DESIGN AGENCY: DISSECTING THE LAYERS OF TABLETOP ROLE-PLAYING GAME CAMPAIGN DESIGN

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DESIGN AGENCY: DISSECTING THE LAYERS OF TABLETOP ROLE-PLAYING GAME CAMPAIGN DESIGN

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LIST OF SYMBOLS AND ABBREVIATIONS

RPG Role-Playing Game

GM Game Master

D&D Dungeons and Dragons

AD&D Advanced Dungeons and Dragons

SUMMARY

In the field of digital media, the study of interactive narratives holds the aesthetics of agency and dramatic agency as core to digital design. These principles hold that users must reliably be able to navigate the interface and the narrative elements of the artifact in order to have a lasting appeal. However, due to recent academic and critical discussions several digital artifacts are being focused on as possible new ways of engaging users. These artifacts do not adhere to the design aesthetics foundational to digital media, but represent a movement away from the principle of dramatic agency in interactive narratives. In an attempt to understand this separation and offer a solution to this developing issue, another non-digital interactive medium was studied: tabletop role-playing games. The designers of this medium were studied to understand the techniques and methods they employed to create dramatic interactive narratives for their users. These case studies suggested the designers used a third design aesthetic, design agency, to help balance the tension between agency and dramatic agency of the users of their medium. This design aesthetic could provide a balancing force to the current issues arising within interactive narrative.

CHAPTER 1

INTRODUCTION

Digital media practitioners often celebrate their chosen medium and its relation to non-interactive media ancestors including film, television, and novels. Somewhat surprisingly, however these same designers rarely, if ever, acknowledge their debt to earlier interactive media, particularly tabletop games. Digital media designers often extract techniques from the former fields all the while ignoring the latter, which somewhat ironically influenced the development of the field of digital media itself. This aporia has led to a division within the narrative structures of digital media. On one side, theorists state that users should have the ability to control the events of a narrative solely based on their actions. On the other side, industry practitioners have championed designs that limit a player's choices so they have minimal interactive options within the narratives. In this thesis, I argue that a return to the study of tabletop role-playing games (RPGs) can help bridge this gap between theory and industrial practice.

There are two aesthetics key to the design of the digital medium: digital agency and dramatic agency. Digital Agency is the ability for the user to interact within the digital environment of the medium. The other

¹ This definition comes from the need to separate Janet Murray's definition of agency from other mediums definitions of the same word. As Murray's definition relates purely to digital environments it has been renamed Digital Agency.

form, Dramatic Agency, is the ability for users to interact in meaningful ways within narratives of the medium. Theoretically, a digital artifact should create the maximum amount of both digital agency and dramatic agency for its user. Practically, this is impossible due to a number of limitations. As such, designers utilize varying levels of immersion and interactivity to balance digital and dramatic agency for their users.

However, recent digital artifacts have deviated from this balance. Several critically and academically praised games highlight a shift in the aesthetics of interactive narrative design. These narratives remove the player's ability to have dramatic control over the events of the story. Instead, the designers focus on creating interactive experiences to mask the narrative's lack of choice for the player. In order to bridge the gap between theoretical and industrial practices and between immersive and interactive artifacts, designers need to look to outside the digital realm towards the analog roots of the medium.

Zork (1977) [1] is a foundational work of digital media created in the late 1970s. This early digital artifact, which forms part of the base for modern digital narratives, based its rules and story off the early works of another fledging medium, tabletop RPGs. As the digital medium quickly overshadowed the analog, the intertwined origin of these two mediums has been overlooked. However, just as the digital has grown and evolved over

the last fifty years, so too have tabletop RPGs. If *Zork*'s designers believed the early iterations of roleplaying games were fertile ground to produce their games, then it is feasible that this same ground holds solutions to the current dilemmas facing IN designers.

Chapter 2

Interactive Narrative Theory

Founded upon digital artifacts such as *ELIZA* (1964) [2] and *Zork* (1977) [1], interactive narratives are digital artifacts where the user of the system controls story generation though their choices and interactions within the system. One of the more concise definitions of interactive narratives comes from Mark Riedl and Vadim Bulitko [3], "Interactive narrative is a form of digital interactive experience in which users create or influence a dramatic storyline through their actions." This thesis also uses the definitions put forth by Janet Murray in her book, *Hamlet on the Holodeck* [4], for its terminology.

INs attempt to create an environment pleasing to the users of the system. While defined as agency, this term is derived from several smaller components including interactivity and immersion. Murray defines immersion as:

"A design term that is often used too loosely, and is sometimes confused with mere activity or potential actions. Composed of three separate entities: the procedural and participatory affordances of the digital medium, and the associated aesthetic pleasure of [digital] agency that results when the interactor is appropriately scripted to perform actions that the computer code can respond to appropriately" [5].

The procedural and participatory affordances are part of the four affordances all digital media artifacts can utilize in their design, the other two affordances are the encyclopedia, and spatial affordances[6]. The

procedural affordance represents the digital access and ability to use executable rules to control a system [7]. The participatory affordance represents a digital artifact's ability to invite users to manipulate an artifact [8]. The encyclopedia affordance represents the artifact's high capacity of information in multimedia formats [9]. Finally, the spatial affordance represents the ability for the user to navigate digital space within the artifact [10]. Digital agency, Murray defines as:

"... an aesthetic pleasure characteristic of digital environments, which results from the well-formed exploitation of the procedural and participatory properties. When the behavior of the computer is coherent and the results of participation are clear and well motivated, the interactor experiences the pleasure of [digital] agency, of making something happen in a dynamically responsive world" [11].

This sense of digital agency specifically refers to the navigation of digital environments such as web pages, hyperlinks, and menu systems. A different, but equally important, form of agency is the one experienced by the user in a narrative environment instead of a digital environment.

This form of agency, called dramatic agency, Murray defines as:

"The experience of agency within a procedural and participatory environment that makes use of compelling story elements, such as an adventure game or a interactive narrative. To create dramatic agency the designer must create transparent interaction conventions (like clicking on the image of a garment to put it on the player's avatar) and map them onto actions which suggest rich story possibilities (like donning a magic cloak and suddenly becoming invisible) within clear stories with dramatically focused episodes (such as, an opportunity to spy on enemy conspirators in a fantasy role playing game)" [12].

Both digital agency and dramatic agency rely on a cycle to keep users immersed within their environments [13]. This cycle of anticipation, action, and appropriate response helps reinforce a user's active creation of belief within a system. The more this cycle completes without interruption the more willing users are to immerse themselves within the system.

Interaction designers can provide multiple means of creating belief within a system for users by accounting for various parts of the design.

One aspect is to consider how users interact with the artifact, such as using a controller or rolling dice. This design choices shapes how users impart their decision onto the artifact. Another area of consideration is the genre being emulate. By recreating the trappings of certain genre tropes, designers can shape a user's expectations, encouraging them to explore the artifact with certain desired goals in mind.

When designed properly, a successful interactive system culminates in the desire to re-experience the system. Several techniques available to designers can accomplish this feat, including the use of multiform or multisequential narratives. Multiform [14] narratives contain more than one configuration based on the same general components or framework. In contrast, multi-sequential [15] narratives have more than one valid, coherent path through a set of segments. Despite the different

approaches, both structures invite the user to re-experience the interactive narrative multiple times in an attempt to further their understanding of the story or surrounding events.

These concepts form the foundation of digital media but there are differing opinions on how to best utilize such concepts. The generation of coherent environments and designing believable agents are just two areas of digital media that affect the creation of interactive narratives. Designers such as Celia Pearce believe when creating realistic and coherent digital environments, such as Massive Multiplayer Online Role-Playing Games (MMORPGs), combine the spatial affordance of digital media with her concepts of Community and Identity, ultimately helping create a sense of digital and dramatic agency for a wide range of players inside the system [16].² Users in well designed digital environments become active participants in the system and, especially in the case of MMORPGs, by playing out the roles desired for their characters. This engagement bolsters the cycle of active belief and forms a unique identity for users within such online groups. These identities combine with the recurrent and persistent system of the digital artifact to form a sense of community between the users.

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² Celia Pearce's paper "Narrative Environments" (2007) uses a specialized definition of Community and Identity that requires the use capitalization for this paper.

Another important aspect of interactive narrative design is the creation of dramatically believable agents within the system. Designers such as Michael Mateas design languages to explain how these agents can be created. Mateas' method utilized the idea of an Oz-Centric design [17], which relied on the use of plot-points to control the characters. As the player navigates the digital environment, a system within the artifact observes them until they trigger a plot-transition. The system then calculates all possibilities using past plot-points and possible future plot events. It then presents to the players the highest ranked total history of all points as the next plot event. Brian Magerko's research focuses on character level design of these agents. His work defines the dramatic believability of a character as a function [18]. The results of this function are that users deceive themselves into believing the agents are more realistic than they actually are. Designers can achieve this goal by minimizing "a) Difference between what is expected and what is offered [to users] and b) proximity of observer expectation to some measure of "reality"" [18].

These theories and definitions form only a portion of digital media but they are vital building blocks for all designers. However, an understanding of interactions between the field of study and the baseline theories is necessary to continue this research. In the next chapter, several design

languages used by interactive narrative designers are examined to uncover one that would be most beneficial to this research.

Chapter 3

Narrative Design Languages

Interactive narrative researchers utilize several narrative frameworks to describe the complexities of their design experiences. For this research, several of these frameworks were investigated for their historical importance and the sweeping taxonomies they use to help individuals understand the structure of narratives. Other narrative systems researched focus on the digital interactive aspects instead of the narrative aspect of interactive storytelling. In order to find a proper lens to translate the design of tabletop RPGs into a digital understanding an overview of these narrative design languages is necessary. Below are a comparison of the works of Campbell's Monomyth [19], Propp's Morphology of Narrative [20], P.I.N.G. (Passive Interactive Narrative Game) [21], Koenitz et al.'s unnamed language [21], and Brian Magerko's PC3 [22].

Both Campbell's and Propp's languages focus on the structure of narratives. Propp's research, Morphology of Folktale (1928) [20], focused on the creation of a methodology by dissecting Russian folktales. He created a linguistic taxonomy based on the structures and characters found in these folktales which forms the basis for narrative structure used in digital media today. Unlike Propp's sole focus on Russian folktales, Campbell's research also compared mythologies across multiple cultures.

Campbell's resulting work, The Hero with a Thousand Faces (1949) [19], investigated the journey of archetypal heroes in mythology. The result of his research, the monomyth, was a theory capable of charting the stages of the hero's journey within ancient legends or modern stories.

While Propp and Campbell provide important ways to think about story structure, P.I.N.G. [21] allows us to consider how narrative and system operate specifically in the realm of digital art. The P.I.N.G. language's spectrum is a two axes system: Passive to Interactive and Narrative to Game.

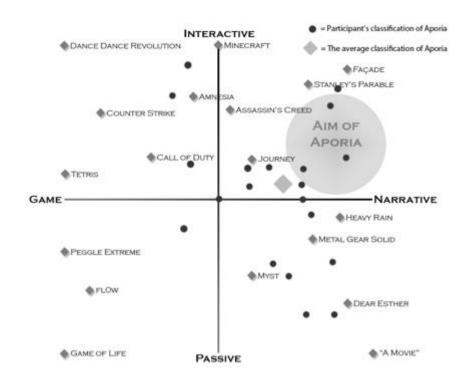


Fig. 1. The P.I.N.G. Model

Figure 1 [21] above shows a list of various digital and analogue narratives as they lie along the P.I.N.G. spectrum.

Due to the wide array of styles and methods within RPGs, using the P.I.N.G. language as a basis for the research would only result in a shotgun spread of data points, not allowing any cohesive conclusions to be drawn. Koenitz's language focuses this data to a more manageable spread with its simplified axes. Koenitz's language utilizes a three axes structure focusing on the Agency, Dramatic Agency, and Narrative Complexity within a narrative system [22].³

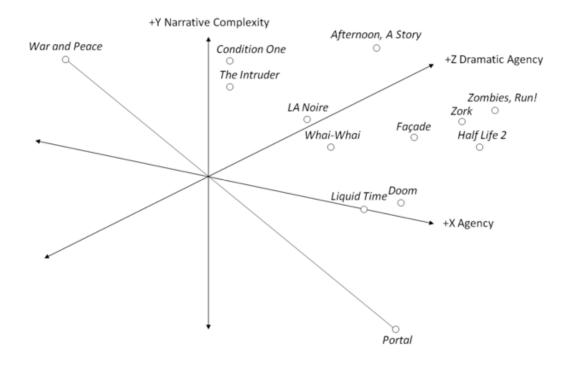


Fig. 2. The Koenitz Model

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³ Koenitz defines Narrative Complexity as the quantity of concurrent narrative developments

Figure 2 [22] above shows a diagram of Koenitz's spectrum of interactive narratives. The problem with the Koenitz's language is the same with P.I.N.G.: clarity. Agency, Dramatic Agency, and Narrative Complexity are all aspects inherent to the design of an RPG campaign as well as tied to a designers personal philosophy. Using Koenitz's language would create a spread of data that would provide little to no useful information for future research. The flexibility in RPGs means users would present data along all of Koenitz's axes by its inherent nature.

While Koenitz's restrictive design would hamper the discussion of narrative in tabletop RPGs, Magerko's PC3 language [23] utilizes a precise structure for the study of both digital and analogue interactive narratives. The PC3 language uses a number of axes inherent to interactive narratives. The four axes of PC3 are Process, Context, Content, and Control [23]. Process represents the executable actions within story creation systems that users control. Content is the combined story elements and structure that creates the space the interactive narrative takes place in. Control represents the agent in command of the interactive narrative. Context represents social elements of the system or the intended purpose of the system.

Right away, the PC3 language offers an axis of study not mentioned by the previous languages: control. Control is a key aspect of both

interactive narrative and tabletop games and its inclusion within the spectrum allows for the study of interactive narratives directly controlled by a supervisor, such as a Game Master (GM) or AI, or games that are purely improvisational with no supervisory entity controlling the environment. A game master is both the designer and controller of a tabletop RPG narrative. Specifically within the context of this research, the GM of a tabletop RPG acts in a manner similar to that of an AI in a digital interactive narrative and is the controlling entity of the decisions within the narrative of the campaign.

The remaining layers of the language provide a more precise viewpoint for the study of interactive narratives. By focusing on the Process, the systems of controls available to users, PC3 allows for a translation of RPG mechanics and rulesets into a digital language. Games with relatively few rules or mechanical interactions would fall towards one end of PC3's Process mechanic. While games with a high number of rules and systemic interactions situate themselves at the opposite end of of the Process axis.

Even Context, a more esoteric area of interactive narrative not explored in the previous languages, matches with one of the unique aspects of tabletop RPGs: user expectations. Context can represent the "social contract" aspect of tabletop gaming and harkens to the intended

purpose of the RPG medium as social collaborative storytelling within a gaming environment. In addition to the social aspect, Context for a RPG system can be tied to the genre the system emulates and general tone of the system used for a narrative. For instance, the use of a *Dungeons and Dragons* (*D&D*) [24] RPG system sets the context for the players so that a fantastical setting with wizards and other such fantasy elements are commonplace. On the opposite end of the axis lie games such as *Fiasco* [25] and more directly controlled, but narratively open RPG systems such as *FATE* [26]. These systems do not attempt to emulate a genre but, instead, leave it and the context for the system open for the GMs and designers. It is because of these various factors this research utilized PC3 as it base language.

Because PC3 utilizes a separate axis for the controller of an interactive narrative system, on top of several other advantages, it was chosen to be the the primary language for this research. With the groundwork of theory and language laid out, the next chapter highlights the divergences within current interactive narrative design.

Chapter 4

Digital Examples of Aesthetic Divergence

The previous languages, definitions, and theories form the foundation of the study of digital media and interactive narratives.

However, practice and theory has diverged significantly as the use of digital agency has become more important than the use of dramatic agency in interactive narratives. The digital artifacts below represent how interactive narrative design has changed to work within the constraints of modern technological limitations.

The games discussed below provide a spectrum to observe the shift in design ascetics from digital agency to dramatic agency. The first game, Spec Ops: The Line (2k Games, 2012) [27], is a AAA mainstream video game industry that has been academically and critical praised for its dramatic ethical narrative. Undertale (Toby Fox, 2015) [28], the second game discussed, represents an indie game that attempts to merge both digital agency and dramatic agency using genre conventions and subversions. This game, while new, already has created several conversations among critics about the ethical questions raised during play. The third game, Gone Home (Fullbright 2013) [29], represents another indie game both academically and critically studied. This acclaim comes from the narrative told to the player, which focuses more

on the digital agency of the player navigating the interactive system than actual dramatic agency within the game. Finally, the last game discussed is Façade (Mateas and Stern 2005) [30], a research project made in an academic laboratory and available free on the internet. Both academics and critics study Façade for its use of language processing techniques. However, the game still presents several limitations on the player in order to test this processing system, thus limiting the dramatic agency of the users.

Spec Ops: The Line

One of the clearest examples of the shift in aesthetic focus is 2k Games' Spec Ops: The Line. Spec Ops. This game utilizes the gameplay elements of the third-person shooter genre: the environments contain waist-high walls for cover, rechargeable health over the course of play, and a mind bogglingly high number of digital foes. The story of Spec Ops plays out through the actions of Captain Martin Walker as he searches a post-sandstorm devastated Dubai. At first, the mission is to perform reconnaissance, but events of the game quickly spiral out of control until Walker is the last man left alive in his squad as he hunts down and captures the rogue Colonel John Konrad. A narrative designer of Spec Ops stated that during development they simplified the story to "...move thematically closer to Heart of Darkness (HoD), and have everything

revolve around the storm [sandstorm], the game's proxy for HoD's jungle"
[31]. What plays out over the course of the game is a narrative that
intends to make players question their ethics and morals as they control
Walker's attempts to be a hero in the devastated city.

Dissecting a pivotal moment in Spec Ops' story reveals how little dramatic agency players actually have within the game. In Chapter 8, Walker and the members of his squad find their progress blocked by a superior military force backed up by tanks on top of a bridge. In order to clear a path, Walker uses the enemies' own white phosphorous mortar station against them. What follows is a sequence where the player controls Walker as he destroys the tanks and murders the entire enemy opposition, all the while bombing other heat sources, assumed enemy soldiers, hiding under the bridge. After destroying the tank, the game allows the player to access the next segment of the game and walk through the results of their actions. At the end of the sequence, the heat sources under the bridge turn out to the very refugees Walker has been trying to save. The rest of the scene is a non-interactable cut-scene as Walker's squad argues and points at the player exclaiming, "This is your fault!" [27] all while showing the player heavily mutilated refugees, much more graphically depicted than the soldiers not a dozen feet away.

This scene highlights a difference with current practices of interactive narratives. The game forces the player to kill the refugees along with numerous other limitations imparted on the player during the sequence. The player cannot descend from their position without activating the mortar sequence. If they try to shoot enemies from their position, they continue to spawn until the player is overwhelmed. If the player attempts to destroy the tanks before they reach the bridge the resulting damage still kills the refugees. Spec Ops' designers are forcing players to commit an atrocious act, removing all options for the player in the process. A common response to this observation is to turn off and not play the game. If a conscious design choice, this goes against the concept of dramatic agency in that the players do not have the ability inside the narrative to affect it in any meaningful way. In addition to shaming the player for playing the game, if they refused to participate in the scene, Spec Ops forces the player to take themselves outside of the narrative and break all sense of immersion. In order to continue playing the game, the designers force the players to carry through the action, directly contradicting their own stated design goals:

"The "decision scenes" were designed to be scripted sequences players could interact with using core game mechanics. There were three possible categories of responses: deadly action, melee, and inaction."[32]

The lead designer of the game consciously removed these interactions. As he explains in another interview:

"Sure. Obviously, there's a number of cutscenes in the game where you don't have control of the character, and there are scenes where you have sort of partial control. We want to put the player in the position where he can have control as often as possible, but at the same time we're telling a story, and so there's a number of devices that we use in order to portray that as strong a way as possible." [31]

The statement is clear. In order to tell their story, the designer's story, players cannot have dramatic agency within the game. We could overlook this statement; after all, certain genres and themes, such as horror, need the removal of character control to create certain atmospheres. What we cannot overlook, however, is that this removal of immersion does not even matter by the conclusion of the narrative. At the end of the game, the ending sequence reveals Walker has been hallucinating most of the moral events in the game and none of the decisions presented to the player actually mattered. This further removes dramatic agency from the users and dilutes the narrative of the game by making all player choices meaningless. Spec Ops: The Line's design

practices mirrors those of other mainstream video games in a method that is counter the original theories of digital media.

Undertale

Unlike Spec Ops: The Line's stringent observation of genre conventions for a subversive narrative, Undertale works within the formula of its genre to destabilize existing trends and provide a questioning narrative to its player. Released by indie developer Toby Fox, Undertale is, according to its Steam tagline, "the RPG game where you don't have to destroy anyone" [33]. In the game, players control a young child exploring an underground kingdom full of monsters and whimsy. As the player progresses through the game, opponents and friendly characters alike periodically acknowledge the previous actions of the player. The player can achieve multiple endings to the game depending largely on how closely they stick to the tagline of the game.

Just like Spec Ops, Undertale challenges common genre conventions found within video games. While Spec Ops attempts to subvert the shooter genre by crafting a doubting narrative around traditional genre mechanics, Undertale combines both genre mechanics and narrative elements of video game RPGs. Players navigate the world and partake in random battles as they explore the Underground. During these battles, players have the option to FIGHT, ACT, ITEM, or MERCY.

FIGHT and ITEM follow the genre tradition of allowing the character to attack opponents and use items respectfully. However, ACT and MERCY represent slight changes to common activities found in the digital RPG genre. ACT allows the player to investigate their opponents as well as perform various actions to change the enemy's opinion of the player character, leading to the possibility of enemies leaving the battle peacefully. MERCY is the option for players to leave combat and, when combined with certain ACT sequences, every enemy in the game, including bosses, can be defeated without killing them.4 Ending a round of combat with MERCY rewards no experience for the player and only gives a small amount of gold. Depending on the player's actions, Undertale charts character grown not by the RPG usual of gold and statistical increases, but in the relationships between characters and enemies and how they react to the player character within the environment.

The largest divergence from traditional RPGs in *Undertale* is seen in the methods used to obtain the diverse variety of endings. If the player takes the typical RPG action of killing every enemy they encounter, the game begins to question the player's actions. Ending in the player character being "possessed," it invisibly alters its own data, corrupting the

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⁴ NPCs can become friendly to the player during combat using various ACT actions such as "flirt" or "flex." Certain enemies require a specific sequence of ACT actions to become non-hostile to the player.

ending without completely uninstalling the game. This ending is aptly named the "No Mercy" route by the designer. Should the player do a completely passive run and spare every character, they can achieve the best ending of the game. If the player's actions result somewhere between the two extremes, there are a number of branching endings possible which reflect how the player escaped the Underground and who they killed to achieve this goal. Like Spec Ops: The Line, Undertale also takes away dramatic agency from the player and badgers the user for their actions within the game. However, whereas Spec Ops removes the player's ability to control or alter the story while bombarding the user with hollow, emotionally charged images and decisions, Undertale acknowledges when it impedes the player's actions and uses self-aware interaction as part of the narrative structure of the game.

For example, several of the game's penultimate bosses acknowledge the player's ability to save and restart the game upon failure. During the "No Mercy" route, the final boss actively comments on meta-knowledge about the player in several ways, such as counting the number of times he has defeated you. Likewise, if the player attempts to fight this boss using the save file of a previously completed game, the boss will reference events of the previous play through in an attempt to dissuade the player from fighting. As things become dire, the boss

challenges the player by breaking defined genre rules of turn-based actions in order to keep the player from winning.⁵ Their "ultimate attack" turns out to be complete inaction. Working upon the meta-knowledge that *Undertale* utilizes a turn-based combat system, they act on the logic that the fight cannot advance and the player cannot succeed if the boss does not take their turn. The boss denies any attempts from the player to break this sequence. Players that attempt to fight are forced to soft-reset to the beginning of the round. However, after a few minutes the boss falls asleep and the player is able to cheat the rules even further by moving the game's interface and forcing their way through the inherent structural limitations of the game's mechanics.

Where Spec Ops condemns the player for their actions after stripping away their dramatic agency, Undertale challenges the player's actions while allowing them, not complete, but relative freedom to respond within the system. This creates a rare degree of immersion on a meta-level. Instead of the player experiencing the narrative through the eyes of character, the narrative actively involves the players themselves. This alters their perception of their agency within the game, shifting them out of pre-established trends and belief. These design choices result in

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⁵ In typical turn-based RPGs, during an individual's turn no other actions are possible by others. It is only after the individual, be it player or NPC, has selected their action that others may have a chance to select their next action if it is becomes their turn in the sequence of actions.

Undertale working with both technical and narrative limitations to create a unique experience for players.

Gone Home

Fullbright's first-person adventure exploration game Gone Home [29] does not attempt to alter modern genre conventions as the previous games did. It does not spotlight, question, or investigate the player's reason for playing a game. In fact, Gone Home is the most recent in a long line of what certain members of the gaming community call "walking simulators." This type of game is a derivative of the self-discovery puzzle game style made famous by Ran and Robyn Miller's Myst (1993) [34]. Whatever failures or lacks in gameplay the game contains, it does provide a new aspect to the genre and shows the latest developmental techniques used by the genre to tell a multisensory story to the player. Gone Home tells the story of an individual coming home from an extended stay in Europe. Upon arrival they find their family's new home empty with an ominous letter attached to the doors just inside the patio. As the player searches the house, a story emerges that integrates numerous characters, including the father, mother, sister, grandfather, dead uncle, and others, all of which play a part in the mystery of the seemingly abandoned house.

Gone Home represents an evolution of point and click adventure puzzle games from a two-dimensional environment into a threedimensional one. This extra dimension allows designers to use negative space in conjunction with other storytelling elements to weave together a compelling narrative for their users. One of the core mysteries of the game, where the player character's sister has gone, is unveiled through audio logs triggered by the inspection of key items scattered throughout the house. The mystery of the parents' disappearance comes to light from interactable notes scattered throughout the house. However, these story elements are temporally disjointed from the events the player experiences while exploring the abandoned house. To create a more active sense of understanding, Gone Home uses props within the environment to tell implicit stories. This is seen when, after the discovery of notes detailing the mother's peculiar actions toward a coworker during a series of forest fires, a risqué romance novel featuring a lumberjack clutching a swooning woman in front of a fire can be found tucked away in her personal study room. This image and placement does not outright state anything, but combining the placement with the previously found articles begins to paint an image of possible infidelity on the part of the wife.

The problems persists that, although immersive within the system, the amount of interactivity available to the player is limited. The user has no control over the actual story within the game and additional replays will

not change the result of the narrative at all. In fact, replaying the game is much akin to re-reading a book or re-watching a movie; minor details or facts missed upon the first use add more details, but the overall narrative of the work does not change. Gone Home is not an interactive narrative in the strictest theoretical definition. The story is pre-written and nothing the player does in the game affects the plot. The player only controls the dispersion of story through interactions within the environment. The increase in graphical fidelity creates a greater visual field for the player to explore, thus providing a reason for the game's focus on digital agency instead of dramatic agency.

Façade

One of the key theorists in the research of interactive narrative, Michael Mateas created Façade [30] as an example of the interactive capabilities of his research. Façade places the user in the middle of a dinner party hosted by a struggling couple. Depending on the player's interaction, the couple can forcibly eject the player from the party, have a dramatic breakup in the middle of the party, or reconcile their differences. These events change depending on the player's ability to interact with the couple though the text interface of the game.

Façade utilizes a large natural language processing database and other artificial intelligence techniques to provide its interactive experience

[30]. After completing the experience, Façade's program produces a text file for its users containing a transcript of their experience for future reference. A large part of the replayability of Façade comes from the improvisational conversation elements between the couple and the player, but also from the random elements within the program, such as drinks or topics of dinner conversation, selected upon the initialization of the simulation.

A common complaint lodged against *Façade* is the user's limited abilities to interact within the simulation. Users often have better results from the AI agents if they forgo natural responses. Using one word or minimal responses often yield better results as longer, more complex statements cause the AI agents to react in unexpected ways. The AI agents, while marvelously scripted, are the focus point of the simulation and the player has no onus or drive outside of context clues and personal investment to be part of their romantic troubles. *Façade's* rich characters and complex programming do nothing for the fact that the players must derive their own sense of dramatic agency from the awkward dinner party.

Façade is a marvel of interactive storytelling, the culmination of years of research and work by Mateas and Andrew Stern. It focuses heavily on the interactive side of interactive narrative but lacks an

immersive element within the narrative. The context around the events of the game and the drive for players to interact with it are a simple setup to frame the interactions the designers wished to focus on. As such, Façade is also perhaps the best example of the limitations experienced by designers. The game forces the users to deal with the constraints and limitations the theoretical realm has when transplanted into the practical realm.

These digital artifacts draw on the original techniques of interactive narrative as described in Murray's work, but notably the aesthetics of these works have moved away from the definitions and theories of the medium. Interactive narrative is supposed to be about digital experiences where the user's personal ideas or actions shape the events. The aforementioned examples do not allow this theoretical control. Instead, they show vestiges of the original concepts and each has the ability for the player to interact within the system, but none offer dramatic agency to the narrative. These examples diverge from theory due to issues translating digital narratives to non-theoretical environments.

Spec Ops: The Line creates a powerful story that makes the user question their desire to experience the narrative. However, instead of allowing the player to choose a path and reacting to these choices, the player has the crux of the narrative decisions forced upon them. Worse,

the final scenes of the game invalidate all the user's choices they have made over the course of the game. The game controls every narrative option the player has, leaving only the control of proceeding from plot point to plot point open.

Undertale provides a powerful story, but does so by acknowledging the player and working alongside the limitations of the medium to enrich the narrative. The crux of the player agency comes from how the users desire to follow the core theme of the game as opposed to ingrained genre tropes. The game relies on a player's meta-knowledge of the system to provide an impactful narrative, taking dramatic agency away from the player in an attempt ignite a deeper conversation.

Gone Home removes the player's ability to take actions against the pre-established narrative. Even the simple act of leaving the house is unavailable by informing the player that severe weather in the area makes travel unsafe. The only option for the player is to determine how they navigate the environment and what order they choose to have the narrative told to them. The designers of the game suppress the needs of the player in order to tell their story. The gameplay of exploring the house forefronts the story the designers have written.

Façade is another game where designers place the technical aspects in higher regards than the users. The characters hosting the party

are more realized aspects of the system precisely because the interactions core to the system relies on conversations with these characters. This conversation system becomes more important than the player's expectation and dramatic agency within the game. The result is an experience where asking for some melon at a dinner can result in the expulsion of the player, for no apparent narrative reason.

This shift in focus from player to gameplay is a result of the divergence between theory and industrial practices. Ideally, the player's choice is the core of the experience and they ultimately control the events as they unfold. In current industrial practices, however, this is not possible. Reading articles about design of interactive narratives in industry reveals a different perspective. In "The Sands of Time: Crafting a Video Game Story" [35], author Jordan Mechner describes the ten rules his team members utilized for creating Ubisoft's action platformer Prince of Person: The Sands of Time (Ubisoft, 2003) [36]. The most interesting of these, as well as the rule that underlies the entire article, is "Rule #2: Story Is Not King" [35]. In this section, Mechner describes how he scrapped the original story to have it coincide more with the desired gameplay. Rather than attempting to alter the gameplay to match the story, the developers recreated the story, focusing instead on creating a narrative that could fit within the narrow gameplay they desired. The rest of the article echoes the idea of holding gameplay above every other aspect of the artifact,

going so far as to remove the sense of narrative drama from the game by making the narrator an aged version of the protagonist and making it transparent to the player that success is inevitable.

Another article, "Fretting the Player Character" [37] by Nick Montfort, describes in detail the design choices available to interactive fiction designers that remove dramatic agency from the player. "Creating a good player character within an interactive fiction world involves putting this character in a situation that is motivation for the interaction – but not giving the interactor actual dramatic script or a role to play" [38]. Montfort goes on to explain, "The interactor must have enough control over the player characters to be able to express an understanding of this world though that character" [37]. Monfort believes player characters in interactive fiction do not need to be acted on by the player at all, but instead need to be steered like a vehicle along the predetermined path of the designer's story. The player character is a constraint defined by the designer on the player. This mirrors the statement from the Spec Ops designers who severely limited or completely removed the creative storytelling aspect of the game from the user. These articles and the previous interviews all express a shift in the paradigm of narrative experience design to focus more on external constraints felt by the designers, addressing only the immediate need of the system rather than

what is necessary for player engagement and creation of narrative immersion.

This mentality is far removed from the initial games and theories founded on such digital artifacts such as Zork (1977) [1] or ELIZA (1964) [2]. Zork itself based a number of its design elements and mechanics off another emerging medium: tabletop role-playing games. If such a foundational work drew inspiration and methodologies from tabletop role-playing games, a study of the medium can provide a means of understanding where the divergences in the theoretical and practical areas of interactive fiction design began.

Chapter 5 Tabletop RPG History

In order to study modern RPG storytelling designs accurately, the history of the medium needs understanding. The history of tabletop roleplaying games, much like the history of film, is one of a medium born from a combination of rapidly changing techniques and technologies derived from largely short-lived predecessors. Eventually, unique sets of rules and techniques combined the various mediums of its heritage to form a dynamic new experience for users. Where the film medium's heritage comes from dance, theater, and art, tabletop RPGs draw their lineage from board games, tactical exercises, and wargames.

Due to its widespread popularity and longevity, Chess is one of the most influential games in history. While it has been used to teach war strategies for ages, chess is not a wargame. Chess is a game about space and control of said space; it simulates war without the bloodshed of the former [38]. Chess abstracts the characters, tactics, and themes of war and simplifies them into a game-like form. While it is unknown where Chess originated, what is certain is that Chess paved the way for the creation of European games that attempted to simulate war.

Chess evolved in the Middle Ages in an attempt to become a better representation of tactical battlefield simulation for nobles and

kings. One notable variant includes the 1664 King's Game [38] that increased the number of pieces per side to thirty, updated piece names to match more modern militaristic names, established rules for eight person play, and expanded the board space from sixty-four to five hundred squares [38]. King's Game was a step towards more realistic representations of war, it still lacked the necessary immersive and interactive elements desired by military practitioners. In 1780, Johann Christian Ludwig Hellwig created what modern wargame enthusiasts consider to be the first tabletop wargame, War Chess [38]. Hellwig created a board with over 1,600 squares, color-coded to represent different terrains, and added hundreds of additional pieces to represent different military battalions.

This massive increase in playing pieces and complexity led to a decline in available players of *King's Game* due to accessibility and financial reasons. In 1812, in response to the extreme price of *War Chess*, George Leopold von Reiswitz created *Tactical Wargame* with "instructions for a mechanical device to show realistic tactical maneuvers" [38] While the original version of the game involved the use of sand to model topography, soon modular wooden tiles replaced the need for sand. *Kreigsspiel*, as Reiswitz called his game, received an update when his son refined the rules to use dice to simulate role of luck and a third party to referee the game. Perhaps the most influential force behind *Kreigsspiel's*

spread came from Otto von Bismark who made the game a mandatory part of every Prussian soldier's gear [38]. This created a unique situation for soldiers to train mentally during downtime, similar in effect to generals reading Sun Tzu's Art of War for inspiration. However, as with any highly specialized hobby, the full extent and rules of Kriegsspiel, much like the rules of war, were too innumerable for nonprofessionals to comprehend.

This glut of rules and reliance on traditional militaristic strategies led to the creation of *Little Wars* in 1913 by H.G. Wells [39]. His game removed many of the ingrained specialized rules that had accumulated over the years in an attempt to make *Kriegsspiel* into a more user-friendly game. Wells' design attempted emulate the sentimentality of Chess, creating a game "... about how no one wins in war, and it is ultimately a game we all lose" [39]. His goal failed, not because of poor design, but due to lack of interest from the public [38]. It was not until the 20th century that wargaming became more approachable to mainstream users.

Charles Roberts created the first tabletop wargame, *Tactics* [40], in 1954. Roberts designed *Tactics* because:

"To be conversant with the Principles of War is to a soldier what the Bible is to a clergyman. ... The Bible, however, may be readily perused ... wars are somewhat harder to come by. ... Since there were no such wargames available, I had to design my own" [41].

Tactics contained a pre-printed board with a hand drawn map, cardboard chits to represent units, and the crux of the game was a conflict between imaginary countries. This stripping away of historical baggage, complex rules, and need for expensive game pieces helped make tabletop wargames palatable to the public. Further, by taking away historical and sociopolitical influences, it allowed users to create their own imagined reason for the events of the game to take place, in an early example of non-digital dramatic agency.

The next major step in the creation of modern roleplaying games came from an 1880 military training manual. In the early 1960's Dave Wesely used a concept written by Charles A. L. Totten in "Strategos: A Series of American Games of War" [43] to introduce the idea of an all-powerful referee that could act as a neutral party to settle disputes between players within a wargame [38]. This referee soon became a standard inclusion in all tabletop wargames and serves as an early example of a control structure within PC3's Control spectrum.

Wesely also introduced the concept of role-playing individuals outside of active military units, something not done in tabletop wargames outside of set dressings. For one of his campaigns, Wesley designed the fictional town of Braunstein, Germany set during the Napoleonic wars [38].

⁶ Over the next eight years, Roberts created the Avalon Hill game company and become the fourth largest producer of board games in the US [42].

He had his players control both the besieging armies as well as individuals residing within the town. Each character had unique objectives in the game that caused the players controlling them to think about motivations and characterization instead of the usual conquer and destroy strategy. This campaign imparted more narrative complexity for the user's actions within in a tabletop wargame. Not only did the player's actions effected the overarching plot of who won the battle, but also they had to be conscious of the lives and routines of the villagers amidst the campaign. Wesley's campaign imparted players the ability to deviate focus from the overarching plot of the battle to smaller more personal plots of non-military combatants which he, in turn, promised might provide effects on for the various factions battling for the city. The success among its participants created "Braunstein-style" games within the tabletop wargame community.

Due to the fan culture surrounding them and the rules made famous by Wesely, tabletop wargames attempted to emulate genres in the style of Sir Arthur Conan Doyle's Conan the Barbarian [44] and space operas like Flash Gordon [45]. Genre elements such as damsels in distress and fantastic weaponry combined with Wesely's use of individual characters as generals or focal plot points in an attempt to immerse themselves within their much-loved genres. Nevertheless, these games still focused on the use of battlefields and tactics to tell stories. For example,

gaming systems like Gary Gygax's Chainmail (1971) [46] were set in a fantastical setting similar to Conan the Barbarian, allowing players to experience what a battle would be like in a sword and sorcery setting. Specifically, Chainmail allowed for the inclusion of fantastical elements like spell casting and a wide array of equipment and weapon choices so players could customize their personal characters [46].

In 1971, David Arneson combined these elements with the aspect necessary to separate RPGs from wargames, narrative immersion within a living world where player characters could revisit and explore in sequential play sessions [38]. Arneson's campaign utilized the *Chainmail* wargame system, but housed it in his personal setting of Blackmoore. Players created characters that intermingled with the community of Blackmoore castle, but the crux of the gameplay and excitement came from the exploration of various dungeons hidden beneath the city. The exploration and discovery aspect of the game set it apart from other wargames at the time. With the encouragement of his players, Arneson took his idea to the gaming convention Gen Con in 1972 [38].

The Lake Geneva WarGames Convention, later simplified to Gen Con [47], was founded August 24, 1968 by Gary Gygax. Over the years, thanks to a meeting between Arneson and Gygax, the convention, much like the medium itself, shifted towards roleplaying. First held at the Lake

Geneva Horticultural Hall, the event was small, only charging one-dollar admission, and barely made enough money to cover the 50-dollar venue rental. Since then the convention has become one of the most popular conventions in North America, with an attendance rate of 197,695 people as of 2015 [48].

Arneson met Gygax at Gen Con in 1972 and introduced him to his Blackmoore setting. Gygax and Arneson immediately combined forces to create Dungeons and Dragons [24]. However, even in the earliest playtests the two pioneers highlighted the different design philosophies within the burgeoning medium. Gygax's playtest focused more on immersing the players within the game world [38] and fostering cooperation among them, adjusting rules on the fly to retain party cohesion. Players drew maps of the dungeons as the game progressed instead of Gygax following the usual standard of providing them to the group. Most importantly though, the games were social and players were free to give directions at any time. No miniature figures played a part in Gygax's playtest and the gameplay happened entirely verbally with some players taking notes. In contrast, Arneson's playtest involved experienced wargamers [38]. As such, his games focused on the statistically interactive elements of the system and aligning closer to the medium's wargaming roots. Arneson provided maps for the players, utilized miniatures to traverse the dungeons, and attempted to control

interactions by having players write up their moves in notes read aloud by an individual of the group to Arneson. These two varying playtests styles displayed the strength of the new medium to its designers, this new game would allow for the creation and play of any style ranging from Gygax to Arneson or somewhere in-between.

The birth of tabletop RPGs began with the release of *Dungeons and* Dragons in 1974 by Tactical Studies Rules [24], a company created by Gygax, Done Kaye, and Melvin Blume. Although they each designed game with different goals and style, Gygax and Arneson were able to create a system that allowed for the combination of interactive and immersive elements in a singular environment. In 1979, Advanced Dungeons and Dragons [49], became the de facto edition for the game, remaining in circulation longer than any other edition to this day [50]. Since then, thanks to the standards set by Dungeons and Dragons, there has been countless RPG systems released and the family tree of RPGs has branched into many different subsets.

Numerous other tabletop RPGs have emerged since the creation of Dungeons and Dragons. Runequest [51] was released in 1978 by

Chaosium in direct competition with Dungeons and Dragons and its success led the way for them to also launch Call of Cthulhu [52], which is now popularly considered done of the cornerstones of narrative role-

playing game [53]. Call of Cthulhu, like Dungeons and Dragons, is also a rarity in the RPG medium; it does not release systemic updates favoring instead to release new story and setting content for players [53].

Nevertheless, Call of Cthulhu also inspired a new RPG system, Peligrain Press' forthcoming Delta Green [54]. This branch of roleplaying focuses on the narrative elements of interactive storytelling: though the emulation of horror genre conventions and the manipulation of the cycle of immersion to scare and unsettle its players.

Generic Universal RolePlaying System (GURPS) [55], released in 1986 by Steve Jackson Games attempts to simulate all aspects of a game for the designer and player using tables, equations, and point systems. GURPS 4th Edition [56] alone contains almost 200 books [57] all dedicated to the creation, and emulation of various media genres. In terms of design, GURPS focuses on providing as many interactive elements as possible in an attempt to provide for designers all the tools necessary to combine them and create satisfying immersive environment.

Another lineage found in the family tree of tabletop RPGs is the Shadowrun [58] series, published by the FASA Corporation in 1989. Writers and creators from the original Shadowrun RPG broke off from the company to create a "storytelling RPG system" which eventually became the World of Darkness [59] series of game books released in 1991 by White

Wolf Publishing. World of Darkness is another RPG system that has widely influenced the medium, giving birth to the FUDGE [60] system in 1992. FUDGE begot FATE [26] in 2003, which in turn encourage the creation of the Powered by the Apocalypse [61] system in 2010. This branch of games form a string of related RPG systems designed to focus on narrative and storytelling. These game utilizes the oppose design focus to that of GURPS. Instead of contributing many highly specific interactive elements, these systems provide designers with a few wide ranging interactive elements in the hopes, with the combination of various genre conventions, of creating immersive environments.

Tabletop RPGs today use a wide variety of design methods. Systems such as GURPS focus on mechanical complexity in its interactive elements while other systems forgo complexity and rely on users to create immersive setting themselves. In the middle of these two design methods lies D&D. Its long history designers within the system have the ability to go from one extreme of tabletop design to the other. This flexibility is one of the many reason for its long-term survival and pivotal status within the RPG community.

Chapter 6

Dungeons and Dragons Editions as a Lens for RPG Medium

Due to the extreme amount of diversity within the RPG medium, this research focused its attention on a singular system. As a progenitor of the medium, Dungeons and Dragons hold a unique place in modern culture and serves as an excellent focal point. D&D's staying power is comparable to the, now outmoded, Atari 2600 being both on the same market as and competitive with current video game consoles such as the Xbox One, WiiU, or Playstation 4. This unique aspect of D&D can help display the challenges the medium faced as it grew over the last forty years. Although the system's dominance in the medium has waxed and waned, its unique perspective allows it to adjust to match challenges and insecurities of the medium.

Dungeons and Dragons (1974-1977)

Dungeons and Dragons [24] first released in 1972, was groundbreaking, but gated. The rules released to the public were little more than advanced rulesets for a tabletop wargame. The system relied on outside user knowledge of how to design and create a campaign, usually in the form of "grognards," [38] individuals who were veterans of the tabletop wargaming community. Campaign, is a term borrowed from the medium's wargaming roots [38], it is a series of interconnected play

sessions, sometimes involving multiple story arcs or setting changes. However, the reliance on older individuals to create and run campaigns acted as both a boon and a hindrance to the medium. These individuals fostered a younger generation and prepared them for becoming GMs themselves in an apprentice role, but these older users also were staunch observers of techniques found in wargaming that did not translate well to the new medium. For better or worse, the original D&D ruleset was more tabletop wargame than interactive narrative and the unique creative elements of the medium felt tacked on by users. ⁷ In essence, the games were more interested in the player's physical agency, their ability to move and interact within the system, than their dramatic agency in shaping the story dynamically with their choices.

"Basic Set" (1977-2000) & Advanced Dungeons and Dragons (1977-1985)

The next edition of *Dungeons and Dragons* was a twofold effort by Gygax and John Holmes. Holmes worked on the Basic Set [62], intending it to be an introduction for new and less experienced users. Gygax, on the other hand, worked on the Advanced Set [49] which target experience players of *D&D* and acted as the official rules once players had graduated from the Basic Set.

⁷ The next chapter covers some of the theories found within tabletop roleplaying games. Unfortunately, these are sparse and lack any real support in academia. As such the interactive narrative used for tabletop rolepaying games will use the same definition as digital interactive narrative, with the understanding that they are not digital, but analogue systems.

Holmes worked on the *Dungeons and Dragons* Basic Set, known as the "Blue Box" [38] by the community due to the blue colored box the game came in. The Blue Box provided players the essential rules and concepts of the system, such as rules for character creation and level-advancement for player characters, levels 1 to 3. However, more importantly, it provided information on how to play a tabletop RPG and contained advice on how to adventure inside dungeons for players and how to be a GMs.

The other half of the effort was Gygax's Advanced Dungeons and Dragons (AD&D), known as the "Red Box" [38] for the same reason as the Blue Box. Where the Blue Box's design introduced new users to the medium, the Red Box's intention was the complete overhaul of the original system. Such changes included the removal of locational damage, a complete overhaul of the previous combat-system, and an overhaul of the character alignment structure. Overall, AD&D expanded the original D&D rules set from a pamphlet into three full books.

The division of skill level created a united community with two separate districts, similar in idea to Celia Pearce's Digital Communities [16]. The Basic Set created an inviting and open environment for new players to create their own Identity, character or personally, with the medium. Likewise, the Advanced Set allowed returning players to

continue building a Community. These two divisions within the Community often worked together resulting in an integration where older "advanced" players guided newer "basic" players to join the growing D&D community.

Advanced Dungeons and Dragons 2nd Edition (1989-2000)

The second edition of AD&D, AD&D 2.0 [63], is the least memorable of the Dungeons and Dragons series. This edition is a reflection of the medium's struggle with public perception, mirroring outside political pressures and media scandals from individuals who did not understand it and were quick to label it negatively [64]. The rules continue to move away from their roots as a tabletop wargame, removing more complex math in favor of simpler equations.

It is during this time hobbyists of RPG began to organize themselves and theorize on the design of their medium. The next chapter of this thesis discusses a few major theories of this time such as the GNS (Gamist, Narrativist, and Simulationist) [65] and Threefold theories [66]. These theories were influential before Wizards of the Coast, Dungeons and Dragon's current intellectual property holder, later created a study [67] that countered many of the established ideas propagated by these theorists.

Dungeons and Dragons 3rd & 3.5 Edition (2000-2008)

The 3.0 edition [68] continued the simplification of the original D&D system by moving away from the complex interaction based stories of tabletop wargaming toward more abstract immersive stories. It removed the dice mechanics that required numerous types of dice and replaced them with a new system utilizing a single 20-sided die to determine most of the action within the game. The d20 system was released under an Open Game License (OGL), mirroring contemporary open source software practices.

In July of 2003 a revision of the 3rd Edition [69] was released with a number of small official changes. Dubbed 3.5 by the community [38], this edition of *D&D* had a wider impact on the system beyond its meager rules changes. Due to its use of an OGL, 3.5's release integrated a large number of fan created works as official material. This mass influx of material created the ability for users to generate their own content but also created a glut of information for players to delve through. Players and designers had access to and means of creating new aspects for their campaigns. Both players and designers could now create complex interactive elements within their campaigns as well as employ other users' input, not immediately at the table or in the group, to bolster the immersion during the campaign.

D&D 3.0 and 3.5 both focused on open source creativity, copying digital creative thinking of the time. These editions are responsible for the wide range of material available for fans of D&D and the acknowledgement of homebrew and fan-made material. This stance has been integrated into other RPG systems and many authors now utilize OGLs, allowing supplements and new games created by fans to be published so long as the source material is acknowledged.

These editions also provided a marked change in how players played tabletop roleplaying games. While older editions of D&D relied heavily aspects of war games, 3.0 and 3.5, in conjunction with its OGL, opened up to players the freedom to move from a combat focused game to something else. During this time, fans designed and created numerous "homebrew" classes and systems for D&D. However, this is not without its detriments; the glut of information created an optimal set of rules and interactions that limited the creative potential of both players and GMs and 3.5 quickly became known as a "solved" system where so long as the player followed a set of prescribed character traits, skills, and actions, they would always win."

Dungeons and Dragons 4th Edition (2008-2014)

D&D 4th edition [70], highlights the problems found in the comparison between video games and tabletop RPGs. Changes in this

edition included the altering of the alignment system, removal of skill points and specialization spells. 4th edition simplified the system to the point that older and more traditional role-players felt like they were playing a video game rather than the interactive storytelling experience usually found within the medium. D&D, in an attempt to remain relevant, created a system that focused more on simple instant gratification and power, similar to mainstream video games, instead of focusing on generative story aspects and hard earned tactical understanding of the original system.

Dungeons and Dragons 5th Edition (2014 – current)

Previously, tests within the D&D systems required a variety of skills or stats as the basis for their tests, 5th edition changed these mechanics. The new system based tests on the statistics of a character with skills supporting the check. However, D&D 5th edition [71] seems to acknowledge the split in the tabletop RPG community, while still tactical, the system is modular and allow for GMs and players to implement more or less material into the games to suit their tastes. Individuals who like the "solved" environment of 3.5 and those who enjoyed the video game feel of 4th edition could add their old material from previous editions into their games, while users on the opposite end had more room for narrative freedom and the inclusion of dramatic agency.

As stated previously, D&D's unique position allots it the flexibility to change with the medium. Looking at the revisions in the mechanics across the editions, we see a shift in numerous aspects of D&D's design. The original edition was an exclusive system that relied on outside user knowledge to create campaigns in an attempt to bring character based fantasy narratives to tabletop wargames. The latest edition focuses more on the ability to create stories between GMs and players using simplified mechanics and a community of knowledge to back up the design of innovative narratives. These changes acknowledge that there is a wider spectrum of gameplay inherent to the Tabletop RPG medium than initially imagined by the creators.

Chapter 7

RPG Theory and Design Works

Because of its hobbyist nature, proper theoretical study of tabletop roleplaying games is sorely lacking. There have been studies by users, but due the open and personal nature of the medium, in-depth study is difficult at best. However, of the theories and design teachings provided, a general idea of how and why GMs and users play tabletop games can be determined. The most prevalent researcher of the medium, Gary Gygax, is also one of its chief founders [24]. His work provides the best detail to understanding the core design philosophies of the medium.

The most similar leaving tradition to the teaching of campaign design within the RPG medium is that of oral storytelling. Unlike digital games which have books, classes, and colleges dedicated to their design, tabletop RPGs continue to be a secluded hobbyist medium taught by trial and error. GMs continue traditions through rituals and experiences passed from teachers to students. Ultimately, even the core rulebooks of the various systems provided little means for instructing a new GM how to design a campaign from scratch. Much like the original edition of D&D, the hobby has a reliance on older users to impart wisdom and knowledge of the medium to newer individuals that continues to this day. There are a number of books and resources on how to GM but they

are almost all old and outdated with information that is more like self-help advice than clear instructions. Gary Gygax's Master of the Game:

Principles and Techniques For Being An Expert Role-Playing Game Master

[72] is one of the rare exceptions.

The language in Gygax's book is grandiose and slightly absurd, the title alone should provide a hint of this and even the cover art comes straight from the 80s tradition of over the top fantasy art. Despite its dressings, the book, published in 1989 and currently pulled from publication, provides some of the only explanations on the principles of designing and running a campaign. The book's stated goal is to make readers into "Master Game Masters" [72] and provide them with a wealth of knowledge necessary to become "Masters of Game Mastering" [72]. Despite the cheesy wordplay, the book also provides a number of vital factors not only for the design of campaigns, but also managing group dynamics and for how to deal with failures inevitable in the medium. The simplest information within the book is sorely missing from most other "GM ONLY" RPG material. For example, the original edition of Advanced Dungeons and Dragons [49] contains very little material on the design of campaigns in its section specifically titled "THE CAMPAIGN." Instead, an overview introduces the role of the GM to the reader, then immediately dives into the minutia one might need to consider when designing. At no

point is anything as important or foundational as narrative design or structure discussed.

Meanwhile, the chapter "The Master Milieu: Design and Maintenance" in Master of the Game [73] contains Gygax's seven rules necessary for the design and completion of campaigns. Stepping through these individual points illuminates the complex nature of RPG campaign design.

"1. Assure harmony between the RPG genre and systems and the campaign milieu, so that players do not become confused between what they understand from the game vehicle and the play of the campaign. In some cases, this may mean instructing your players in any rule modification you have made" [73].

The first step Gygax deems necessary for the design of a campaign is to make sure that the game does not create dissonance in the players. To do this, the emulated genre, the system running the game, and the milieu of the campaign must be understood by the players. If the campaign attempts to stray or deviate from any of the three key elements the GM must inform the players of the changes and help them understand how and why they occurred.

- "2. Establish a past, present, and likely future for the game milieu as directed in general by the RPG or at the GM's discretion if the game system does not give any direction in this respect" [73].
- "3. See that the milieu of the campaign has purpose as well as a framework in which random events occur. There must be vast, cosmic, greater, intermediate, and lesser schemes (the

macrocosmic descending toward the microscopic in gradual circles). Determine at which level you will begin the scenario and consider how player characters may discover or explore the others" [73].

After preparing the users for the experience, the next two steps are to make sure the campaign resides inside a structured universe. The creation of past, present, and possible future makes it such that the GM can understand the inner workings of their campaign. This also provides them with the ability to anticipate possible dissonance inside the campaign that players could encounter. The creation of different stratifications of events based on scales of influence also allows the GM to assist players in the active creation of belief. These steps help the GM anticipate possible desires to explore or question the narrative structure of the campaign without having to break the player dramatic agency. By having created such a universe and detailed milieu this design process can allow the GM to create or find material which can serve as assistance to the player's understanding of the campaign.

"4. Be sure that logic of some sort, either general or game-oriented, exist within the milieu, and that this logic must direct the course of events beyond the scope of player character interaction. The world must function and change without requiring the player characters to constantly direct it. Life will go on when they are not looking, which will ensure variety and sustained interesting in the scenario" [73].

This point is a slight deviation from the current design of both RPGs and digital media. Design of digital narratives hold the player as the sole focus and driving aspect of the story with their actions having an effect on the world. Gygax challenges this notion. He rules that creating a system that is beyond the scope of the players, where they have no control, is necessary for the creation of a good campaign, but this does not mean that the GM controls the narrative of the story either.

"5. Structure events and connections between them so that player actions have a ripple effect, with definite influence on the other factors in the world – but the ripples should disappear at a reasonable point in the overall scheme. Some action taken on a microcosmic level will not necessarily affect the macrocosm at the other extreme, and vice versa" [73].

The players of the campaign have the ability to interact as they will within the campaign but their effects on the environment are limited in scope to match the narrative. Their actions will have consequences on the system, but only so far as what the narrative can or should handle. To compare, Spec Ops' narrative of loss of self and degradation of morality in search of glory could function within a RPG campaign. The actions of the player within such a campaign would affect the squad, the area of combat, and those involved in the region of the campaign. What would change from the video game narrative, however, is the reaction to the player. Instead of the player making futile decisions that have no effect on the course of events, the narrative structure of the story would focus on their

squad mates and their group's reaction to the player's actions throughout the campaign. This would allow for reflection on both the actions of the character and the reasoning for said actions.

"6. To ensure the continuity of the campaign, build in both continuity of logic and purpose. The GM maintains the game as an entertainment form for all participants, but if it lacks continuing purpose in its aspect, it fails to be vital" [73].

Here is the core aspect of the GM's job: entertainment. The entire point, Gygax states, of being a GM is to provide entertainment for all participants, including the GM's themselves; the moment the campaign lacks purpose or entertainment for even a single member of the group is when it stops being successful. This sentiment was echoed numerous times in the interviews conducted for this research, as will be expounded upon later in a later chapter.

"7. Do everything possible to guarantee continuity of participation by players and their game personas. For obvious reasons, this is of considerable importance to the vitality, realism, and enjoyment of the campaign" [73].

Gygax believes participation of both player and player character are necessary for enjoyment of a campaign. He then folds the previous aspects he discussed by restating that the vitality, realism, and enjoyment of the campaign are necessary to provide dramatic agency for the players. Players need to be able to create an active sense of belief that

the world and game they currently inhabit is real. To do this, the job of the GM mirrors that of designers of digital media. They create various forms of non-digital agency and dramatic agency for their players and attempt to create narrative environments and believable agents within those environments that invite player interactions. A GM must also create a sense of Community among the players, by combining their Identities, in this case the characters designed by their players, with a recurrent internal consistency of the campaign. Together these create a sense of Community in digital environments similar to that described by Celia Pearce [16].

Gygax also provides standards for the players and consumers of an RPG campaign to test its quality. In his previous book, *Master Role-Player* (1987) [75], Gygax wrote to players in an attempt to develop "Master Players" similar to his desire to mold GMs into "Master GMs" in his other book. In the chapter "The Group: More Than Its Parts" Gygax dedicates a section to "The Problem GMs" providing an in depth investigation on the topic. Gygax breaks these GMs into several different types:

 GMs hostile to the group or who denigrate player actions in an attempt to elevate their self worth.

- 2. GMs who elevate themselves or their story above all else, making the players a mere "puppet" for the GM's narrative to be shown through.
- 3. GMs who treat characters unfairly or in an inappropriate manner during campaigns, including the use of narrative elements that an RPG system is not set-up to handle. For example a "killer campaign GM" who kills off numerous player characters, even though the base system does not support such routine character creation.
- 4. GMs who coddle their players, letting them reap rewards without appropriate opposition. This also covers GMs who are badgered by their players, browbeaten into submission to the players' wants at the sacrifice of game or narrative quality.

This list outlines the delicate balance inherent in the design of campaigns. The GM must accommodate their players but the campaign must also be designed to keep their interest. At the same time, the GM must not force their narrative and ideas on the players or be forced by the players to divert from the intended goal.

RPG theory outside of Gygax's research focuses on the attempt by designers and researchers to classify the uniqueness of RPG systems in relation to other mediums. Unfortunately, attempts to classify the function of RPGs have devolved and much of the theory centered on system

design has fallen to the wayside. Such examples of these abandoned schools of thought are the the GNS (Gamist, Narrativist, Simulationist) [70] and Three Fold [71] theories. While the Three Fold system looked at supposed player goals, GNS focused on systemic objectives. Nevertheless, the core of these theories assumed that RPG systems could be broken down into three distinct areas of focus: game, narrative, and simulation. These theories stood for a number of years and resulted in the creation of several RPG systems but ultimately fell out of favor due to a study conducted by Wizards of the Coast that called into the question their baseline philosophy [72].

Wizards of the Coast explained the core of RPG systems from the viewpoint of a user-focused study. Their research showed that the three areas of system design previously theorized were not the driving force for players. Instead, the research [72] claimed, most players found enjoyment out of systems that fulfills eight core values:

- 1. Strong Characters and Exciting Story
- 2. Role-Playing
- 3. Complexity Increases over Time
- 4. Requires Strategic Thinking
- 5. Competitive
- 6. Add on sets/New versions available

- 7. Uses imagination
- 8. Mentally challenging

While no longer used as a whole, the base ideas of GNS and Threefold continue in other forms through games designed based on these theories. Likewise, Threefold theory's tenets of player desire have since evolved in an attempt to encapsulate Wizards of the Coast's research and remain relevant [74]. Nevertheless, RPG theory research has significantly decreased in light of Wizards of the Coast's findings.

Chapter 8

Research Process

Dungeons and Dragons is as much a parent of digital media as the computer revolution. Dungeons and Dragons [24] inspired Zork [1] and other initial interactive narratives. However, the tabletop RPG medium remains understudied by academia, particularly in how an individual acting as the controller of the experience designs their narrative. To uncover their design process, game masters from all skill levels were surveyed and interviewed. In an attempt to bridge the gap between theoretical and practical interactive narratives, this study surveyed GMs for their experience and knowledge of how to create an analogue interaction narrative.

Translating RPG Design to PC3

As discussed in Chapter 3, Brian Magerko's PC3 language was chosen as the bases for the survey language in this research. PC3's design areas provide a better fit in translating the analogue elements of tabletop RPGs into digital concepts than the other design languages. For the survey, the four areas of design in PC3 were divided as such:

 Process translated into the actions and systems available for both users and designers over the course of RPG campaign design and play. In the survey, Process was called the "RPG Systems" element

- to help the GMs understand the concept in vernacular they were familiar with.
- Control translated into the idea of the controller of an RPG
 campaign. For this study, because of its focus on games run by an
 individual controller, the GM, this area of design was held constant
 and not included as a part of the survey or interview process.
- 3. Content translated into the narrative designed by the GM and presented to the users of the campaign. In the survey, Content was called the "Narrative/Story" element to help the GMs understand the concept in vernacular they were familiar with.
- 4. Context translated into the desires of the users surrounding the campaign being designed. In the survey, Context was called the "User Wants" element to help the GMs understand the concept in vernacular they were familiar with.

Survey

To study the process by which GMs design campaigns and adapt their narratives, the creative design periods were broken down into three specific areas: the initial conceptualization, the intermediate iterative period, and the running or application of the campaign. Each of these areas were further subdivided in the survey, inquiring which concept of the PC3 language the game master focused on during the area: the

Processes available to their users, the Content of the narrative, and the Context imparted by user desires. The survey asked the user to rate, on a scale of 1 to 5, if they consider these certain areas of interactive narrative during the stages of the life cycle of a campaign. The scale for the survey breaks down as follows:

- 1. The designer never considers the area of design
- 2. The designer mostly never considers the area of design
- 3. The designer maybe considers the area of design
- 4. The designer most always considers the area of design
- 5. The designer always considers the area of design

Finally, there was an additional section at the end of the survey for users to provide extra terms or areas of design that they believe were missing from the provided questions.

Interview

Following the survey, game masters were given the option to participate in a short, recorded interview. Individuals interviewed were free to skip or refuse to answer any of the questions or stop the entire interview at any point during the process. The purpose of the interview was to gather anecdotal evidence and possible historical examples from the game masters. Those users who wished to have their interview

recorded are included in the appendix section of this thesis. The interview questions were the following:

- 1. Favorite Tabletop RPG System or Systems? This question was often followed up with an explanation of their preference or if there was a system that had fallen out of favor with the individual and why.
- 2. Personal History of Tabletop RPGing? This represented the game master's history with tabletop RPGs, specifically their initial exposure to the medium, their first time playing a game, their first experience as a GM, and their first designed campaign.
- 3. Experience designing RPG campaigns? This question asked for examples of campaigns they had designed. This could be a number but anecdotal stories were quite common as well.
- 4. Observations of Designing RPG campaigns. This question provided techniques and observations the GM felt was necessary or vital to the creation or application of campaign design. Often this question was reworked to individuals as "what is some helpful advice for new GMs?"

With these core question asked, the interviewer sometimes inquired about information relating to the individual's answers. Examples of such questions include:

- What are the differences between online and in person game mastering?
- 2. Are there any notable differences between American RPGs and European RPGs?
- 3. What are some perceived differences between the various D&D editions (if they had played them)?
- 4. Do they feel there is an inherent spectrum to the gameplay elements of tabletop RPGs?

After these questions, the participants were asked to explain their short answer responses to any of the survey questions. Sometimes these questions were self-answered during the previous interview questions while other times they generate new questions similar to the previous portion of the interview. Finally, the users of the survey were given an open period to include any information, anecdotes, or evidence they felt would be useful to the interviewer.

Recruitment

Recruitment for both the survey and interview were accomplished through email request and open recruitment. In an email sent to several companies and individuals within the RPG community the following paragraph was attached:

"I am a researcher at the Georgia Institute of Technology doing a study of how game masters engage RPG campaign design. We want to understand how game masters conceptualize, think, and iterate their campaigns over the course of creation and execution. From studying people, we hope to better understand the nature of guided interactive narrative design and use these results to influence the design of future entertainment technologies. For our study, we are looking for game masters who are willing to fill-out a survey and possibly complete a short interview. If you are interested in participating, please email tgasque@gmail.com."

If an individual reached out, they were presented with a consent form that explained their rights as a participant in the research. The participants were asked to keep their consent form, Appendix C, for future records if they wished to be part of the research. Following confirmation of consent, the participant arranged a location and time to meet with the researcher for either the survey, interview, or both. During this meeting, once again, participants were informed of their rights and asked if they wish to proceed. Following the survey, participants were asked if they wished to participate in the interview and if so if they wished for the interview to be recorded with their identities being anonymized in all notes and records.

Calculation of Results

Once gathered, a database of the results of the surveys was compiled. This spread sheet separated all the participant's numerical data into the three different sections of the survey: conceptualization, iteration, and application of campaign design. The median results of the

questions were calculated to determine where the middle of the collected data laid. Then using an "Expected Results" survey filled out by researchers prior to recruitment, the P-values of the data was calculated.

With the median and P-values calculated, the information from the interviews notes and audio recordings were studied for any uniting themes or threads. Histories, short answer responses, and interesting musings were compiled for both results and to synthesize the mentality of the interviewed designers. To keep the participants safe, no identifying information mentioned during either the survey or interview were recorded and in the case of accidental identification, all information was anonymized during the calculation of the results.

Chapter 9

Results

The results of the surveys and interviews revealed a marked difference between the design and application of tabletop RPGs to those found in digital interactive fictions. A core focus across all surveys, from conceptualization and iterative design to application of tabletop games, was the narrative presented to the users. This is in stark contrast to Mechner's article [38] that held gameplay, in this instance the Process layer of PC3, is beholden above all other design layers. Even more curious, the Processes layer of design ranked among the lowest necessary layer for tabletop campaigns. In fact, only during conceptualization of a campaign did the Process of the system play into the decision making of the users.

Conceptualization

Table 1. Survey Results – Conceptualization

	Q1: Narrative/Story	Q2: RPG Systems	Q3: User Wants	Q4: Different Design Areas
Anon-1	5	3	1	2
Anon-2	4	3	4	2
Anon-3	3	4	2	5
Anon-4	4	3	2	1

Table 1 (Continued).

Anon-5	4	3	3	4
Anon-6	5	2	3	3
Anon-7	4	4	2	1
Anon-8	4	3	4	1
Anon-9	4	3	4	5
Anon-10	5	3	2	2
Anon-11	5	3	4	3
Anon-12	4	2	3	3
Anon-13	5	3	4	5
Anon-14	2	4	5	4
Anon-15	4	4	2	1
Anon-16	4	3	2	2
Expected Values	4	2	3	3

Table 2. Survey Results – Conceptualization Statistics

Media	4	3	3	3
P-Value	0	0.5	0	0.083

Table 1 and Table 2 show the results of the survey for the conceptualization of tabletop RPG campaign design. The Narrative, or the Content, of the campaign was the most important aspect of the design for GMs. The other three areas of design tied for second. The

largest variance came from the fourth question of this section of the interview "What is an unlisted design area you focus on first during designing a campaign?" Similar questions also have the widest variance in the other sections of the survey. Of the data, all except the second question's p-values were in acceptable ranges. However, the data does differs from Gygax's conceptualization design criteria. In Gygax's design, conceptualization required the consideration all areas of the campaign [73].

In response to the variance in the fourth question of the section, it appears areas, after consulting the interview notes and survey short answer response, commonly believed by GMs to be outside of the initial three sections were actually aspects that combined different design areas. Chief among this area was the integration of a player character's backstory into the narrative of the game. When questioned, they felt that this was unique to the medium. In actuality, and due to the flexible nature of the PC3 language, this aspect of design is a combination of the Content and Context layers. The Context, representing the player's desired emulation in the game through their player character, must be integrated into the Controller's vision of the Content. Other areas of concern GMs felt lay outside the predefined design areas included:

- Utilizing and testing new or experimental rulesets for their games.
 This would fall under the Process and Context areas of design.
- 2. Self-reflection on the campaign story and if it would work better in a different format. This also falls under a combination of the Content and Context layers, as the Controller of the system must reflect on whether the Content of the campaign will be something within their player's Context for the system.
- 3. One of the unique concerns came from a self-identified podcast GM who, as such, was concerned about the "consumption [of the campaign] by an audience outside of the GM or player." Their concern brings a new perspective to the Context layer because this designer is no longer just interested in the immediate social aspect of their campaign's narrative for their players. They are now also worried about another type of user's Context brought to the campaign: that of passive users who consume the narrative in a non-interactive, auditory medium.

Of the individuals that provided a response to the question of additional areas of design, all their generated answers fall within a combination of one or more of the PC3 design areas.

Iteration

Table 3. Survey Results – Iterative Design

	Q5: Narrative/Stor y	Q6: RPG Systems	Q7: User Wants	Q8: Different Design Areas
Anon-1	4	5	1	2
Anon-2	4	2	4	2
Anon-3	5	3	4	5
Anon-4	3	3	4	1
Anon-5	5	4	5	3
Anon-6	5	3	4	3
Anon-7	3	3	4	1
Anon-8	4	3	4	3
Anon-9	3	4	5	4
Anon-10	5	4	4	1
Anon-11	5	3	4	3
Anon-12	4	2	3	3
Anon-13	5	3	4	1
Anon-14	2	4	5	4
Anon-15	4	3	2	1
Anon-16	4	4	5	2
Expected Value	5	2	5	3

Table 4. Survey Results – Iterative Design Statistics

Median	4	3.5	4	2.5
P-Value	0.2	0.5	0.2	0.083

Table 3 and Table 4 show the results of the iterative design section of the survey. The results of this section are once again a tie between narrative and user desires, Content and Context in the PC3 language, as the most important area of design for a tabletop RPG. In general, all the scores for areas of design have a higher rating than in the previous section except for the fourth question, "When designing a campaign do you focus on different areas than the previous three questions?" This question had a lower score than the previous section, but only slightly. This suggests the iterative design stage is where GMs begin to branch off to focus on one of the various axes of the PC3 method. This would explain both the increase in the ratings for the areas of design. Again, the p-values for all questions of this section, except the system and processing question, were within acceptable ranges. This is due to a belief by the research that the Process or system of the campaign was not a major consideration during design. This section was off from Gygax's design theory in the same manner as the previous section. Instead of being of equal value to the other areas of design, Gygax believed that the system should be a major

consideration during the iterative design of a campaign. This is because the mechanics of the system available to both designers and players plays a major role in the interactive and immersive element of the final campaign, and a poorly though out use of system could ruin a campaign [73].

Much like the previous concern over the question of outside design elements, game masters concerns were actually a combination of different areas of design. The main aspect that continues to carry over in this section from the previous is the concern for the integration of usergenerated content, in this case player character stories and actions. GMs stated designing environments, events, and actions that included player character plot contributions allowed users to experience a more immersive story while also providing the game master content for the overall experience of his or her player. The GMs also discussed concerns of party integration and cohesion. This represents an attempt on the game master's part to balance each individual player's Context for the game with the overall stability of the system and Content the GM must provide the players. This complicated design work attempts to band users together so they can create their own content generation in a unified front, instead of an antagonistic or abrasive group dynamic.

Application

	Q9: Narrative/Stor y	Q10: RPG Systems	Q11: User Wants	Q12: Different Design Areas
Anon-1	4	2	4	1
Anon-2	4	2	4	3
Anon-3	5	1	4	4
Anon-4	5	3	4	2
Anon-5	4	3	3	3
Anon-6	5	3	3	3
Anon-7	3	3	4	1
Anon-8	3	3	5	3
Anon-9	3	2	4	4
Anon-10	5	4	5	1
Anon-11	4	3	4	3
Anon-12	4	2	4	3
Anon-13	4	3	5	1
Anon-14	4	3	5	4
Anon-15	3	3	4	2
Anon-16	4	2	5	2
Expected Results	4	2	4	3

Table 5. Survey Results – Application

Rounded	4	2.5	4	2.5
P-Value	0	0.5	0	0

Table 6. Survey Results – Application Statistic

Table 5 and 6 show the results of the campaign application section. User desires, Context in the PC3 language, stands out as one of the most important areas of application design, contrasting with both the conceptualization and iterative design sections. Narrative remains highly rated in this section of the survey but does not have the highest average like in the other sections. Moreover, the Process area sits at its lowest point in the survey, just a few points above the "unlisted area of design" question. As with all other sections, the p-values aligned with the observed results of the participants except the system question. However, this section mirrors Gygax's campaign design philosophy [73]. Specifically, during the application, or running, of a campaign both the narrative and the users are the most important aspects. It is this delicate interplay between narrative and users during application that is unique to tabletop RPGs and digital media designers should research.

As with the other sections of the survey, the fourth question, "When running a campaign, do you adapt it based on different areas than the previous three questions," continued to rate lower than the other design areas. Yet again, after consulting the short answer section of the survey

we find that the mains concerns GMs voiced in this area still fit into the PC3 areas of design. When asked, most all of the GMs stated that during this point in their designs their focus was on allowing the players to shine within the narrative. Several game masters provided examples of engaging their players by giving them chances to display their characters skills and abilities. One GM mentioned that they create and adapt the narrative to highlight the ongoing growth of each character. They described their process as creating situations to spotlight player character evolution over the course of the campaign.

Chapter 10

Synthesis

There is a clear design choice among designers of tabletop roleplaying games to focus on the narrative and social interactive elements of their campaigns. This social element presents itself in the adaptation of the narrative to highlight and challenge the individual user's desired context for playing the game, be it character or genre emulation.

PC3

The PC3 language's different areas of design correlate extremely well to the pre-existing structure of RPG theory and design. The results of this case study display the power of the PC3 language as a theoretical language to describe the design of RPGs. Not only do PC3's areas provide a powerful descriptor for the aspects of tabletop gaming, but its divisions also form a spectrum for the qualities RPG designers, GMs, and players desire in their campaigns. Even more so, the eight core values players seek within RPGs, as WoTC's research showed, are contained within the various axes of the PC3 language.

As part of the survey, Process reflected the system and abilities the players used to interact within a campaign. This spectrum is the predecessor to Koenitz's Agency axis. For instance, an RPG system at one

end of this spectrum allows little ability for the player to interact, such as in games with only a singular resolution mechanic or singular input form. An RPG system on the opposed end of this spectrum is a complex system where players have many different facets they can use to interact within the system, such as having to the ability to tap a singular button, type in a response, or insert a code. This spectrum relates to the third, fourth, and sixth cores desires of RPG players: Complexity Increasing over Time, Requires Strategic Thinking, and New Sets/Version Available.

As stated previously, the research for this thesis held the axis of Control constant at a singular controller of a system. This concept proved both false and true. While the controller of the system was a singular entity, the GM, the users within also had varying degrees of control over the campaign. This enforces the idea of a spectrum of RPG design control. Game such as Fiasco [25] would be on one end of the spectrum while digital interactive narratives, such as video games, sit at the other with RPGs falling in between them. It is worth noting, according to Gygax's rules of GMing, a GM who is too controlling of a game is considered to be a bad GM. As of the writing of this thesis, there has not been found a "good" example of a RPG system that is completely controlled by a singular individual. This spectrum of control is one that can be studied to provide a possible bridge between the gap in the theoretical and practical design of interactive narratives.

The Content of a RPG is another spectrum similar to Control.

Content of a RPG was defined in this research as the story created by the gameplay. At one end, stories are told to players by the GM while at the other end, the story can contain a loose structure for users to fill in with their own desired directions. This spectrum provides an answer to the core desire of RPG players one and seven: Strong Characters, Exciting story, and Uses Imagination. It also plays a part in the core desires two, five, and eight: Role-Playing, Competitiveness, and Mentally Challenging. However, these three desires, much like the design areas listen by the surveyed GMs in the short answer section, are a combination of the Context and Content Spectrum of PC3.

This spectrum, which was defined as User Wants for the research, provides an interesting, well, context for view. The research showed that the desires of the users ranged from fulfilling genre expectation to enacting events or characters outside predefined genres. The RPG community has their own spectrum similar to the PC3 Context spectrum: "Beer and Pretzel," "Meat and Potatoes," and "Wine and Cheese" [75]

Beer and Pretzel represents a game that the users and GM understand is just for fun. There is little to no role-playing and the focus is on combat or the core non-roleplaying mechanics of the game. Meat and Potatoe games represent campaigns that encourage role-playing

and may provide a standard for players, but is ultimately about combining role-playing and the game aspects of the medium into a singular experience. Wine and Cheese games represent games that focus more on the role-playing then the game aspect. They tend to require players to only act and speak in character, focusing on what the character would do and not what the player would do. There are even designers of these games remove the mechanics of the system entirely. This, they believe, causes users to focus more on the experience of roleplay than roll-play. As mentioned earlier, the core desires of RPG players this spectrum represents are two, five, and eight: Role-Playing, Competitive, and Mentally Challenging.

Design Agency

An exceptionally common theme in the case study was trial and error paired with tutelage from an older, more experienced GM, as a necessary component in learning how to design campaigns. This commonality indicates that, even with the lack of official design books available to teach the "rules" of GMing, there is a community available for individuals willing to learn in much the same tradition as oral storytelling. GMing has no centrally agreed upon written tradition on how to perform and most of the interviewed game masters either consult

community forums or dissect prewritten campaign materials piecemeal in an attempt to better themselves in their craft.

As mentioned, if we divide Gygax's design philosophy into the PC3 areas of design, we see that his main account mirrors that of the GMs interviewed. The Content is most important to create a framework for the players, but Context is just as important for the design considerations of the campaign. Process is important for the nature of the game and understanding how the system interacts with both story and users is a vital piece of the design. Nevertheless, Process should not dominate the design of the narrative.

One interviewed GM greatly considers the entertainment value of their games for external users who do not actively participate and instead listen to pre-recorded sessions. Furthermore, every GM made mention of trying to design games that allowed players to experience a sense of engagement within the campaign. In order to help ensure a good experience for their players, it is common practice among these GMs to alter or ignore the published rules of the system whenever they negatively interfere with the gameplay. This interplay between GM and player needs creates a shared design space. This allows GMs and players to co-create with a unique form of agency; design agency.

Design agency is the ability for the user to design and co-create with the controller or design within an interactive system. This is most similar to co-authorship in other mediums where multiple individuals work together to create an artifact. The crucial difference within the RPG medium lies in the interplay between player and GM that forces them to keep the other entertained. This means that both sides of the table actively work to design and create events that function within the formal rules of the system, but exercise the intrinsic desire of the other individuals present.

Alongside digital and dramatic agency, design agency is another aesthetic to consider during the development of a digital artifact. Design agency combines Janet Murray's definitions of digital agency [11] and dramatic agency [12] to create an aesthetic pleasure characteristic for the user through the successful interaction with the system's interface and narrative in a meaningful way while working in conjunction with the designer. This is similar to the practice of participatory design, but differs in the point of application. Where participatory design attempts to have all stakeholders in the design work together to achieve a goal, design agency is instead concerned with the level of design imparted to the users of the artifact. Unlike a practice, like participatory design, design agency works along a spectrum that seeks to measure the degree by which designer and user barter for control.

Chapter 11

Conclusion

Tabletop RPGs are not a replacement for digital interactive narratives, but there are key aspects to the medium that can be used to enhance the design of digital artifacts. These difference can act as a bridge between theoretical interactive narratives and those found in industry practices. The divergence between the focus of interactive narratives – the user in the theoretical environment and the narrative in the practical environment – creates two ends that the study of RPG systems and campaign design can unite.

Another way to view this study is in relation to space; theoretical interactive narratives present endless possibilities with little to no constraints on their users. The player is free to explore an open field and make story decisions as they desire. Practical interactive narratives, on the other hand, are more representative of an enclosed sandbox. The player is free to create and do whatever they want within the confines of the box. However, this box constrains user actions when compared to the freedoms of the theoretical philosophies. Without a means to connect one to the other, user experiences will vastly different.

However, RPGs represent a third way of building interactive narratives. They are neither an enclosed box limiting the user's decision

nor an open field with limitless control; they are akin to a vine lattice where designers create general pathways for the users to navigate. However, this pathway is merely a suggestion for the users and they are free to deviate as they please. This freedom of movement by both the designer and user creates a dance of cooperation and trust, resulting in something unique and unexpected by the end.

The foundational design aesthetics of digital media, digital agency and dramatic agency, should be expended to include design agency as a third stabilizing factor. Users and controllers working in tandem within a narrative system result in a refinement and improvement of the narrative. From an interactive and design perspective, adding the third option to the aesthetics of interactive design allows for more freedom in the development of the digital media field.

QUALITY Scale Survey

For each items identified below, circle the number to the right that best fits your judgment of its quality.

Use the rating scale to select the quality number:

1 - Never, 2 - Mostly Never, 3 - Maybe, 4 - Most Always, 5 - Always

	1. Question			Scal	е	
2.	When first designing a campaign you focus on the Narrative/Story first.	1	2	3	4	5
3.	When first designing a campaign you focus on the RPG Systems first.	1	2	3	4	5
4.	When first designing a campaign you focus on the User Wants first.	1	2	3	4	5
5.	When first designing a campaign you focus on different areas than the previous three questions.	1	2	3	4	5
6.	When designing a campaign you focus on the Narrative/Story of the game.	1	2	3	4	5
7.	When designing a campaign you focus on the RPG Systems of the game.	1	2	3	4	5
8.	When designing a campaign you focus on the wants of the Users of the game.	1	2	3	4	5
9.	When designing a campaign you focus on different areas than the previous three questions.	1	2	3	4	5
10.	When running a campaign, you adapt it based on the needs of the Narrative/Story.	1	2	3	4	5
11.	When running a campaign, you adapt it based on the needs of the RPG System.	1	2	3	4	5

12. When running a campaign, you adapt it based on the needs of the User Wants.	1	2	3	4	5
13. When running a campaign, you adapt it based on the different areas than the previous three questions.	1	2	3	4	5

For each items identified below, provide a short answer if desired.
What is an unlisted design area you focus on first during designing a campaign?
What is an unlisted area of design you focus on during the creation, designing, and running of a campaign?
What is an unlisted area of design you adapt based on the needs of the campaign while it is running?

Research Interview Notes

Interview I	Details									
Name:		Date:	Time:							
Company	/Organization:									
Questions	to Ask Interviewer									
Question:	uestion: Favorite Tabletop RPG System or Systems?									
Notes:										
Question:	Personal History of Table	etop RPGing?								
Notes:										
Question:	Experience designing R	PG campaigns?								
Notes:										
Ouestion:	Observations of Designi	na PPC campaian								
QUESTION.	——————————————————————————————————————	ng ki 6 campaign:								
Notes:										
. 10103.										

Additional Notes

Georgia Institute of Technology

Project Title: Dissecting the Layers of Tabletop Roleplaying Game

Campaign Design

Investigators: Travis Gasque

Consent Title: Main 9/1/15

Research Consent Form

You are being asked to be a volunteer in a research study.

Purpose:

The purpose of this study is:

... to determine the design choices of game masters as they develop tabletop roleplaying game (RPG) campaigns. We aim to understand the design processes behind: (1) Initial campaign conceptualization, (2) iterative design of campaign, and (3) the execution and playing of campaign.

Eligibility

You must be an individual of 18 years or older who has experience designing, running, and conceptualizing tabletop roleplaying game campaigns.

Procedures:

If you decide to be in this study, your participation will involve:

- The completion of a survey asking you to scale your use of different interactive narrative concepts in the various stages of campaign design mentioned above.
- 2) The completion of a short interview asking for your history, design experience, and personal opinions of RPG campaign design.

Risks/Discomforts

The following risks/discomforts may occur as a result of your participation in this study:

The risks involved will be no greater than those involved in typical online survey or interview. There is a risk of being recognized during the interview although this data will never be presented with other identifying information. However, if you become uncomfortable

with either the survey or the interview at any time, you can notify an experimenter and either will end.

Benefits

The following benefits to you are possible as a result of being in this study:

We do not anticipate you will directly benefit in any way from this study. Our research aspires to build foundational knowledge of design of guided interaction narratives to inform academic researchers when building interactive systems. We plan to use these study results to inform the development of various areas of interactive narratives.

Compensation to You

None?

Confidentiality

The following procedures will be followed to keep your personal information confidential in this study: The data that is collected about you will be kept private to the extent allowed by law. To protect your privacy, your name will not be recorded unless you desire. Your records will be kept in locked files and only study staff will be allowed to look at them. Your name and any other fact that might point to you will not appear when results of this study are presented or published.

Interview will be recorded and all recordings will be kept in a locked room that is only accessible by staff. The recordings will be kept for archival purposes.

To make sure that this research is being carried out in the proper way, the Georgia Institute of Technology IRB may review study records. The Office of Human Research Protections may also look at study records.

Costs to You

There is no cost to you for your participation except for your time.

In Case of Injury/Harm

If you are injured as a result of being in this study, please contact Brian Magerko at magerko@gatech.edu. Neither the Principal Investigator nor Georgia Institute of Technology has made provision for payment of costs associated with any injury resulting from participation in this study.

Subject Rights

- Your participation in this study is voluntary. You do not have to be in this study if you don't want to be.
- You have the right to change your mind and leave the study at any time without giving any reason, and without penalty.
- Any new information that may make you change your mind about being in this study will be given to you.
- You may print out a copy this consent form to keep.
- You do not waive any of your legal rights by participating this research.

Questions about the Study or Your Rights as a Research Subject

- If you have any questions about the study, you may contact Travis Gasque at telephone (912) 308-9736.
- If you have any questions about your rights as a research subject, you may contact Ms. Melanie Clark, Georgia Institute of Technology at (404) 894-6942.

If you participate in the study it means that you have read (or have had read to you) the information given in this consent form, and you would like to be a volunteer in this study.

REFERENCES

- [1] Anderson, T., Black, M., Daniels, B., Lebing, D.. (1977). ZORK. Infocom.
- [2] Weizenbaum, J. (1964). ELIZA. MIT Artificial Intelligence Laboratory.
- [3] Riedl, M. O., & Bulitko, V. (2012). Interactive narrative: An intelligent systems approach. *AI Magazine*, 34(1), 67.
- [4] Murray, J. H. (1997). Hamlet on the holodeck: The future of narrative in cyberspace. Simon and Schuster.
- [5] Murray, J. H. (2011). Glossary: Immersion. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#immersion
- [6] Murray, J. H. (2011). Glossary: Affordances. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#affordances
- [7] Murray, J. H. (2011). Glossary: Procedural. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#procedural
- [8] Murray, J. H. (2011). Glossary: Participatory. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#participatory
- [9] Murray, J. H. (2011). Glossary: Encyclopedic. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#encyclopedic
- [10] Murray, J. H. (2011). Glossary: Spatial. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#spatial
- [11] Murray, J. H. (2011). Glossary: Agency. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#agency

- [12] Murray, J. H. (2011). Glossary: Dramatic Agency. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#dramatic_agency
- [13] Murray, J. H. (2011). Glossary: Feedback. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#feedback
- [14] Murray, J. H. (2011). Glossary: Multiform. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#multiform
- [15] Murray, J. H. (2011). Glossary: Multisequential. Retrieved January 1, 2015, from https://inventingthemedium.com/glossary/#multisequential
- [16] Pearce, C & Artemesia. (2007) Communities of Player: The Social Construction of Identity in Persistent Online Game Worlds. Second Person: Role-Playing and Story in Games and Playable Media, 311-317.
- [17] Mateas, M. (1999). An Oz-centric review of interactive drama and believable agents (pp. 297-328). Springer Berlin Heidelberg.
- [18] Magerko, B. (2007). Measuring dramatic believability. *Intelligent Narrative Technologies*, 79-82.
- [19] Campbell, J. (2008). The hero with a thousand faces (Vol. 17). New World Library.
- [20] Propp, V. (2010). Morphology of the Folktale (Vol. 9). University of Texas Press.
- [21] Bevensee, S.H., Dahlsgaard Boisen, K.A., Olsen, M.P., Schoenau-Fog, H., Bruni, L.E.: Project Aporia An Exploration of Narrative Understanding of Environmental Storytelling in an Open World Scenario. In: Oyarzun, D., Peinado, F., Young, R.M., Elizalde, A., Méndez, G. (eds.) ICIDS 2012. LNCS, vol. 7648, pp. 96–101. Springer, Heidelberg (2012)

- [22] Koenitz, H., Haahr, M., Ferri, G., Sezen, T. I., & Sezen, D. (2013). Mapping the evolving space of interactive digital narrative-from artifacts to categorizations. In *Interactive Storytelling* (pp. 55-60). Springer International Publishing.
- [23] Magerko, B. (2014). The PC3 Framework: A Formal Lens for Analyzing Interactive
- [24] Gygax, G. and Arneson, D. (1974). Dungeons & Dragons. TSR, Inc.
- [25] Morningstar, J. (2009). Fiasco. Bully Pulpit Games.
- [26] Hicks, F. and Donoghue, R. (2003). FATE. Evil Hat Productions.
- [27] Yager. 2012. Spec Ops: The Line. 2K Games.
- [28] Fox, T. (2015). Undertale. Toby Fox.
- [29] Fullbright. 2013. Gone Home. Majesco Entertainment
- [30] Mateas, M. & Stern A. (2005). Façade. Procedural Arts
- [31] Pearsey, R. (2012). "No Good Deed Narrative Design in Spec Ops: The Line". Gamasutra. http://www.gamasutra.com/view/feature/176598/no_good_deed_ _narrative_design_in_.php?page
- [32] Sheffield, B. (2012). "A Line in the Sand: The Spec Ops Interview."

 Gamasutra.

 http://www.gamasutra.com/view/feature/167705/a_line_in_the_sand_the_spec_ops_.php

- [33] "Buy Undertale". Steam. http://store.steampowered.com/app/391540
- [34] Miller, R. & Miller R. (1993). Myst. Cyan.
- [35] Mechner, J. (2007). The sands of time: crafting a video game story. Second Person: Role-Playing and Story in Games and Playable Media, 111-120.
- [36] Mechner, J. (2003). Prince of Persia: The Sands of Time. Ubisoft.
- [37] Montfort, N. (2007). Fretting the Player Character. Second Person: Role-Playing and Story in Games and Playable Media, 139-46.
- [38] Ewalt, D. M. (2014). Of Dice and Men: The Story of Dungeons & Dragons and the People who Play it. Simon and Schuster.
- [39] Wells, H. G. (2013). Little wars. Read Books Ltd.
- [40] Tactics (game). (2016, February 22). In Wikipedia, The Free Encyclopedia. https://en.wikipedia.org/w/index.php?title=Tactics_(game)&oldid=7 06204900
- [41] Roberts, C. (1983). "In His Own Words". Charles S. Roberts: In his own Words. http://www.alanemrich.com/CSR_pages/Articles/CSRspeaks.htm
- [42] Avalon Hill. (2016, February 18). In Wikipedia, The Free Encyclopedia. https://en.wikipedia.org/w/index.php?title=Avalon_Hill&oldid=70568 6949

- [43] Totten, C. Adiel Lewis. (1880). Strategos: a series of American games of war. New York: D. Appleton and company.
- [44] Conan the Barbarian. (2016, March 25). In Wikipedia, The Free Encyclopedia. https://en.wikipedia.org/w/index.php?title=Conan_the_Barbarian& oldid=711895330
- [45] Flash Gordon. (2016, April 16). In Wikipedia, The Free Encyclopedia. https://en.wikipedia.org/w/index.php?title=Flash_Gordon&oldid=71 5605701
- [46] Gygax, G. & Peren, J. (1971). Chainmail. Guidon Games.
- [47] Gen Con. (2016, February 28). In Wikipedia, The Free Encyclopedia. https://en.wikipedia.org/w/index.php?title=Gen_Con&oldid=707355 633
- [48] "Gen Con 2015 Post Show Release". August 3, 2015. Gen Con. http://www.gencon.com/press/2015postshow
- [49] Gygax, G. (1977). Advanced Dungeons and Dragons. TSR, Inc.
- [50] "History Forty Years of Adventure". Wizards of the Coast: Dungeons and Dragons. http://dnd.wizards.com/dungeons-and-dragons/what-dd/history/history-forty-years-adventure
- [51] Perrin, S. (1978). RuneQuest. Chaosium.
- [52] Petersen, S. (1981). Call of Cthulhu. Chaosium.

- [53] Hite, K. (2007). Narrative Structure and Creative Tension in Call of Cthulhu. Second Person: Role-Playing and Story in Games and Playable Media, 31-40.
- [54] "What is Delta Green?". (2015). Delta Green. http://www.delta-green.com/what-is-delta-green/
- [55] Jackston, S. (1986). GURPS. Steve Jackson Games.
- [56] Smith, E. (2004). GURPS Fourth Edition Basic Set Review.
- [57] "GURPS Worldbook Index". GURPS. http://www.sigames.com/gurps/books/
- [58] Weisman, J. (1989). Shadowrun. FAFSA Corporation.
- [59] Rein-Hagen, M. (1991). Vampire: the Masquerade. White Wolf Publishing.
- [60] O'Sullivan Steffan. (1992). Freeform Universal Donated Gaming Engine. Grey Ghost Press.
- [61] Baker, V. (2010). Powered by the Apocalypse. Lumpley Games.
- [62] Gygax, G., & Arneson, D. (1974). Dungeons and dragons, basic set.
- [63] Cook, D., & Weis, M. (1989). Advanced Dungeons and Dragons 2nd Edition Players' Handbook. *Lake Geneva, WI: TSR Hobbies*.
- [64] "Dungeons and Dragons controversies." Wikipedia. https://en.wikipedia.org/wiki/Dungeons_%26_Dragons_controversies

- [65] Edwards, R. (2001). "GNS and other Matters of Role-Playing Theory." The Forge. http://www.indie-rpgs.com/articles/1/
- [66] Kim. J. "The Threefold Model". Darkshire. http://www.darkshire.net/jhkim/rpg/theory/threefold/
- [67] "Breakdown of RPG Players". SeanKReynolds.com. http://www.seankreynolds.com/rpgfiles/gaming/BreakdownOfRPG Players.html
- [68] Cook, M., Tweet, J., & Williams, S. (2000). Dungeons & Dragons Player's Handbook: Core Rulebook I. Renton, WA: Wizards of the Coast.
- [69] Cook, M., Tweet, J., & Williams, S. (2003). Dungeons & dragons dungeon master's guide: core rulebook II v. 3.5. Wizards of the Coast.
- [70] Heinsoo, R., Collins, A., & Wyatt, J. (2008). Dungeons & Dragons Player's Handbook: Arcane, Divine, and Martial Heroes: Roleplaying Game Core Rules. Wizards of the Coast.
- [71] Wizards RPG Team. (2014). Player's Handbook (Dungeons & Dragons).
 Wizards of the Coast.
- [72] Gygax, G. (1989). Master of the Game: Principles and Techniques for Becoming an Expert Role-Playing Game Master.
- [73] Gygax, G. (1987). Role-Playing Mastery Tips, Tactics and Strategies for Improving Your Participation in Any Role-Playing Game.

- [74] Kim, J. (2005) "The Evolution of the Threefold Model".

 http://www.darkshire.net/~jhkim/rpg/theory/threefold/evolution.ht
 ml
- [75] User: Travern. "Beginners Guide". Reddit. https://www.reddit.com/r/rpg/wiki/beginnersguide#wiki_gamer_jargon