Agency: A Character-Centric Approach to Single Player Digital Space Role Playing Games

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Abstract

In this paper I describe my character-centric role playing game *Agency*. I distinguish between "Physical Space Role Playing Games" (PSRPGs) and "Digital Space Role Playing Games" (DSRPGs).[1] PSRPGs include role playing games played in physical space, such as live action role playing games and table top role playing games[2], while DSRPGs include role playing games played through digital technology such as computers and video game systems[3]. I discuss how PSRPGs are capable of creating a sense of *transportation* in players, while DSRPGs do not. I discuss my game as an attempt to address this issue, and describe the mechanics by which I go about this as well as the results of this experiment.

The Physical Space Role-Playing Game

In every role playing core rules book[4], there is a passage towards the beginning that reads something like this:

> "When you play the Dungeons and Dragons game, you create a unique fictional character that lives in your imagination and the imagination of your friends. One person in the game, the Dungeon Master (DM), controls the monsters and people that live in the fantasy world. You and your friends face the dangers and explore the mysteries that the Dungeon Master sets before you."(Cook, Tweet et al. 2000)

The role playing game can be a very confusing concept to those who have never played one. Trying to describe it to a non-player often just results in confused or incredulous stares. "It's like a board game but there's no board, you just have this character and you play them and the DM tells you what happens." "You have a character, see, and you act like the character and when something happens, you roll dice to see how it comes out. " "It's like improvisational acting, only there's rules to see how you do at different stuff."

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[1] This terminology is intended to avoid the exclusion of different role playing game media by providing clear and inclusive terms.
[2] Sometimes referred to as Pen and Paper games.
[3] For the purposes of this paper, I am focusing on single-player digital games.
[4] The core rules books of PSRPGs are the books that contain the basic rules and game world description that the player needs in order to be able to play the game. Most role playing games also have any number of supplementary books available, which provide more rules and content that can be used along with the basic rules and world setting.

The role playing game (RPG) allows a player to take on the persona of another character and act with a fair amount of freedom as that character in another world. The player's character and that character's interactions with the game world (the alternate reality in which these player characters exist) are what make up a role playing game. RPGs have mechanics (the set of rules for a given game) that govern how the world works, but they are unlike most other games in that there are no real winning or losing conditions. The game is free-flowing and flexible, and has the possibility of never truly ending. Goals created by the players replace the end conditions of most games. [5] The act of role playing is the act of playing out the role of a player's character. When role playing, the player responds to the stimuli of the game world as their character would, and exerts the will of their character on the fictional world and other characters.

> "After all, playing characters who aren't like you and who regularly do things you wouldn't dream of doing yourself (not in the real world at least) is part of the fun. A shy player can play an outgoing character, a law-abiding player can rip loose in all kinds of mayhem, and a gentle player can enjoy a knock-down drag-out fight."(Dancey, Noonan et al. 2000)

Most often, role playing games are played around a table. A small group of players sit with their character sheets (a piece of paper which defines their characters' capabilities in the game world) and their dice (which are used to determine outcomes of events based on the game's set of rules)[6], while another player referees the actions taking place, and represents the actions of non-player characters (other characters in the game world which are not controlled by a player except for the referee), also known as NPCs. This referee is sometimes called the Dungeon Master (DM), Game Master (GM), Story Teller (ST) or

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[5] As noted in Salen and Zimmerman (2004), there are many definitions of the term "game". While many of them require that the game have an end point, a winning or losing condition, I prefer Costikyan's (1994) definition of games as requiring goals. "For it to matter, for the game to be meaningful, you need something to strive toward. You need goals."

[6] Diceless games exist as well, such as Eric Wujcik's *Amber* which uses a unique bidding system, and Pinnacle Entertainment Group's *Deadlands*, which before its latest revision was played with a regular deck of playing cards. Using dice to resolve challenges is by far the norm, however.

a number of other things, depending on the game being played[7].   The GM is responsible for the content of the game world that is not directly under the other players' control. For example, the GM often invents a fictional world in which the player characters exist, as well as the inhabitants that live there. The GM often also creates a plot or story that takes place in this world, and with which the players can choose to interact.[8]

The history of the role playing game shows how the emphasis of the PSRPG shifted over time from its mechanically heavy roots to become more story and character-based. Dave Wesley who played miniatures war-games (in which each player controls an army of miniature soldiers) with a regular group of friends spiced up a gaming session by giving each player personal goals to accomplish in the game. From there his friend Dave Arneson continued experimenting by adding new elements, and finally worked with E. Gary Gygax on what would become *Dungeons and Dragons*. *Dungeons and Dragons* was published by Gygax's gaming company, TSR Hobbies, Inc. in 1974.(Fine 1983) Combining aspects of make-believe war-games rules systems, and a generous helping of Tolkein, *Dungeons and Dragons* (or D&D as it is often abbreviated) captivated gamers with its unique gameplay.

Many early gaming groups continued to play D&D much like a war-game. The characters were now heroes instead of generic warriors, but much of the game was spent in war-like fashion. The Dungeon Master (DM) would throw hordes of monsters at the player characters, who would then have to fight to kill them.

> "This is a game of *Dungeons & Dragons*…This game is typical – the characters in the story are magical or superpowerful. They venture into a dangerous situation in search of some treasure; they are attacked by magical mythological creatures; with a little skill and luck they defeat the monsters and carry off a valuable treasure of gold, magic, or other valuables."(J. Eric Holmes 1981)

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[7] The name of the referee is a matter of aesthetics. Game rule sets pick a name for this player based on the theme associated with the game. The role of this player remains pretty much the same from game to game, regardless of name. I will be using the term "GM", as it is the most generic of the names.
[8] Pre-packaged worlds and stories can also be purchased at gaming hobby stores, or down-loaded from the internet.

The game featured character "classes" which were based on fantasy character archetypes (warrior, wizard, thief, etc.) These classes were distinguished from each other mostly in their combat abilities. A character would advance in power by accruing "levels". Each level a character went up would give them increased abilities at combat. In order to gain the "experience points" needed to attain a level, the character would have to kill creatures and gain treasure. Although so-called "Dungeon Crawls" (enter dungeon, fight the monsters, get the treasure) can be fun in their own right, players began more and more exploring what it meant to play a character. Delving into matters of a character's psychology, and being placed in interesting situations where the player would have to figure out how the character would react became more interesting to some players than simply seeing how many monsters one could slay. In turn, published role playing game systems began to reflect this shift.

Chaosium's *Call of Cthulu*, based on the stories and mythologies of H.P. Lovecraft, simplified the rules system of previous games so that all success tests became based on simple percentages. The higher the score a character had in a given skill, the greater chance the player would roll under that number on "percentile dice" (the range being 1-100)[9]. Chaosium also did away with character classes, allowing players to play any sort of character they liked, as described by what skills the character had. Leveling was also eliminated in favor of a "learn by doing" system, in which a character would use a skill in a session and then have an opportunity to increase that skill for the following sessions. In addition, since the Lovecraft stories are often about individuals being exposed to things they should not see and knowledge they should not uncover, the game based on his stories represented this with a numerical representation of the player character's "sanity". The more the character was exposed to strange occurrences which their minds might not be able to handle, the lower the character's sanity became. At some point, their sanity would assuredly break, and the character would from that point become unplayable. These characters were not heroes like in the *Dungeons and Dragons* games. They were

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[9] Compare this to *Dungeons and Dragons 2nd Edition*, in which to hit a monster, the player would first roll a twenty-sided die (range 1-20), modify the result by any miscellaneous modifiers the character had, then modify it again by the monster's armor class and finally compare against the character's THAC0 (to hit armor class zero) to see if they successfully hit.

everyday people who had been plunged into strange events. Many of the "monsters" in the game were simply invulnerable to attempts at killing them. The emphasis of the game, therefore, switched dramatically towards exploring the interior workings of the character one played, and solving the mysteries of what was happening in the game world.

White Wolf's *Vampire: The Masquerade* pushed the envelope even further on this front. Vampire even dropped the term role playing in favor of calling their game "A Story-telling game of personal horror". They called their GMs "Storytellers" (STs) and used narrative terminology to describe as much of their system as possible. This set of rules highly emphasized the story-telling aspect of role playing. The ST is encouraged to develop interesting plot-lines to involve the players in, and the players are encouraged to develop a deep understanding of the character they are playing and to play that character. In Vampire, the players play members of the walking dead, and a strong theme is that of having once been a human being who is now struggling with the notion that they have become a vampire; a killer, a monster. Some vampires choose to simply embrace their monster-status, while others fight against it. A tragedy ensues as the ones who fight to retain their humanity usually lose it bit by bit. The game therefore hands to the ST perfect material for role playing, as moral dilemmas abound in most Vampire games.

Another incarnation of the physical space role playing game is the Live Action Role Playing Game (LARP). LARPs are not played around a table, but rather over some contained geographic area (hotel conference room, church, school). Players dress in such a way as to approximate what they think their character would wear. Actions are gesticulated and acted out rather than verbally described, and the rules systems of most of these games are exceedingly simple. LARPs are usually played with much larger groups of people than table-top games (anywhere from 8 to 200) and have a greater number of GMs to oversee things. However, the ratio of GM to player is generally quite small, and so players must rely on each other for entertainment. LARP interactions, therefore, can often become pure role playing: the interaction between two players who are acting completely as their characters.

Manifestations of the Digital Space Role Playing Game

"By the time I was finally able to figure out all the complex rules of the pen-and-paper edition of *Dungeons & Dragons*, I could see that its largest obvious flaw lay in the fact that mere human beings were responsible for running the game."(Hallford and Hallford 2001)

The two games that arguably launched digital role playing as a phenomenon in the United States were *Akalabeth* and *Wizardry: Proving Grounds of the Mad Overlord*.

Akalabeth, released in 1979 was Richard Garriot's[10] first commercial game.   The game was programmed as a school project, and distributed through California Pacific[11]. It sold more copies than he ever dreamed possible (about 30,000) and paved the way for the entire *Ultima* series. *Akalabeth* featured a simplified *Dungeons & Dragons* character system and the choice to play either a wizard or fighter. Activities in the game were the standard *Dungeons & Dragons* fare: killing monsters, finding treasures, and exploring. (King and Borland 2003)

Wizardry: Proving Grounds of the Mad Overlord, released in 1980, was the first in a long line of DSRPGs to incorporate a "party system".   Andy Greenberg was challenged to "go put D&D on my computer or something" during an exam study-week by a dorm friend. After collaboration with Robert Woodhead, the game became a commercial product. The game allowed players to assemble a "party" of characters, each with a character class and fantasy race taken directly from *Dungeons & Dragons*, and wander through endless wireframe corridors killing off monsters and collecting treasure. Characters would advance through levels and become more powerful, just as in D&D. (Hallford and Hallford 2001)

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[10] Richard Garriot went on to create the extremely popular *Ultima* series of role playing games.
[11] The game was sold in computer stores in zip-lock bags, common practice at the time.

The first DSRPG released for a console was *Dragon Quest*[12], released in Japan in 1986. The game stripped away many of the complexities of the American games of the time, offering a more stream-lined playing experience. Players could not make their own characters, but instead controlled a character handed to them by the game's designers and set about making it as powerful as possible. Gameplay once again included fighting monsters, exploration and gaining treasure. But this game featured a story far more complex than the games that had been published so far. (Hubbard 1996-2004)

Today, these two strains of DSRPGs are still very strong. The American strain, which most often shows up on the personal computer features player characters who have attributes that are alterable at character creation. These attributes are usually derived from *Dungeons & Dragons*, and include Strength, Dexterity, Constitution, Wisdom, Intelligence and Charisma. They help determine how successful the character is in certain aspects of the game. Strength may make a character a more effective fighter, whereas a higher intelligence may allow the character to memorize more or deadlier spells. Character growth is similar to D&D as well. The character is awarded experience points for killing monsters or taking certain actions, and when enough experience points have been gained, the character advances to a new level. These games often feature puzzles to solve, monsters to kill, and more and more fabulous items with which to equip one's character. Examples of this type of game are *NeverWinter Nights*, *Morrowind*, and *Knights of the Old Republic*.

The Japanese strain of games is also extremely popular, but for different reasons. These games do not allow the player to create their own characters, but rather have characters already created for the player. Characters still have attributes and advance through leveling, but customization comes from the player being able to give the character certain accessories and items that increase the character's abilities in different ways. These games often feature rich characters and epic stories, mini-games[13] to play, puzzles to

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[12] This game was re-released in the United States as *Dragon Warrior* on the Nintendo Entertainment System. The game was purged of its adult content and language for American audiences, who were perceived as being generally younger than Japanese gamers.
[13] Small games within the larger game which do not necessarily directly impact the larger game.

solve, monsters to kill, and more and more fabulous items with which to equip one's character. Examples of these games include the *Final Fantasy* series, *Breath of Fire* series, and *Xenosaga*.

Transportation in Physical Space Role Playing Games
Neal Hallford describes the appeal of role playing games as the enjoyment of playing "my guy". As in a childhood game of make-believe, a player has their own special character that they get to play, and they get to watch it advance and do fun things with it in the game world. (Hallford and Hallford 2001)

There are many different styles of role playing and game mastering. In my conversations with players about the appeal of role playing, I have been surprised at the range of replies. While some players enjoy spending the social time with their friends, other players enjoy building their character and the strategy involved in creating a perfect killing machine ("my guy") while still others enjoy exploring the complexities of their characters in the story presented by the GM. In my experience with role playing games and role playing gamers, the appeal of role-playing tends to go much deeper than "My Guy". Players often get very wrapped up in their characters, to the point where they may undergo a deep experience of almost *becoming* their character. I term this experience *transportation*, and it is this experience that makes role playing so compelling for myself and many other players.

Transportation is the feeling a player has of being *displaced from our mundane world into a fictional game world, as the character that the player is representing*. The character and the game world the character lives in are both equally important to the sense of transportation. A character exists in a world, not in a void. Without the game world, the character would simply be an abstract concept; a set of numbers on a character sheet. It is when the player represents the character in the world in which that character lives that the character can come to life. Richard Schechner speaks of performers being in between themselves and the characters they are representing. "This man is not Narad-muni, but also he is not not Narad-muni: he performs in the field between a negative and

a double negative, a field of limitless potential, free as it is from both the person (not) and the person impersonated (not not)." (Schechner 1986) When true transportation occurs in a role-playing game, the "not not" is obliterated: the player for that moment *becomes* the character they are playing and will act as that character without any self-conscious notions of being themselves.

My use of the term transportation is related to, but not identical to, the way the term is used in performance studies. In his paper, "Performers and Spectators Transported and Transformed", Richard Schechner writes about the transportative performance in contrast to the transformative performance. A transformative performance is one in which the performers are permanently changed by the performance, as in the case of many manhood rituals. A transportative performance, on the other hand, is a performance in which the performer emerges from the performance unchanged. They are transported from the realm of performance back into the "ordinary" world to find everything more or less how they had left it.(Schechner 1986) Using this definition, one could say that most role playing sessions are transportative performances – the player shows up, plays their part, and at the end goes home without any profound change having occurred within their lives. However, I am using the term transportation to describe those moments within the greater role playing session where the player becomes lost in the act of playing the character.

Janet Murray, in Hamlet on the Holodeck, talks about *transformation*, *immersion* and *agency*. Transportation, as I am using the term, relates to these terms but is distinct from them. Transportation is a character-centric term, but acknowledges that the character does not exist outside of the fictional world in which it lives.   This differs from simple transformation as masquerade, because the world that the character is transported to is just as important to the game as the transformation of the player "into" the character. Transformation as masquerade may occur when a player of a game consciously decides to play a certain way, and pre-meditates each action they are taking. Transportation, on the other hand, is when a player no longer pre-meditates their actions, because they have for that moment become one with the character.   Janet Murray defines immersion as:

"the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all of our attention, our whole perceptual apparatus." (Murray 1997) Transportation does directly relate to immersion, but is specific to being transported into another world as another character, whereas immersion can take many forms. (Being immersed in the study of a painting, for example, or immersed in piecing a puzzle or other similar hobby.) Immersion can occur without agency, but Transportation cannot. Murray defines agency as "the satisfying power to take meaningful action and see the results of our decisions and choices."(Murray 1997) For Murray, agency is the direct intervention of the participant with dynamic results. In transportation, agency is assumed, but on an experiential level. If a player is *experiencing* something as agency, that is what is important. For example, a game master may have a set of circumstances that they want to set a group of players through. A clumsy GM will blatantly force the characters into the situations no matter what the players try to have their characters do.[14] The players feel as though their characters' actions are of no consequence, and will therefore feel a lack of agency. A deft GM, on the other hand, will allow the characters to do what they want at any given moment of the story, and will find clever ways to weave in their own set of circumstances for the characters to fall in to. The players never suspect that these circumstances were already planned out, and see them as a result of their interactions with the game world. They therefore feel as though they have agency over the game world, even though in both cases the exact same set of circumstances has been laid out. In transportation, an illusion of agency is all the players need in order to feel satisfied that their actions are in fact impacting the fictional world their characters live in. However, transportation cannot occur without this sense of agency.

Transportation is described by role playing scholar Gary Alan Fine (Fine 1983) as "engrossment".

> "A key concept is the *engrossment* of players in the game. For the game to work as an aesthetic experience players must be willing to "bracket" their "natural" selves and enact a fantasy self. They must lose themselves to the game…The acceptance of the fantasy world as a (temporarily) real world gives meaning to the

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[14] A common experience in digital games. In the role playing hobby, this is called *railroading*.

game, and the creation of a fantasy scenario and culture must take into account those things that players find engrossing."

In *Life on the Screen*, Sherry Turkle gives this example from a live action role playing game:

> "So there we were in this room in the chemistry department and I guess we moved over into a corner, and we were sitting on the floor, like, cross-legged in front of each other, like...like, I guess we were probably holding hands. I think we were, And we like...we really did it. We acted out the whole scene....It was, it really was a nearly tearful experience." (Turkle 1995)

In PSRPGs, for moments at a time, players *become* their characters. They experience the emotions that their characters would experience and say what their characters would say, sometimes without prior thought. Role playing offers a unique chance in a player's life where they can completely become someone, or something, else.

A combination of the following attributes is required by role playing games in order to support a sense of transportation.

Character (the role in role playing)

Role playing games would not be what they are without the ability of the player to play a role. A player takes on a persona for themselves, often with a detailed background story, a calculated personality, and a sense of how the character fits into the world that the GM is describing. The player then plays that character to the best of their ability, speaking as the character would in "in character" conversations and describing (or acting out, in the case of LARPS) their character's actions in situations described by the GM. The player may design the character with a specific concept of the character's personality and quirks, but that does not mean this template is immutable. Indeed, just as a real person is shaped by events in their world, so too do player characters change through the course of a game. The longer the campaign[15], the more chances the character has to change. A character

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[15] A "campaign" in an on-going storyline with the same characters which may last across many sessions. The term shows RPGs war-gaming roots. In the game Vampire: The Masquerade, the term campaign is replaced with the term "chronicle".

may begin a campaign feeling very strongly about one thing and through the course of their adventures discover new information that completely changes their mind. Or they may begin a game with a set of personality traits that change through various encounters they have. Characters often tend to take on a life of their own in this sense. I have often heard players say things like "ohh….I know this isn't good…oh well, it's what my character would do.."

Consequences (game world that reflects your actions)
The world in which these fictional characters live is in many senses as important to transportation as the characters themselves. Characters cannot exist without anything to interact with. Without a world to live in they are simply a collection of numbers and a concept in a player's head. It is through their activity in the world that they come to life.

In order to experience transportation, it is vital that players believe they have agency in the game world. Players need to feel as if their character *exists* -- not just in their minds, but in a place. As such, there need to be consequences to their actions. The world should respond as if it were a real world. Hitting someone in a bar might result in a bar fight, or a cowing, or a lawsuit. It should not result in the person being hit remaining in their seat and continuing their previous conversation. A player who feels that they are not able to place a mark on the world as their character feels as if they have no agency in the game. The minute the player feels this, any chance for transportation is lost.

Consistency (game world that is consistent with players' expectations of it as a world)
Hand in hand with having a game world that reflects character's actions, having a game world that feels like a world is also important to transportation.

Part of the GM's job in running a role playing game is to create and maintain a sense of place for the players. This requires formulating a world in which the players can feel their characters belong and where they can predict the consequences of certain actions. The genre and world in which the game is run sets up a number of expectations. In a *Dungeons & Dragons* fantasy game, characters may wield swords, while in a Star Wars

game, they may wield blasters. Playing *Vampire: The Masquerade*, player characters may have to outwit other vampire NPCs while in a Star Trek game they may instead be outwitting Romulans. But if a Romulan shows up in a Vampire game, the players will be jarred from their sense of place and transportation is no longer possible.

Why is there no Transportation in Digital Space Role-Playing Games?

Chris Crawford notes in *The Art of Computer Game Design* (Crawford 1982) that it can be a cumbersome and not especially useful task to directly translate a non-digital game type into a digital format.

> "In one way or another, every transplanted game loses something in the translation…..This is because any game that succeeds in one technology does so because it is optimized for that technology; it takes maximum advantage of the strengths and avoids the weaknesses."

He further comments on the difficulty of creating interactive storytelling in *Chris Crawford on Game Design*:

> "Can you imagine designing and balancing a system involving such a huge number of verbs[16]? Those verbs don't fall into some simple pattern or system that makes it possible to put them in a simple database…Each verb must be custom-programmed." (Crawford 2003)

At first blush, it does in fact seem like a foolhardy task to attempt to translate a role playing game into a digital format. The players of a PSRPG have a fantastic interface to the game world: another human being. Through the interface of the GM, the players have an almost unlimited number of inputs into the game. Anything that they can successfully communicate to the GM their character can attempt in the game.

A DSRPG, on the other hand, has a necessarily limited number of inputs. There is only so much the computer can understand, only so much the programming team can program into the game. And certain things simply seem easier to program than other things. A combat system is fairly straight forward: my character has this set of numbers which

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[16] A "verb" in Crawford's terminology is an action that a player can take in a game.

determine whether I can hit something and how much damage I do, and this other creature has their own set of numbers which can modify my chances. More subtle things such as personality and character to character interactions seem daunting to try to translate into programming. And while a character can attempt nearly any action in a PSRPG, in a DSRPG the number of actions available are severely limited to what the designers of the game think would be the most likely actions of the majority of the game's players.

But perhaps even more significantly a challenge to transportation in DSRPGs is the now long-reaching tradition of these games living in their own vacuum.[17] While PSRPGs were evolving towards emphasizing role play over the complicated mechanics of their war-gaming past, their digital counterparts stuck doggedly to dungeon crawls and treasure hunts.

> "Most computer role-playing games (CRPGs) throughout the 1980's were really just puzzle-solving games, generally mixed with heavy combat. There was a plot somewhere in the background (usually something involving an evil wizard wanting to take over the world), but the only real purpose of the plot was to explain why the world was full of monsters that it was okay for the characters to kill…The characters you controlled, as a result, were almost devoid of personality."(Peterson 2001)

While *Akalabeth* was originally called DND28b(Ackerman March 17, 2002), and *Wizardry* was a bet to make a computerized version of *Dungeons & Dragons*, it is only very recently that DSRPGs have once again been looking to their physical space cousins for inspiration. Instead, the genre was over time built primarily on itself. As a result, these games lack the qualities of PSRPGs that lead the player to transportation.

Lack of Player-Owned Character

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[17] As evidenced in Hallford's history of the role playing game chapter, in which the only physical space game mentioned in the entire chapter is *Dungeons & Dragons*. (Hallford and Hallford, 2001)

Japanese and American style games handle characters very differently. In American style DSRPGs, the player is often able to create a character after a fashion. This character usually has numerical attributes which relate to how well the character is able to handle challenges in the game. For example, a character with high strength may do more damage when they hit something in a fight and be able to break obstacles with physical force. A character with high intelligence may be able to memorize more or more powerful spells. The player can decide which traits of the character are more important to them to play. These characters, however, are not characters in any sense that any writer would call characters. They are wooden dolls with no emotion, and no personality. These characters are more like Neal Hallford's "My Guy".

Japanese games take almost the opposite tack. In these games, the characters are rich and vibrant, full of life. They exist in beautifully thought out worlds, and participate in epic and fabulous stories. They have their own emotions, personality, goals and motivations. Unfortunately, while this gives the game very interesting characters, these characters are not in any way *owned* by the player. The only control the player has over the characters is what accessories and items to equip in order to customize them. The characters have a life of their own, but not any that the player can truly participate in. These characters are like Pinocchio, with the developer taking the role of a cruel Blue Fairy who teases the wooden boy with life only to take it away again. The player guides them around like a puppet during fight sequences and certain other challenges, then they magically come to life on their own and the interesting story happens with limited or no input from the player. The characters then once again become lifeless puppets to be guided around.

Game world that minimally reflects your actions
Digital games tend to feature linear or extremely narrowly branching stories. While there are consequences to some actions, there is limited meaningful action that a player can take in order to change the flow of the story or the state of the game world[18]. Some games expand on the linear story model by offering "side-quests" in which the player can

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[18] *Legend of Mana* and the *Dark Cloud* series allow you to "build" the game world (geographically), but arranging pieces of the world simply opens up new areas of the story, rather than having an overall impact on it.

optionally participate. While these side quests can be interesting and give the player more information about the story or history of the game world, they do not impact the overall story on any appreciable level.

Game world with game expectations

DSRPGs also have a tendency to lack consistency in world setting. Instead, there is a set of conventions that are fairly consistent from game to game (depending on the sub-genre of RPG) which seem at odds with the setting of the game. For example, in nearly every Bioware game, the player character is allowed to steal items from the homes of NPCs while they are standing in the same room. The NPCs will not even comment. This goes against the world expectations of the player, though not necessarily the game expectations of the player. Nonetheless, it is jarring to the player's sense of transportation.

DSRPGs do offer many pleasures to the player. A sense of accomplishment is common, a sense of immersion in a grand story in some cases, or in the beauty of the game world, and perhaps even a sense of identification with one or more of the characters (as you might identify with a character in a novel or movie). While there is much to enjoy about these games, someone who has spent a good deal of time with PSRPGs usually still feels that something is missing. And that something is a sense of transportation.

Towards Transportation (related work)

While no digital space role playing game encompasses all the qualities needed to lead a player towards transportation, some games do include interesting elements that help provide more of a role playing flavor. The following works were useful to me as inspiration while I was creating *Agency*.

Virtues in Ultima IV

Ultima IV attempted to provide players with a deeper sense of character and consequences. *Ultima IV* was the first game in the *Ultima* series to introduce the concept of "Virtues" for the Player Character. At the beginning of the game, the player is

presented with a number of moral decisions to work through. How the player answered these questions determined where the character would start from, and what character class they would start as. A player would have to collect enough points in each Virtue to finish the game. This design feature helped create a sense of who a character might be, but the virtues did not have significance throughout the whole game. *Ultima IV* also was one of the first role playing games on the computer that had consequences for certain social actions one could take.

> "I was very proud of Ultima IV where I put in little tests. One of my favorites was a blind woman who sold herbs, and after you bought your herbs, the game just asked you, "How much money do you leave in her coffers?" She'd tell you "It'll be 5 gold," and instead of just taking the gold from you, you had the option to leave as much or as little as you wished. The game didn't say anything about it if you short-changed her, and she would say, "Thank you very much," and let you leave. Later in the game you would come back to her needing some very special information or help, and she would say, "I'd love to help you, but you are the most dishonest, thieving scumbag I've ever met! So why should I help you?" I was very pleased to see player response to that. They would go, "Oh my gosh, what have I done?" (Ackerman March 17, 2002)

Neither the virtues nor the consequences were applied very strongly in the game. Very specific actions would have very specific consequences, and though the game "watched" the character's actions and attributed virtue points based on them, collecting enough virtue points merely served as a key to the final stages of the game, and did not actually do much to impact gameplay[19].

Charisma and Intelligence in Fallout[20]

Fallout took a different approach to providing players with more interesting characters and more consequences for character actions. *Fallout* was a breakthrough game in a number of ways. The setting was unique for a DSRPG. It takes place in a post-

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[19] Although since players could not confirm within the game itself which actions would give or take away virtue points, some players would tend to curb certain types of actions so that they could accumulate the virtue points necessary to complete the game.

[20] Other games by the same company (such as *Fallout 2* and *Planescape: Torment*) also contained many of these same features.

apocalyptic world, in which your character has been living underground in a fallout shelter their whole life.   The "water control chip" in the shelter breaks, endangering the continuation of the shelter. Your character is sent out to see if they can find a new chip. Once you leave the shelter, your character is on their own. There are many places to explore and many side-quests to undertake. Your character can make allies who will accompany them on their quest. *Fallout* featured a reputation system by which your actions would align you with different factions throughout the game. Factions you were aligned with would help you, while factions you were antagonistic towards might attack you on sight. One of the most interesting features of *Fallout*, however, was your supposed ability to complete the game with radically different play styles. *Fallout* had *Dungeons & Dragons* like attributes in which you created a character by assigning points to traits directly from that system. Charisma and Intelligence had new uses in this game, however.   Intelligence would change the dialogue options you had available to you when talking to NPCs. The more intelligent your character, the more intelligent conversations you were able to have with the NPCs. Charisma affected how willing other characters were to listen to the player character and follow the PC's advice. In effect, how convincing the character was. A higher charisma also enabled the character to "barter" more efficiently with NPCs, allowing them to buy equipment at a lower cost.

NPC Memory in Morrowind

Morrowind also took advantage of player character's attributes to help provide more interesting interactions with NPCs, and included a system by which NPCs would remember your character. *Morrowind* is a vast game with much to explore and many ways to arrange a character to overcome challenges. One intriguing mechanic in Morrowind was that the game would track how much individual NPCs "liked" your character. There were different ways to befriend different NPCs. Some characters could be buttered up by talking nicely to them, while other NPCs would simply be insulted by such false flattery. Having an NPC as an ally might gain you access to information that you would not be able to gain otherwise. Or they might give you items or other aids to help you in your quests.   Your character's charisma score would modify your likelihood to come off well when trying to gain favor with different NPCs.

Morrowind was the first game in which I encountered this sort of system, and at first it is very exciting, but it doesn't always play out well. For one thing, the player is able to sit in front of the same NPC and say the same things over and over again until they have maxed out their affinity with that character (the NPCs in the game do not have an extremely wide range of dialogue options.) In addition, some interactions did not make that much sense. One such occasion early on in the game involves an elf who has hidden a pendant in a hollowed log. You can track the elf to the log and take the pendant. However, if you then try to talk to the elf about the pendant or even try to give it to him, he doesn't recognize it. He should probably be mad that you've stolen from him. Instead he makes a comment to the effect of "I don't need that, friend." The player does not lose any "friendship" points with the elf over the interaction.

Good vs. Evil in Knights of the Old Republic
Star Wars: Knights of the Old Republic is one of the most ambitious recent attempts at providing the player with a sense of consequences for character actions. *Knights of the Old Republic* is a game set in the Star Wars universe well before the events in *Star Wars: Episode I.* The plot centers on the player character discovering that they are a Jedi[21] hopeful. The contribution of this game is that the player has an opportunity to decide whether to become a light (good) Jedi or a dark (evil) Jedi. Different actions that the player takes in the game generate light or dark side points for the character. As the character becomes more evil or more good, different options open up in the game and different powers become available to the character. There are many moral decisions available to the player character in the course of the game which have the possibility to add points to the character's dark or light side pool. Unfortunately, the game both gives and applies these points fairly narrowly. Dark and light side points are only given for very specific actions in very specific places of the story. For example, you are able to walk into an NPC's home and steal all of their personal effects while they stand there and watch you. It would make sense to receive a very small amount of dark side points for this type of activity, but the character doesn't. Nor do they receive dark side points for

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[21] The mystical warriors who served as the guardians of the Star Wars universe.

killing most NPCs. Only killing specific NPCs that are related in some specific way to the storyline actually gains the character dark side points. Once the character has accumulated dark and light side points, they actually do not change the game all that much. The PC is able to get along better with different NPCs depending on their dark and light alignment and this in turn opens different side-quests that the player can partake in. The number of dark and light side points also affects what powers your character has access to, and which one of two endings the player sees. For such an intriguing concept, it is applied to the game far too shallowly to promote any real sense of playing a character, and the player winds up feeling as though they are poking a toy towards the light or dark sides just to see what will happen.

World Modeling in Fable

Fable by Lionhead Entertainment is another fantasy-based RPG which is scheduled for release in late 2004. Like *Knights of the Old Republic*, *Fable* tracks activities of the player character and assigns them points towards good or evil. It appears as if the points will be awarded in a similar way as in KOTOR, but perhaps used in a greater variety of ways.

> "If you choose to fight the bandits and defend the traders, you'll increase your character's "good" points, and you'll also indirectly cause the game's trader population to increase. Since Fable's trade routes will become safer, you'll see more traders with far better equipment to sell. On the other hand, you can decide to side with the bandits by attacking traders. This adds "evil" points to your character, and it will also drive down the trader population, while driving up the bandit population. You won't have as many options as to where to shop, but you may make a few new bandit friends -- but only a precious few. "(Park 2004)

Even though the good/evil dynamic is not as interesting as modeling actual character personality, the game will include other features that sound very intriguing. For one, the idea that your actions can actually influence populations of NPCs may mean that your character has actual agency over the shape of the game and world. In addition, the player character will have a relationship with different towns in the game where they will

recognize you and based on your previous actions, embrace you with open arms or chase you from their streets.

While the descriptions of the game that are so far available expound on some very fun and exciting sounding concepts, time will tell how these play out.

Erasmatron

The Erasmatron is an authoring system developed by Chris Crawford in order to facilitate the creation of "storyworlds". Instead of creating a story per se, the author creates a storyworld and provides for it characters, places, and possible events that the characters might interact with. The player character can move through the world, talk to the other characters, uncover bits of what is happening in the story, and perhaps take some action on it. The characters are rather complex, each one having 28 pre-defined personality traits that the author can set to a certain numerical value, with an additional number of traits that are definable by the author. Equations determine character to character interaction, such as the likelihood of two characters falling in love, or of someone taking aggressive action towards another character.

Since *The Erasmatron* is an authoring tool, it is difficult to know whether different storyworlds created with it might support transportation. The one storyworld available at this time, *Shattertown Sky,* provided a player character with pre-defined traits. It was difficult to see these traits represented in the actual storyworld, and most actions the player could take seemed disconnected from them. There was some sense of consequences in that the player's actions over time could either keep the fictional town in harmony or falling apart. However, the moment to moment interactions seemed almost random. Different NPCs would approach the PC and ask more or less the same questions each time. The responses available to the PC were extremely limited. Very little consistency was apparent, as the same NPC would sometimes ask the same questions over and over again.

The following works, *Thespis* and *Façade* have neither transportation nor role playing as their goal. However, they were very useful to me as inspiration for how to best build the underlying architecture of *Agency*.

Thespis (enabling technology)

Thespis is an exercise in interactive narrative that appears in Mark Bernstein's "Cardshark and Thespis: exotic tools for hypertext narrative". In it, Mark Bernstein suggests a non-linear system for creating stories in which pre-conditions are set for certain actions to take place. Only after the pre-conditions are met can the event happen in the story. This allows for a very flexible system which is very scalable and easy to debug and extend. Links do not have to be re-made (as in a typical branching story) every time some story element is added or dropped. (Bernstein 2001)

Facade (enabling technology)

The drama manager of *Façade* makes use of pre-conditions, as does the *Thespis* prototype, but expands greatly on this concept. *Façade* also creates a dramatic arc in its interactive story by assigning weight and priority to specific story elements which allows the architecture to always select the most interesting element as the next in the story. *Façade* also has memory; current story values, the history of the story so far, and the current status of the NPCs to the player character all have pull on what happens next. (Mateas and Stern March 24 - 26, 2003)

Agency and the Character Centric Approach

In *Dungeons & Dragons*, the player character is given eight traits (or "stats") with a numerical range from 3-18 that define the abilities of that character. Strength determines the physical strength of a character. A higher number allows the character to do more damage in combat. Dexterity represents a character's speed and nimbleness, and a character who is more dexterous than others has a better chance of hitting a foe in combat. Constitution is a measure of a character's physical hardiness. A high constitution will allow a character to survive more fighting than other characters. Intelligence is usually described as representing a character's book learning. A higher

score in intelligence directly relates to how many spells a magic-using character can use in a day and how powerful they are. Wisdom represents the character's common-sense and wits. A high wisdom allows priest characters to more effectively channel their chosen god, essentially allowing them to cast more "priest" spells per day. Finally, there is charisma, one number which encompasses how charming and likable a character is.

None of these stats tell us anything about the character as a person. What makes the character tick? What are their goals in life? What are they likely to do in any given situation? A player at a table-top game has a sense of the character they are playing and can make him or her act accordingly. They have an infinite number of inputs into the game world through the human GM. In a single-player digital game, however, the player's inputs are severely restricted.

One apparent solution to this problem is the simulation, or playground, gameworld. In this type of game, the player has a great deal of freedom in terms of where they can roam and is given a number of activities they can do at almost any time. A mischievous player of *Animal Crossing* can, for example, dig pits around an animal NPC's house so that the animal can't return to their house to sleep at night. A friendlier player can write letters to all the animals and send them gifts. Players have an assortment of inputs into the game world that are consistent with the world provided to them and usually have at least short-term consequences.

The problem with this approach from a role playing stand point is that it necessitates a small number of possible verbs. Conversations with NPCs are shallow. There is no room for complex, character-based interaction with any sort of story. There is no opportunity for dramatic character growth. There is nothing in these games to ellict from the player the feeling of playing a character. Players are simply playing themselves through their digital representatives on the screen. While these games may be enjoyable in and of themselves, the structure of the playground gameworld is not especially supportive of role playing.

Another apparent solution to creating a digital role playing game is to incorporate a natural language processor that can interpret a huge range of actions as a GM would in a table top game. A player would be able to type in whatever action they wished to take, and the system would be able to use their statement to determine what results to provide. While early text based adventure games allowed the player to type in commands in order to guide their character, the set of commands that the system understood was far too small to support a sense of transportation. While AI researchers have been working on more complex solutions to this issue, this is not technology that is currently available to game development companies.

Addressing the apparent disconnect between role playing and working with a limited input system does not require a radical new approach (or even radical new technology), but rather a slight adjustment to the way DSRPGs are currently designed. In almost every current digital RPG, there comes a point where the player is faced with a menu of options. Often, this menu represents options for communication with NPCs, although it might instead represent a decision point in the story, for instance whether or not to give an item to someone. These menu options do not attempt to interpret the type of character the player is playing. Some titles may give the player more options for conversation based on the character's intelligence, or may make the NPCs more inclined to take towards the character based on the character's charisma. However, the options to choose from are not customized to the way the player is playing the character, and often the player will find themselves staring at a menu of options without a single hopeful one (a choice the character would actually take) looking back. Having clear available options that make sense is important, lest the players start getting flustered by indecision or listlessness. This is related to Mateas' work on creating agency by balancing narrative possibilities with action available to the player.(Mateas 2001) The sense of transportation is maintained only if the player doesn't have to second guess what his or her character would do in a given situation, and instead flows within the game from one decision point to the next. [22]

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[22] This is where *Morrowind* enthralls some players while leaving others flat; the players who are planner types or explorer types will enjoy either setting clear goals for themselves or randomly exploring until they

I have termed my approach a character-centric one to emphasize that the player character itself and their interactions with the game world are the most important parts of the role playing game. All other trappings, such as combat, rare and fabulous items and special powers are superfluous to the actual act of role-playing. *Agency* will attempt to work with a limited input system to provide an experience of transportation that draws on character, consistency and consequences.

In order to facilitate this, the goals of the project have been as follows:

- Allow the player to make their own character with a customizable personality.
- Provide circumstances in the game's story for the character's personality to shine through.
- Allow for character personality growth and evolution.
- Provide a world that is consistent and NPCs that act like people. Give the players a sense of place and do not do anything to jar them out of it.

Mechanics

Character Traits for Player Characters

Agency uses a character system that utilizes a series of personality traits with accompanying numbers that the computer can understand and work with. Character creation occurs as the first chapter of the story. It consists of a series of decision points where the choices made shape the personality traits of the character. The game then uses these traits to determine what set of options to present to the player at a given decision point in the main story of the game. For example, when faced with a small girl alone on a street corner during rush hour, a character with high selfishness may see these options: "Ignore her and continue on to work", "Ask where her parents are. Maybe they will reward you for finding her", "Point her out to a policeman and then continue on to work". A character with high selflessness, on the other hand might see these options: "Stop and

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find something to do that strikes their fancy. Other players do not have any clue where to start, and so get frustrated early on in the game by not knowing what to do. Feeling like not knowing where to go next in the game jars the player from the alternate reality of the game and forces them back into their own world in order to examine options from a higher-level perspective.

ask her name", "Stop and ask her if she is lost", "Call the police on your cell phone, and then ask her if she is ok." In addition, in certain high-stress areas of the story, the player may be presented with an option that is an "edge case". If the player selects this option, their personality traits will shift accordingly and subsequent decision points will take into account this new arrangement of traits[23]. In this way, the game system allows for character growth and metamorphosis.

Choosing which traits to provide to the player character will greatly shape the experience of playing the game. The traits are used to allow the player character access to the world that the story takes place in, so it is important to choose them carefully.

Chris Crawford's Erasmatron uses a series of 28 possible personality traits for each of his characters. This is possibly over-complicating things, because perhaps those traits will never show themselves in the story. Crawford says himself that when using a personality model, one should limit oneself to the traits that are relevant to the task at hand.(Crawford 1993-1994) Irwin Blacker, in *The Elements of Screenwriting* concurs: "There is no need to establish unique traits if they will not be important within the context of the conflict."(Blacker 1986) The Erasmatron probably needs many traits because it is a scripting language – Crawford cannot anticipate which traits the creator of the story world will *not* need.

David Freeman introduces the technique of the *character diamond*. The game designer chooses three to five traits to describe a major NPC or possibly a player character in a game.(Freeman 2004) This is enough, Freeman states, to create a sense of depth and complexity in these characters.

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[23] A perfect film example of this is the Cowardly Lion in the *Wizard of OZ*. The cowardly lion is scared of everything until the point comes where overcoming his fear can save his friend Dorothy. At this point, the lion finds courage within himself and helps his friend. From this point on in the story, he is not nearly as cowardly.

In *Agency*, I am not casting the player into a role. I am instead asking them to create their own. But it is necessary to create the role within constraints, so that the role can be translated to the story system.

Blacker points out that "The character is understood in the context of his actions". (Blacker 1986) This is true in our case as well. The player character interfaces with the game world through the actions they take. Therefore, what the character is thinking or feeling is up to the player. These things do not have to be translated to the story system. The NPCs will not react to what the PC is thinking, only what they are *doing*. My story does not involve a PC whose thoughts manifest into real life. If that were the case, then modeling how the PC thinks would be important for me to do.

It is important, therefore, to choose traits that will easily translate into action, and to choose traits that will relate to choices that are likely to occur in the story. This focus on action also helps eliminate traits that are not as useful. Two traits can seem very different, but can manifest in very similar actions. I originally had included Impulsiveness/Thoughtfulness as character personality traits until I realized that it was too difficult to distinguish where action dictated that those traits were more appropriate to test against than Courage/Discretion. Personality traits exist as dualities of opposing qualities. One can be selfish where another is giving. One can be courageous where another is cowardly. It is these oppositions that will distinguish PCs from each other. I used a scale of 1-4 for simplicity, range, and because an even number eliminates the middle of the scale. It is more interesting to have a character lean one way or another on such a scale and besides, how many people do you know who have completely neutral personalities?

Finally, since these traits must interact with each other, it is important that they are orthogonal (Crawford 1993-1994) while not being exclusionary of each other. In other words, the value of one attribute must not negate the value of a different one, and must not be so similar that it makes it irrelevant.

With all these things in mind, I settled on the following traits for *Agency*:

Compassion/Selfishness: Our story revolves around this dichotomy. The story is about a little girl who is calling on a stranger for help. The decision that makes the most impact on the story is whether or not the PC chooses to help her. Therefore, this seemed a very useful set of traits to adopt. Compassion/Selfishness determines how likely a PC is to help someone else when it is inconvenient or difficult for them.

Courage/Discretion: There will be many possibly risky situations that will occur in my story. This trait will determine whether a PC will leap into danger with both feet, try to gain information and plan first, or avoid the nasty situation all together. This could be anything from asking the boss for an unplanned day off to rescuing someone from danger.

Lawful/Chaotic[24]: This trait determines how firmly the character follows the laws and dictates of society. Someone highly lawful will tend to follow the rules all the time because they believe in the rules. Someone highly Chaotic will completely ignore the rules in favor of what they think is best.

Character creation occurs through an introductory dream-sequence to the story. The player moves their character from one decision to another, and traits are assigned to the character and modified without the player's knowledge. The player is never presented with a character sheet that explicitly shows the traits that result from character creation. While players of PSRPGs are always aware of the numbers behind their characters, *Agency* takes advantage of the digital medium to enhance the player's experience. Players in PSRPGs are generally responsible for their own characters, and therefore need to have knowledge of what their character is capable of for purposes of conflicts in the game running smoothly. Since *Agency* takes place on a computer, the computer can instead be responsible for the player character and the numerical traits can therefore be

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[24] Dungeons and Dragons has an "alignment" mechanic that helps a player decide how their character might act in certain situations. The alignment is made up of possible combinations of a good/neutral/evil axis with a lawful/neutral/chaotic axis. (Cook and Tweet, et. al 2000) I have borrowed their definition of lawful and chaotic for *Agency*.

removed from the player's attention. This allows the player to concentrate more fully on the story of the game and the type of character they feel they are playing, rather than being distracted by a set of numbers, which would only serve to remind the player that they were playing a game.

Architecture: Tracking the state of the game world
NPC Memory
Non-player characters are given a "memory" through the use of two techniques: *brownie points* and *remembrances.*

Brownie points will be a general measure of how much the non-player character "likes" the player character. Positive interactions with non-player characters will boost their brownie points with the player character, while negative interactions will do the opposite. The number of brownie points the player character has with a specific non-player character will help determine the tone of interactions, as well as how willing the non-player character is to help the player character. *Morrowind* uses a system similar to this, but the mechanic is transparent to the player. So much so that the player can approach the non-player character with the same conversation options over and over again in order to quickly inflate how much the non-player character likes them. *Agency* will not allow players to speak the same words over and over to an NPC in order to inflate brownie points.

Remembrances are assertions (see below) that are specifically linked to non-player characters, and represent specific events between the NPC and PC that the non-player character might refer back to in a follow-up conversation with the player character.

Assertions and Pre-conditions
Following the example of story systems such as *Thespis* and *Façade*, *Agency* uses assertions and pre-conditions to create a combinatoric system that makes authoring the game simpler and more flexible than using hard-coded links as one might do in a branching story (such as a traditional DSRPG or adventure game). *Assertions* are the

way in which the game keeps track of things that are important to the story. An assertion may be a number of things, from the time of day it currently is to which decisions have been made by the player so far and what items the character is carrying around with them. The pool of assertions as a whole will influence which event will happen next, and determine which events may no longer be possible. Every time a PC takes a meaningful action which in some way affects the story or changes the game state, an assertion is added to the pool.

The other half of this equation is pre-conditions. Pre-conditions are conditions put on segments of the story which must be satisfied in order for that part of the story to occur. In other words, in order for a story element to occur, the pre-condition on that element must be satisfied by one of the assertions in the assertion pool.

An example of this in action might be if an NPC dies, the assertion "ThomasDead" would be added to the assertion pool. From this point on, any event with a pre-condition that requires Thomas would not be able to happen, and so a different event would have to be chosen by the system. On the other hand, this now enables story elements with the "ThomasDead" pre-condition to activate (i.e. his fiancé blames someone for the death).

Assertions and pre-conditions are also useful for dictating which art is used at which points in the story. The art is split into two categories, backgrounds and foregrounds. Each art piece has certain pre-conditions, so that the proper art is used in the proper places in the story.

Story

Story is vital to an RPG. The character is the vehicle through which the players interact with the simulation of the game world, but the story is the glue which holds the whole enterprise together. The player-characters have to have something to *do* in the world, or else there is no reason for them to be there. The characters need not blindly follow the course of the story. Often, the GM will have a major storyline that the players take their

times meandering through. The players even have the option of abandoning a particular storyline, in which case the GM will provide them with a new one. An engaging story and world will keep the player in the mind of the character, thus making transportation much more likely[25].

The story of *Agency* is highly influenced by the work of H.P. Lovecraft and Joseph Campbell. Classic Victorian horror writer Lovecraft wrote a series of short stories that take place in a well developed dream land.(Lovecraft 1995) The world of dreams is fascinating to many people because it is something that all people experience, and yet everyone experiences them in a highly different manner. "Dreams are strange things, dangerous and odd."(Gaiman 1995) Dreams tend to make suggestions about the dreamer's sub-conscious, and yet sometimes provide the most fantastical places and events that a human being can experience. The fact that some dreams feel more "real" than some events that happen in the waking world (and are usually more interesting) make them especially mystical and fascinating to people. I chose to write a story where much of the action occurs in dreams because of my own fascination with them, and also because it is an experience that, no matter how fantastical the content, players can relate to. I attempted to incorporate the sense of otherness that Lovecraft so brilliantly creates in his stories.

I also chose to incorporate many elements from Joseph Campbell's monomyth in the hopes that, because these myths are so ingrained in all of us, they would lend the story a good deal of resonance.

> "As we shall soon see, whether presented in the vast, almost oceanic images of the Orient, in the vigorous narratives of the Greeks, on in the majestic legends of the Bible, the adventure of the hero normally follows the pattern of the nuclear unit above described…"(Campbell 1973)

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[25] In a LARP, where the hand of the GM may not be so integral to the story, players create their own stories with other player characters based on character goals and interactions. An engaging LARP, however, usually integrates both GM-driven and player driven story.

Agency, however, is not really a story about dreams. The player is told at the beginning of the game that whatever character they choose to play, it should be some sort of office worker in the modern day. There are many people in this world who, despite the life they would really desire to live, settle for something else out of a sense of social or financial responsibility. Many people spend most of their lives working jobs they don't like and not standing up for themselves in situations they would like to because they fear being poorly looked upon. The player character in *Agency* is an unhappy character whose only outlet for truly expressing who they would like to be is through their dreams. As the game progresses, they have the possibility of drastically changing the landscape of the dream world, while they are stuck in a rut in their waking lives. However, at the end of the game they are finally afforded an opportunity to take meaningful action in the waking world. The less passive they are in the dream world, the more action they take, the greater the action that they are able to take in the waking world at the end of the game[26]. The dreams are a vehicle by which the character learns to take action for themselves in their every day lives. The story therefore, is about agency itself; the player character's agency that they learn from dreaming and then claim for themselves in the "real world".

See the Appendix for a complete description of the story of *Agency*.

Presentation

Out of necessity for limited time, the presentation of *Agency* was designed to be fairly simple. The interface draws from conventions of classic adventure games, but is further simplified to still images and text. The images for the dream parts of the story are created to be impressionistic and dreamlike, while the images for the waking parts of the story are modified close up photos of mundane objects that would be in the player character's environment. The dream parts of the game are meant to remind the viewer of a children's story book, while the waking world imagery is meant to be jarring and unpleasantly mundane in contrast.

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[26] *Agency* tracks the actions characters take in the dream world, awarding them "agency points" for taking drastic actions. The more "agency points" the character has accumulated by the end of the game, the more drastic action they are able to take at the very end in the waking world of the story.

Myst used lovely still images to convey a sense of space, but unlike *Myst* and other classic adventure games that involve poking around the screen to see what things do, *Agency* strives to maintain a sense of immediate presence by only allowing the player to work with the decision at hand. The interface is extremely transparent: choices displayed as text invite the player to pick among them. *Myst* and the adventure game genre present a screen with unknown options. The player clicks on any object that seems interesting, or runs their mouse cursor over the screen watching for a change of cursor to indicate that something worth clicking on is present. This distances the player from the game world by re-enforcing the sense of playing a game. Many DSPRGs present a view of your character wandering around the space of the game world and then change perspective when the PC is conversing with another character or making an important decision. When such an event happens, the perspective then switches to frame the object of the PCs inquiry in the middle of the screen with possible decisions to be made under the artwork. This rapid switching back and forth from perspective to perspective takes the player out of the game space and reminds them that they are only playing a game. Therefore, I chose not to have any switching of perspectives in *Agency*, and instead all action happens from the same first person perspective.   Separate foregrounds and backgrounds will are able to be mixed and matched through the process of creating a decision point, cutting back on the number of hand-drawn images necessary for the game.

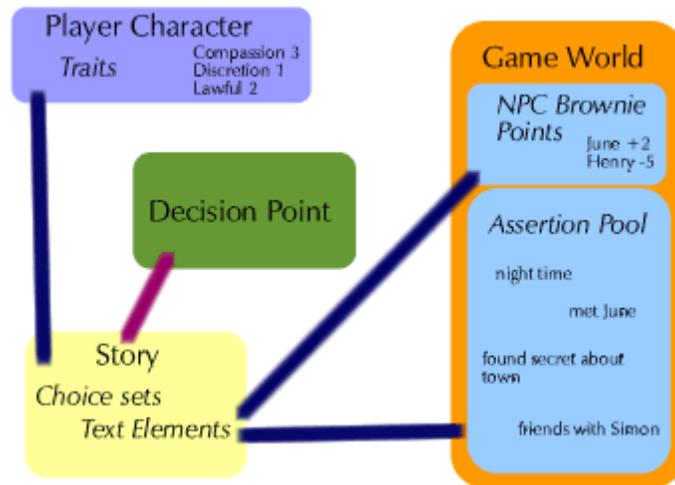**The pieces together: Decision Points**

Figure 1: Bringing the elements together

Agency is not spatially oriented. Instead of moving through the world from space to space as in most DSRPGs, the player character moves from decision point to decision point. Choose-your-own-adventure books such as the very excellent *Lone Wolf* series (Dever and Chalk 1984) make use of a decision based orientation. The decision point in these books is comprised of a text element that describes the area or situation the character finds themselves in, and a set of choices from which the player can make a decision and continue on to the next decision point. In *Agency*, each decision point also contains artwork comprised of a background and a foreground. A decision point is assembled programmatically in *Agency* as follows:

- A player makes a decision by clicking a choice on the screen.
  - This choice is removed from the available pool of choices so that the player does not find themselves making the same choice over and over again.
  - This usually adds one or more assertions to the assertions pool.
- The system checks which assertions are currently in the assertion pool, and finds a text element for which all the pre-conditions are satisfied by assertions in the pool. (If multiple text elements are satisfied, the system picks one of the qualifying elements at random.)
- The text element is added to the decision point.

- Associated with each text element is a background art piece. The background art is added to the decision point. (Art may be shared among multiple text elements.)

- Associated with each text element is an NPC for which there is a set of foreground art pieces. The system checks how many brownie points the NPC has with the player character and selects the foreground art which best illustrates the NPCs attitude towards the player character (friendly, angry, etc.) Some text elements have foreground art which does not represent an NPC, while others have no foreground art at all. In each case, the system checks whether a foreground is present and of what type, and takes the appropriate action.

- The foreground art (if any) is added to the decision point.

- Associated with each text element is a choice set. This set of choices will have anywhere from nine to twelve choices in it (though future work will likely have more). The system goes through the choices in the set to find a sub-set of choices for which the player character's personality traits match the pre-conditions.

- These choices are added to the decision point, to complete the new decision point.

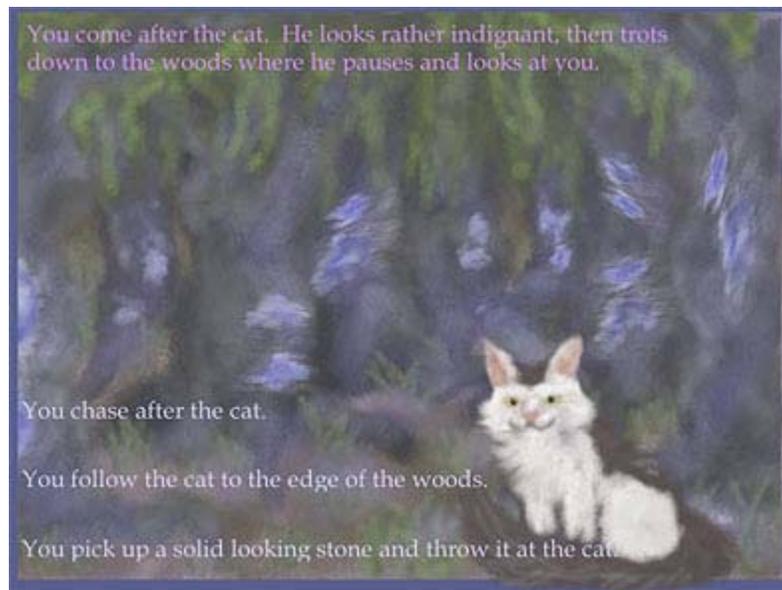- The player is ready to pick a new choice, and start the process again.

Figure 2: An assembled decision point with foreground, background, text element and choices

Reflections on *Agency*

Agency was very engaging and challenging to make. Settling on a proper story was perhaps the biggest obstacle, as it had to be short enough to make completion possible, and yet interesting enough to hold the players' attention.

Watching people play *Agency* is a fun and fascinating experience. During play-testing, an interesting distinction between two groups of players quickly made itself apparent. Players who had role playing experience treated *Agency* very much as a role playing game. They entered the game with a character in mind that they were going to try and play, and played it throughout the game to the best of their ability. Players who had little or no role playing experience either attempted to play a character and quickly lost track of the character in favor of choosing the options that most intrigued them, or else never really attempted to play a character in the first place. Therefore, just as in physical space role playing, in order for *Agency* to act as a role playing game, it requires the cooperation and discipline of its players to actually attempt to role play.

Players who tried to role play reported that the experience was a satisfying one. Only one of the play-testers mentioned that they would like to see more choices available. Most of the testers agreed that the action they wanted their character to take was always present on-screen. In addition, players who played through as multiple characters enjoyed how the available decisions changed to match their new character. Since at the time of testing the entire experience (i.e. art) was not available and I was watching over the shoulder of the tester, it did not seem possible to test for transportation.

Players who did not try to role play nonetheless enjoyed the experience. They became immersed in the story and exploring the world which I had created. I do not take these players' lack of role playing as a failure of the project. My project was targeted at role players who felt that DSRPGs were missing something that PSRPGs had, and the fact that non-role players enjoyed my game despite the fact that they weren't role playing at all only reinforced the feeling that I had developed a fun and interesting project.

The pre-condition/assertion architecture made the building of the game a delightfully plastic experience. It was relatively easy to change parts of the story around, or add more details, or add more choices for different personality arrangements. It also enabled me to create a more interesting rhizome-like architecture rather than the traditional branching tree. I do not think it would be possible to create this game with a typical branching story. It would be cumbersome at best. Nonetheless, the process I used is still very author intensive, requiring one to write a great deal of content. Given the time it took me to produce the first chapter of the game, I expect it would take another four to six months of dedicated work to complete the game. This is for maybe an hour worth of gameplay. One thing that would help is the creation of an intermediary tool that would easily allow the author to enter in new choice sets and text nodes. The objects that make up the individual choices and lines of text contain a good number of properties that are easy to confuse. A tool that queried the author for the correct properties which would then automatically enter the complete object into the game would greatly simplify matters.

One feature I would like to add to future versions of the game is a weighting to certain choices in the choice sets.[27] Currently, the system collects all of the choices that match the player character's personality traits into a sub-set and then randomly picks three of them to display as part of the decision point. This sometimes results in more interesting choices being unused in favor of dramatically less interesting choices. I would like to add "weight' to certain choices that are dramatically more interesting so that if more than three choices fit with the character's personality, the more interesting choices are presented to the player.

One obvious improvement on the game would simply be to offer more choices for the player at each decision point. One player asked for eight to ten, but I think even increasing the number of choices to four or five would make a big impact on the game. More available choices would help ensure that the player always had a choice that fit with what they would want their character to do.

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[27] Similar to Façade's weighting in their drama manager.

Future versions of this or any similar game will definitely have a save feature. Even though the game is short, people sometimes have unavoidable interruptions that they must attend to. Not including a save feature is disrespectful to people who have other pressures in their lives. Since consequences are important to the game, I may only allow one save per character. A common gamer tactic is to save the game before an important decision, and then reload that save and play from it if they don't like the outcome of their actions. *Agency* is different from the games that these players are used to in that there truly are no wrong decisions (from a game stand point). There are only different choices. The player may not realize this if they are reloading the game every time they are concerned that something bad has happened. The player would be able to save every time they exited the game, but there would only be one save which would be saved over on exit.

Future work along these lines may also include an authoring tool that would allow other creators interested in these types of stories to make their own. I quickly realized after programming the architecture of the game that if I had decided to change my focus, it would not have been terribly difficult to turn my project into an authoring tool. It would be very satisfying to see what other sorts of stories people would create using this architecture.

Conclusion – A possible future of the DSRPG

Agency added a depth to playing characters in the digital role playing experience that players very much enjoyed. While Agency itself is a small game with a very short story, there is no reason that a similar character-centric approach could not be taken with commercial DSRPGs. When making *Agency*, I stripped away many of the trappings of current DSRPGs to focus in tightly on the experience of role playing itself. But a game that included a character-centric system, a longer story, interesting combat sequences, and other traditional trappings of DSRPGs could be a truly enthralling experience. What would a character-centric *NeverWinter Nights* be like? A character-centric *Final Fantasy*? The system I used to create *Agency* could fairly easily be mixed with other systems in existing digital RPG designs to create a richer role playing experience than has

yet existed anywhere outside of the physical world. Experimentation by DSRPG developers may uncover other possible ways to reinforce a sense of role playing to their games. Transportation is a powerful experience, and developers of digital games should not overlook their physical space cousins for inspiration on how to encourage this sense of displacement as a character to a fictional world in their games. When transportation becomes possible in a digital game, it will not only fill the void that physical space gamers currently feel with these games, but captivate DSRPG gamers as well and reveal to them what it was that drew gamers to role playing in the first place.

Appendix: Complete Story Description of *Agency*

Summary: This is a story about agency, about people being able to take action to make their own lives better. The story is a series of dreams and waking sequences. The player character can only take meaningful action in the dream segments of the story. The waking sequences are simply a still image with a paragraph describing the mundane course of the day's events. Finally, at the very end, the dreamer is able to use some of the strength they have gained through taking meaningful action in their dreams and is finally able to take a meaningful action in their waking life. In essence, they are waking up to new possibilities. The dream sequences will have a continuous narrative structure across them. Each dream sequence will be a short adventure of some sort that is designed to illicit character behavior from the player character. The dreams will be structured together based on Joseph Campbell's Hero's Journey.

Background: The Two Cities

Thlanviviack is a dying city. Once the height of splendor and majesty, the city has been put under a terrible curse; that no children may be born. Praying to the gods has not brought a solution, and so the people have taken to kidnapping children from nearby Esquinox and auctioning them to the childless people of Thlanviviack. The children are given a draught of forgetfulness to forget their former lives, and are then raised as if they belonged in this city. The city, once all beautiful white marble spires, now is crumbling and in ruin. As the population grows smaller, they retreat further to the center of the city and the outskirts grow more and more overrun. The Regent of Thlanviviack cares for his people and wants them to prosper, and spends all his effort in searching with the Priests of the city for an end to the formidable curse.

Esquinox is a simple and peaceful region. The queen cares for her subjects and tries to keep them safe. Any child born outside the castle gates is allowed to take up residence in the castle to protect it from the slavers of Thlanviviack. The Queen of Esquinox becomes aware of an item of great power that gives the bearer the ability to cure any illness or curse. Her only true daughter, who the PC met in the first chapter of this story, is dying

of an incurable illness. However, this great item could also lift the curse on Thlanviviack. While the Queen wants her daughter to be safe, she is also not unaware of this. She knows that were the once-splendid city to die out, she would never have to fear trouble from them again.

Outline:

Initial Dream Sequence:

The initial dream sequence is a fairy tale like setting in which the actions the player chooses determines the personality traits for their character. This dream also introduces the player to one of the main characters in the story: the princess of Esquinox. However, this dream is not part of the later dream continuity.

Short waking sequence:

The alarm goes off too early. The PC hits snooze to go back to sleep.

Dream I: Departure

Call to adventure

The PC is walking down a lonesome road in a desolate country. Around a turn in the bend is a cat grooming himself. As the PC approaches, the cat looks up and then trots off, away from the road.

If the PC follows, they come to a small clump of trees and a young girl sitting by herself. The PC might recognize her from the earlier dream. If the PC tries to talk to the girl, she won't say anything, but she looks very sad. If the PC offers to help her, she will get up and motion for the PC to follow her. The PC can follow her, and discover a small caravan of children in chains being led by a grimy looking man.

If the PC doesn't follow the cat and keeps to the road, they will eventually run into this caravan on the road.

The slave-trader is bringing these children back to Thlanviviack to be sold. The slave-trader is very distressed that he lost the little girl and will offer huge rewards if the PC turns her over to him. Or, the PC can overwhelm the trader with the children's help.

Supernatural aid (cat)
If the PC helps the trader, he offers to let the PC accompany him to his destination. The cat reappears and watches thoughtfully.

Or, if the PC helps the children, they will try to get the PC to take them home. The way back is fairly dangerous, as the children are sure that others will be out looking for them. The cat reappears and offers the PC help for the way back, in the form of a root which will allow the PC to talk to beasts. *The crossing of the first threshold* occurs as the PC leaves the known plains and road to the unknown; whether forest or city.

Belly of the Whale: symbolic birth or re-birth
The PC can find the mystical city of Thlanviviack, either being led by the slaver, or else through wandering down the road of their own accord. The city is tangled and labyrinthine. The populace is for the most part unfriendly, looking at the PC with ambivalence or barely concealed loathing. The PC hears of the Regent who is sick in the temple and needs a cure that only a dreamer can provide. If the PC goes to the temple, they will gain access to the high priest after explaining they are a dreamer. The high priest will explain that the cure for the Regent's ailment requires the tongue of a dreamer to cure. He further explains that the Regent is offering a significant reward for the cure; a position with him as high vizier of the land. The PC would want for nothing, the priest explains. Should the PC refuse, the priest will allow them to leave. However, they soon get the feeling that someone is following them. There will be a kidnapping attempt on the PC. As night falls, the town becomes full of terrible four-legged beasts, and they will come after the PC. The PC may escape through cleverness and exit through the far gate, at which point they will find themselves at the edge of a stark and ruined plain. If the PC does not seek the Regent, night begins to fall and the game will ask if they wish to seek a place to stay. Staying out at night will lead to the PC being chased by horrible beasts as

described above. The inn they come upon will require money, which the PC will not have unless they have gotten some from the slave trader. There they go to sleep, and dream of the princess's plain.

Or the PC might find themselves guiding the band of children through the tangled and dark mystical Midnight Forest, so named for the glowing blue fungi that coat a number of the trees. The PC comes across a dark monster in a hole. If with they are with the children and have taken the cat's root, they will be able to bargain with the monster. The monster will agree to eat the PC and then guide the children safely through the wood. Or if the PC and monster cannot agree, the monster will eat whomever it can catch. (Regardless, PC will be devoured, which will end the dream). Should the PC find the monster without the children or herb, then the monster will give chase to the PC. The PC will likely be devoured.   Should the PC manage to escape this encounter alive, they will eventually leave the woods and come to a beautiful open plain with small gorgeous houses dotting it and a glorious castle in the distance.

Day I:
The PC wakes up and goes to work. There is a description of the hum-drum events of day.

Dream II: Initiation
Path of trials
The PC finds themselves on the beautiful plain of Esquinox. Before them is a majestic castle with small huts scattered around.   If the princess was not given over to the slave trader in the previous dream, she will be here as a young lady. She is in a coma, but the Queen will have heard of the PC's deeds in the previous dream. Depending on whether or not the PC had helped the Princess and children:
Yes (PC did help children in first dream) *Meeting with the Goddess (princess)/Woman as Temptress (Queen)*
The PC will be happily welcomed into the castle. The Queen is skeptical of the dreamer's motives however. There have been increasing raids on the city, and the Queen

is suspicious of all outsiders. She sets before the PC a simple task, to venture to the top of the forbidden mountain and find the lost horn of Gladonous. This horn was used at the beginning of time to bring the world of dream into being. Supposedly, there is one note left in the horn which can cure any ailment of man. The princess lies in a coma from an unknown illness. If the PC would go forth and find the horn and use it to cure the princess, then the Queen would welcome them as her own child. The Queen directs the PC back to the plains, where the dreamer is to find a herd of nimble goat-like creatures. These creatures are the only known beasts that can climb the sheer mountain. She presents the PC with a golden bridle that will humble the spirited beasts.

The PC can attempt a number of different ways to capture one of these creatures. But the animal will be subdued when the bridle is put on it, and will be rideable.

When the PC approaches the mountain, it is made of sheer obsidian. But the nimble creature is able to make its way precariously up the mountain side. There the PC finds the horn and the cat waiting for him. The cat stares steadily at the PC as two paths appear (*atonement with the father)*. One leads to Esquinox, the other to Thlanviviack, which is crumbling even more than before.   The PC is able to take hold of the horn (*apotheosis/ultimate boon)* and then must decide which path to take.

No (PC did not help children in first dream): An order will be given for the PC to be seized. If the PC does not get away, they will be thrown into the dungeon of Esquinox. They will find there a slaver, the one they met at the first dream. The two will be apparently trapped in the dungeon, but the cat will appear and show them a hidden way out back to Thlanviviack.

The city of Thlanviviack is crumbling and decrepit even worse than before. The PC may opt to visit the Regent. The Regent will remember the dreamer if they had been in the city before. If the Regent had been cured by the PC, he will try to enlist his help once more. If the Regent hadn't been cured, he will be very shriveled, almost like a skeleton. Nonetheless, he will try to enlist the PC for help. His spies have brought back the stories

of the horn on the mountain, and he feels at last there is some help for his people. But it is said the mountain is impossible to climb. He sends the PC to the Midnight Forest to find a particular witch that lives there. The witch is said to be able to create a potion from the glowing fungi which will make one lighter than air.

The witch knows the history of the lands. If the PC so desires, they can get a lot of the story of what has been happening here. The witch prefers to live on her own, away from the foolishness of the rest of "them". The PC will be granted the potion if they are clear that their intention is to lift the curse on Thlanviviack. The witch has given audience to too many women from that city who were hoping she could help them conceive, and she is not without a heart. Alternatively, the PC may get the potion by returning while the witch is asleep and stealing it.

When the PC gets to the mountain and takes the potion, it will turn them into a flying creature. The PC can then fly to the top of the mountain where they will see the cat and the horn and the two paths.

Wherever the PC returns to, they are encouraged to blow the horn. In Esquinox, the princess will be cured and wake up happily. In Thlanviviack, the curse will fall away and the people will rejoice. On blowing the horn, the PC will wake up.

(Or, of the PC decides not to blow the horn, they will wake up on confirming that decision)

Day II:
The PC once again wakes up. The player sees a description of the events of the day, including an unrewarding night out with co-workers.

Dream III: Return
The PC witnesses the outcome of their previous actions.

Blowing the horn for Esquinox will have resulted in that country prospering and the princess will have now become the queen. The land is peaceful and serene, though at night the people secrete themselves indoors as ghosts haunt the land. Thlanviviack, on the other hand, will have crumbled to dust. Only the regent remains alone in his now dilapidated palace, bed-ridden and staring at the ceiling with unseeing eyes. One priest remains to care for him. The Princess will recognize the PC and they will be welcomed to the palace with open arms. She is saddened by the loss of the people of Thlanviviack; she does not have the malice of the previous queen. But what is done is done.

Blowing the horn for Thlanviviack will have broken the curse. The town has grown in size. The people are once again fairly content with their lot in life. The regent has a young prince of his own. The PC will be treated as a hero on their return. Since the people of Thlanviviack are once again able to have their own children, they had long ago abandoned the practice of kidnapping their neighbor's children. Esquinox now has a wall around the entire city, and they have become extremely isolationist and suspicious of outsiders. The now ancient queen had fallen into despair at the death of her favorite daughter, and has never recovered. After ordering the building of the wall, she retired from public life and the city is now run by a council of the wealthiest citizens. This has had sad implications for the farmers, who were before cozy in the middle class and are now poor. Now, since they have to farm inside the walls in bad soil on smaller plots of land, they are not doing nearly as well.

If the PC had not blown the horn at all, a great war over the artifact will have resulted in the decimation of both cities.

Master of two worlds/Freedom to live
In the end, the PC is led by the cat to a portal. Both the Princess and the Regent will understand the meaning: the PC must now choose between the dream and waking life. The PC will be informed that they will now not be able to return to this particular dream. Should they choose the dream world, they will live there for a few days before their body

dies of thirst and starvation. However, should they choose the waking world they will awake on Day III.

Day III:

The PC finally has an opportunity to take meaningful action in their environment. Depending on how passive or active the PC was in the dreams, the lesser or greater the action they may take in the waking world. Actions available will be based on the PC's personality. They will include things such as: quitting their unfullfilling job, asking a co-worker out on a date, shooting their boss, skipping out on work and taking an unplanned day off, calling to make an appointment with a counselor, talking to someone about something that has been bothering them, or standing up for themselves in an uncomfortable situation.

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