the best course of action. All missions allow for a variety of gameplay possibilities, granting players the ability to deal with objectives through stealth or open combat. This high level of player freedom to interact with the game's mechanics creates emergent narrative through gameplay. Each player will have a different approach to an encounter and will experience different outcomes as a result of the way they address conflict. This was praised in 2015 at the time of the game's release by IGN journalist Vince Ingenito. In his review of the game he wrote:

It takes an almost completely hands-off approach to both story and gameplay, which means that the lion's share of the takeaway moments will almost certainly be the ones of

your own orchestration. But given how readily *Phantom Pain* facilitates the creation of those moments, it's difficult for me to feel bad about that. In a decade, I doubt there will be a single mission I'll be able to point to and say "remember when you had to do that," but I could fill a book with stories about how I dealt with a mission going south, or a brilliant plan I came up with that worked just like I thought it should. (Ingenito).

Through his personal experience interacting with the game, Ingenito is able to tell the tales of daring escapes and near death experiences where others may have stories of slinking through bases in the dark and completing their mission undetected. Had the game taken an embedded narrative approach, however, players would have nearly similar recountings of their experience with the encounter.

The Sims

The Sims takes a different approach in setting up the context of the story to come. Where *Metal Gear Solid V: The Phantom Pain* introduces the encounters that the player will embark on, *The Sims* give very little context outside of "simulating life in a slightly exaggerated reality". After creating a Sim, the player is left on their own to control them and influence their lives. The player is not given objectives or boxes to check, they are free to do whatever they desire with their Sim; the narrative of the game is completely determined through the player's will. The game's systems, then, focus on motivating the player to create these stories through achieving various character milestones such as careers, romances, and personal aspirations. The player is still free to do as they wish, but these guide the player to create potential stories through gameplay.

Helldivers 2

Helldivers 2 takes a multiplayer approach to create emergent narratives. The game places players in the boots of disposable soldiers tasked with eliminating enemy forces in order to liberate planets in the name of democracy. The embedded narrative provides a theme and context for the game, however, the missions that players take part of don't dive any further into that. There is no NPC communicating with the player telling them what to do or any information about the world they inhabit, only mission objectives to complete. Players, then, are forced to come up with stories through gameplay experiences with the added twist that they are forced to work together and communicate with other players. Missions are exclusively multiplayer and players are put into a squad of four at the beginning of each mission. Players are encouraged to work together as successes and defeats contribute to an overarching narrative that all players experience together. This strategy emphasizes player to player experiences and creates a strong community working to achieve the same goals. As a result, players have taken to social media and forums in order to recount their experiences and tell "war stories" that every player can relate to despite not sharing the exact same experience. The game exploded in popularity upon release as players told horror stories of watching their teammates get tragically slaughtered on Malevalon Creek. This then created curiosity within the wider gaming community, leading to so many new players joining the cause that the game's servers were consistently maxed out for weeks until the developers were able to acquire more.

Summary

Through an analysis of the above narratives, we can learn a few things about how emergent narratives:

1. Emergent narratives allow for stories to be told with an emphasis on a player's interactions with a system of mechanics
2. They allow for the creation of stories and experiences unique to each player (or groups of players in multiplayer settings)
3. Emergent narratives require a small amount of embedded narrative in order to set up the context for a player's interaction with story world
4. Emergent narratives come about in situations where players are given a high level of freedom in approaching encounters in different ways in order to interact with the story world

Interactivity in Multiplayer Narratives

Introduction

While multiplayer games have generally been focused on gameplay or competition, a desire to not only experience but participate in interactive narratives in a group setting has been a growing desire within the gaming community for years. The desire for shared experiences is not only limited to the gaming space. Other mediums such as film allow for viewers to congregate and have similar narrative experiences, so why can't games?

Analog games such as *Dungeons & Dragons* allow for multiple players to experience the same narrative and interact as a team. Game rules are left to interpretation by a game master (GM) and accommodations or compromises can be made between the player and GM to alter the way a game is run or how story beats play out in order to create an experience tailored towards all players' liking. The transition to a digital space within the framework of inflexible, hard coded rules, however, has presented a problem for developers. How do you accommodate four players with four different visions of what they want from a narrative? How do you accommodate hundreds or even thousands of people within one shared storyworld? The scale digital games provide is much larger than five people sitting around a table.

As a result, this space is mostly experimental in nature. The common practices of multiplayer narratives are still in their early stages of development as few games allow for multiple people to interact with a narrative simultaneously or in the same ways. This section, then, will be focused on highlighting what is currently being done and the ways in which these strategies have succeeded or failed in the eyes of the gaming community.

Background

Prior to the widespread adoption of wireless technology, digital multiplayer narrative games amounted to player 2 taking a backseat role. They could participate in gameplay but not narrative decision making. Games such as *Halo: Reach* only highlight the game host's player avatar in cutscenes despite the ability for up to four player cooperative play, leaving players to wonder what their role in the story is. They engaged with gameplay elements in the same ways as the host, so why should only one person be given special treatment? This can be an immediate break in the illusion of control for subsequent players as the narrative clearly does not treat them as an actor within the world.

Massively Multiplayer Online Games (MMOs) such as *Ultima Online* were the earliest games to deliver a multiplayer narrative experience. For the first time, players were thrown into a world inhabited by thousands of other player characters, not just NPCs. While players were given the ability to interact with each other through text and voice chats, giving them the ability to roleplay and create their own stories, they had no agency over the constituent events of the overarching narrative. Players could make choices that affect the side characters that surround them, however a system has yet to be created that can allow for divergent story paths on the scale of millions of players, especially since this genre of game typically has players working together in order to participate in cooperative missions. This necessitates that all players experience the same events, as the story that accompanies these group events would not make sense unless the player had the necessary context from previous story beats.

In more recent years multiplayer narrative games have evolved to be more inclusive of additional players. Developer Hazelight Studios have put a priority on creating games where Player 2 has just as much of a role in gameplay. Their 2018 title, *A Way Out*, focuses on

teamwork based gameplay and requires two players for the game to be played, going as far as bundling a second copy of the game with every copy purchased. Their follow up, *It Takes Two*, follows a similar set up rules, the game can only be played in a multiplayer setting. These games, however, do not extend Player 2's importance to the narrative of the game as both players experience the same static story. While both players must come together to progress it, they have no agency on how the narrative unfolds.

Contemporary Strategies

Despite a lack of past titles to lean on, developers continue to innovate in the space of multiplayer interactive narrative. 2022's *Dying Light 2* allows for all players to vote on narrative choices regardless of the owner of the save file. While this allows for all players to have the same level of agency within a narrative, it creates a narrative path that is "chosen by committee" rather than one that feels more personalized towards each player. Players in the minority decision can begin to feel as if their input is not being heard and that they are being taken down a storypath they have little to no interest in experiencing. This is especially if their input is consistently ignored in favor of others.

On a much larger scale, interactive narratives such as *Silent Hill: Ascension* put voting into the hands of hundreds to thousands of viewers at the same time. Similar to *Dying Light 2*, narrative decisions are voted on by players within a live streamed game session that is only ever broadcast once. *Silent Hill: Ascension*, however, allows players to purchase votes that have a stronger weight than others, essentially putting narrative decision making into the hands of those willing and able to spend the most amount of money. Due to the negative stigma surrounding gameplay altering in-game purchases and general ill will towards game publisher Konami,

gamers protested in the game's live chat. Some took things a step further, purposefully making narrative choices in bad faith by failing skill checks and purposefully making decisions that put main characters in danger, forever altering the storypath of the narrative.



*Figure 5.3.1: Streamer bobvids encouraging his livestream chat to spam the Silent Hill: Ascension live chat with the phrase: “hideo kojima cu*mmy in my tummy”, a reference to the controversial firing of game director Hideo Kojima from a canceled Silent Hill project in 2015.*



Figure 5.3.2: The comment: “Need pyramid head to impregnate me” displayed overtop of a narrative broadcast for all viewers.

This model of multiplayer interaction has worked in the past, however. In 2014, livestream platform Twitch launched *Twitch Plays Pokémon* where viewers were able to join a

live broadcast and type into the live chat, voting for what action the player character should take next. The game was beaten by participants after sixteen continuous days of streaming, with some stream downtime to fix errors with the voting mechanics. While the choices these viewers made focused more on gameplay progression, this serves as proof that the concept can be viable.

Baldur's Gate 3 takes a slightly different approach to multiplayer decision making. Instead of allowing all players to vote on decisions, it is done by the person that begins the interaction. This allows for groups to come together and decide who is best equipped to handle an encounter and allow them to take the wheel, putting an importance on specializing in social aspects rather than just physical. While this solution gives the feeling of individually contributing to a narrative, interactions can quickly be taken over by one player's vision if they always find a way to be the one starting interactions as there is no system within the game to choose who gets to take the wheel; it can become a race to see who can press the interact button first. This can become especially frustrating as one player's decisions affect all others. The fastest player in the group, then, becomes the de facto player 1.

Helldivers 2 abandons direct choice altogether and places an emphasis on individual player action. In order to affect the overarching story of the game, players must complete assigned missions as a collective and are forced to pool their efforts to successfully meet mission objectives. While each completed mission only grants 0.0001% towards success, it emphasizes the need for a community to come together and creates a greater feeling of fellowship amongst players.

Roleplay and Emergent Narrative In Multiplayer Settings

With the current lack of ability to create personalized narratives in multiplayer spaces, players have turned towards roleplay with fellow players inhabiting the world. This can take many forms: text and voice chat (in game or externally through online chat rooms), joining groups (often called parties or guilds) as well as emotes, specialized character animations used to convey an emotion or action the player would otherwise be unable to do. Roleplay allows for a deeper level of immersion within the game as players are made to inhabit the game's reality and the player character they control on a deeper level through interactions with others doing the same. This has been present in tabletop role-playing games since their inception in 1971, so it is no surprise that players have brought the act into digital spaces. This practice was popularized in games such as *World of Warcraft* where players are required to work together in order to finish difficult endgame story missions. As players are already in the headspace of completing a narrative during these missions, it makes sense that they would present themselves as their character to other players. More recent titles such as *Grand Theft Auto V* have leaned into the roleplay aspects of their games as well. The game runs multiplayer servers specifically dedicated towards roleplaying with others in a sandbox environment. Players are encouraged to communicate and interact with each other within the world rather than in story specific missions, allowing them to create their own stories through interaction.

If successful, roleplay can be used as a bushing technique within multiplayer narratives. Each individual brings with them a unique dynamic to a shared world that changes the way one can experience a narrative. If players have a positive experience with others, they will remember them as important characters within the narrative they experienced. Games reliant on roleplay can run into issues, however. Agreeing to roleplay is only a social contract, not something that

can be objectively moderated by a game's systems. By agreeing to roleplay you agree to follow a set of social rules that can easily be broken. Offenders, intentional or otherwise, can ruin the immersion of the experience if they break character or the rules set forth by the game. The only way to fix this is through staff moderation, typically unpaid volunteers, who have to decide if a rule has been violated and what the punishment for that is. These decisions have an element of subjectivity to them and can lead some offenders to feel as if they have been unfairly punished. Designers, then, should be careful in the ways in which they employ this strategy. Use it as an addition to narrative immersion instead of leaning on it to do all of the work.

Summary

Digital multiplayer interactive narratives are still a developing subgenre of interactive narratives, so few conventions have been set. Building from what has been developed, however, we can gather:

1. It is important to consider what role each individual has within a group and the level at which they are able to influence a narrative
2. Roleplay and features built around player to player interactions can be used to immerse the player within a narrative, however not every player will abide by the social rules set forth

Conclusion

Next Steps

Hopefully after getting this far, you feel as though you have a solid grasp of principles of interactive narrative design and are ready to write some of your own. Where do you go now? Make your narrative a reality of course! One of the simplest to use development engines is Twine. It allows the user to create text-based interactive narratives for the web. It has a very low barrier to entry as it demands very little knowledge of programming skills. Its systems have been well documented online and many user generated templates exist to give your story a visual flair. Other easily accessible development engines include Unity's *Unity* engine as well as Epic's *Unreal Engine 5*. While these engines require a higher degree of coding knowledge, their systems have also been well documented and only require payment after a work developed on the platform has passed a certain threshold of revenue. Other engines in this vein took look into include *Godot*, *GameMaker*, and *Ren'py*.

It's also important to decide what platforms to develop your narrative for. The most accessible platform for development is PC as most development engines create PC builds by default. Other platforms such as Microsoft, Sony, and Nintendo's suite of consoles require applications for licenses and tools, that usually cost money, in order to develop titles for their platforms. Mobile devices are also platforms to consider. Google's *Google Play Store* allows user uploaded works for free while Apple's *App Store* has a subscription based service in place for those looking to upload their works there. One factor to consider with mobile platforms, however, is how your mechanics of interaction will transfer. Mobile platforms allows different affordances than those on PC. Users must use touch controls and have less access to their

keyboard if they want to see the full screen, while also offering haptic feedback as well as gyro controls. Make sure to choose the platform that allows you to best tell your story.

If you are in need of a writing prompt, narrative designer Dr. Greg Buchanan suggests this: “Focus on a brief dramatic scene, ideally in one location with two characters and a bunch of dialogue-based choices” (Buchanan). This allows you to hone in on something small in scale while focusing on grabbing a player’s attention. Use this as practice, and if something great comes from it, expand on it further! You will find some of your best ideas will come from iteration.

Playtesting and Feedback

Now you’ve written something substantial, but what’s next? Playtesting and feedback. While it can be nerve wracking to put your work in front of someone else to judge, it’s how writers improve their craft and work. Books have editors (hi Robert!) and films have test screenings for this exact purpose. This can also be a time to get a second opinion on anything you’re unsure of. It’s never too early to start playtesting as long as you have the skeleton of the systems of interaction you plan to use and a rough draft of your narrative (or even just a scene). Early feedback prevents you from getting too far into development and then realizing that what you’ve got needs a significant overhaul.

When organizing a playtest, try to find people you don’t know; the stranger the better. You want to avoid what I call The Grandma Effect. Showing something you’ve made to the people closest to you often spurs only positive comments. They’re proud of the work you’ve done, and much like grandma, want to hang it up on their fridge. Even if what you’re showing them isn’t great (you’ve scribbled outside of the lines and made the dog a putrid shade of green),

they'll want to support you. While endearing, this kind of feedback will not get to the root of your problems. Unbiased feedback from people that have no personal stake in you or what you're making tend to show you the good, the bad, and the ugly more often than those who don't want to hurt your feelings.

Where do you find playtesters then? There are many communities dedicated just to playtesting. See if there are any local game jams happening near you. Game jams are events where game developers will come together to create a game within an allotted time period. This is a great way to network and connect with like minded people that are often willing to playtest games (it is polite to offer to playtest theirs in return). Game jams also frequently occur in digital spaces, such as on *Itch.io*, where users can submit games for people to play. *Reddit* has a forum dedicated to looking for playtesters as well. You will be surprised how far buying a pizza and offering it to anyone willing to playtest your game will go.

During the process of playtesting, here are a few guidelines to help you get the best results.

- Give your players the silent treatment. Shut up and let them play. If you backseat direct the player the whole time, you're not really gaining anything from their perspective. You're looking to make sure that they know what to do and understand how to play. You don't want to sway their decision making.
- Prior to the playtest only tell the player what the controls of interaction are and any experience breaking bugs that you know of. Do not mention any minor flaws. The first step in fixing a bug is replicating the problem so that you know exactly how it occurs and where to fix it.

- If something unplanned happens during the playtest, let it roll. This is a great time for finding new bugs, and sometimes those bugs create unintentional experiences that can be more fun than what you've planned.
- Try not to stand and watch the player if possible. This can cause the player to feel as if you are expecting them to do something. You want the player to feel at their most comfortable and natural in order to receive the best feedback. This will also prevent them from having the urge to ask you questions on where to go and what to do, and prevents you from talking. A good alternative is recording the screen on which they are playtesting your game. This way you have footage of the playtest in perpetuity and can go back through it to see what the player was thinking in the moment as well as find bugs.

At the end of the playtest, try to receive player feedback as soon as possible so that the experience is still fresh in their minds and they can give you the most detailed information as they can. Questionnaire surveys allow you to standardize the questions that you want to ask playtesters as well as organize the results that they give you while interviews allow you to ask questions more specific to their experience. Two of the most important questions that I always tend to ask are, "Were the mechanics you interacted with engaging?" and "Did the outcomes of the narrative decisions you made feel logical and satisfying?".

When receiving feedback, you again want to keep quiet and let the playtester speak their mind. You don't want to accidentally influence their views or guide them to say what you want to hear, even on accident. Don't get combative either; if a playtester criticizes something, they aren't just saying things to hurt your feelings, it's because they were made to feel a certain way

and that experience is valid. At the end of the day, you get to choose to take their advice or not. Getting into loud arguments with playtesters because you didn't like what they had to say is a quick way to convince them not to return for future playtests. Word travels quickly; if people hear you are mistreating your playtesters, they won't want to playtest your game either. The only time you should speak is to:

1. Graciously thank playtesters for giving you their time
2. Gain clarity on any feedback they have given you that you don't understand
3. Ask any follow up questions that are specific to their experience playtesting

You now have a pile of opinions about your work and you are once again asking, what's next? Sort through all of the feedback you have and figure out what people liked and what people think needs more work. You might disagree with some of the opinions that you've been given, but you need to be able to justify why you disagree with them. What makes you think it is great and where is the disconnect between you and the player? Where can you make your work shine more so that they can see it the way that you do? If a lot of people are saying something isn't working, then something is working. It doesn't mean that the idea itself is bad, it just needs to be worked on more or implemented better. Make a list of things you need to work on, and polish your material. Once you think you're done, playtest again! Repeat this process until you feel good about the state of your project.

A Note on Accessibility

Once you feel that you're ready to release your narrative, consider if your game is accessible to all kinds of players. The World Health Organization estimates that 1.3 billion

people, or sixteen percent of the population, live with a form of disability. The most common types of disability are related to sight and sound. Your interactive experiences should account for this; you want as many people as possible to experience your work. Accessibility features should extend to anything that is required to create an equivalent experience to those without disabilities. Provide captioning functionality for all dialogue, music, and sound effects. If something is color coded in your game, provide color-blind options that change colors to those that aren't affected by the person's disability. Providing these options is best practice and allows more people to experience the work you've put so much effort into.

Last Steps and Reflection

All of the pieces have come together, and now it's time to start getting your work in the hands of players. If you're considering seeking a job in narrative design at a game development company, recruiters want to see shipped titles and have easy access to view your work. Two of the best platforms for publishing games are *Steam* and *Itch.io*. *Steam* has the largest online user base while *Itch.io* is a platform made specifically for independent publishing. As of April 2024, it costs \$100.00 to publish a game on *Steam* (although that will be given back to you should your game sell over \$1000.00 in gross revenue) while *Itch.io* remains free. Both platforms also support updates to works that you've published. The largest difference between the two sites is that *Steam* users generally expect a more polished product while *Itch.io* is made specifically for independent publishing as well as works that are still in development.

Now you're done, right? Wrong. When finishing a project you should take some time to complete a post-mortem document. In game design, a post mortem is a reflection of not only the work you've created, but also the process that you used to create it. Take some time to detail

what went well and what did not. Using this, consider what you will change in the future to avoid past pitfalls and what you will continue to do to promote success. If you have an online portfolio of your work (which is something you should have), post this alongside your finished product. Recruiters like to see that you know the process of making a game as well as your knowledge on the design process.

Roll Credits

Congratulations, you are now ready to write and design your own narrative experiences. If you've gotten this far, I want to thank you for hearing me out. I hope that there was at least one thing throughout this journey that you can add to your toolkit of design strategies. The only piece of advice that I have left to give is to keep your eye on the industry; not just the big AAA experiences, but independent titles as well. Having followed the game industry for eleven years now, change usually starts at a small scale. Watch what decisions developers are making and consider how you might go about including that within your own work and let it inspire you to make fresh, creative decisions. Continue adding strategies to your arsenal and above all else, never stop learning and growing.

Good luck.

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