

DO MODERN STORIES NEED INTERACTIVITY?  
A COMPARISON OF STORYTELLING METHODS IN MEDIA

by

Josiah T Lebowitz

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has been approved

December 2009

APPROVED:

KATHLEEN DUNLEY, Ph.D., Chair

MICHAEL EILERS, Advisor

KEN ADAMS, Advisor

ACCEPTED AND SIGNED:

---

KATHLEEN DUNLEY, Ph.D.

## Abstract

As interactive player-driven stories gain popularity, some believe that they will overshadow more traditional linear stories. To test that belief, the key types of traditional and player-driven storytelling are explained, as is their past and present use in print, film, and video games. To further explain the issue, the key arguments for and against both traditional and player-driven stories are also presented. Building on this information, a survey was conducted to gauge public preference for various types of storytelling in all three mediums. The methodology, results, and implications of the survey are stated and discussed in order to bring about a reasonable response to the initial question of which type of storytelling will dominate.

## Dedication

To all the authors, for creating a universe of stories that is every bit as vast, interesting, and exciting as our own.

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## CHAPTER 1. INTRODUCTION

### Introduction to the Problem

Throughout human history, few things have played as significant a role as stories. Be they lessons on life, attempts to explain the origin of the universe, tales of personal exploits, or fanciful yarns meant to do nothing more than entertain, stories have always been, and will always be, an important part of everyday life. As time has passed, new mediums for storytelling have emerged, along with new ideas on the very nature of stories themselves. Some writers and designers say that, in this age of interactive media, interactive, or player-driven, storytelling is the new wave which will sweep away the traditional storytelling methods of the past; while other writers and designers see those beliefs as nothing more than foolish speculation. What is the true future of storytelling? That is the question the author of this thesis sets out to answer.

### Background of the Study

This study will attempt to determine the future role that traditional and player-driven storytelling will play in three key mediums (print, film, and video games), so as to answer the question of which form of storytelling will dominate. This will be done by examining the use of various forms of storytelling in the three mediums, the storytelling methods used in popular current products, the challenges associated with creating different types of stories, and the

opinions of important industry figures. A study has also been conducted, using a combination of sales data, consumer feedback, and a random sample survey, in an attempt to discern consumers' preferences in regards to various storytelling methods.

While all three mediums will be covered, it should be noted that particular attention will be paid to video games, as they are by far the best suited for player-driven storytelling.

### Statement of the Problem

In the future, will traditional storytelling methods continue to dominate or will interactive player-driven stories become the norm?

The author of this thesis will argue that there is room for both types of storytelling, but that player-driven storytelling will never rise to the same level of prominence as traditional storytelling. This thesis will attempt to prove or disprove that hypothesis through examination of the history, creation process, and popularity of both storytelling methods in popular media; and by delving into the results of a consumer opinion survey conducted on the matter.

### Purpose of the Study & Rationale

Discovering the pros, cons, and potential popularity of various storytelling methods will help future writers, filmmakers, and game designers better tailor their stories to meet the tastes of the consumer base at large. With development costs rising rapidly in the film and game markets, this information is particularly valuable, as it will allow writers to choose the type of story most likely to please their target audience without the need for expensive trial and error.

## Research Questions

This paper will focus on the following issues:

1. What types of traditional and player-driven storytelling are there presently?
2. How are traditional and player-driven storytelling used in print, film, and video games?
3. What are the common arguments for and against both forms of storytelling?
4. What are the differences in creating traditional and player-driven stories?
5. Which storytelling methods are preferred in print, film, and video games?
6. Which storytelling methods are likely to dominate in the future and why?

## Definition of Terms

A “*player*” is a person experiencing a story, either in print, film, or video games. The role of the player and how much freedom he has to interact with and influence the story can range from none at all to near total, depending on the medium and title. In some cases, the player is not technically a player at all, but merely an observer.

*Traditional storytelling* can be considered the classic form of storytelling. Stories told using the traditional method are linear, having a clearly set beginning, progression, and ending. Such stories are static and change little, if at all, no matter how many times they are experienced. In traditional storytelling, the player either serves as a passive observer (as in most books and films), or has strictly limited powers of interaction, which prevent him from influencing the ultimate outcome of the story (as in many video games).

*Player-driven storytelling* uses a more interactive approach by allowing, at one or more points during the story, for the player to make decisions that may alter the course of the plot.

The consequences of those choices can be minor or far reaching, potentially changing the progression and outcome of the story entirely.

The difference between traditional stories and player-driven stories can best be described as a spectrum, but knowing where to draw the line is not always easy. Is a story truly player-driven if the player is only allowed to make a single choice throughout the entire story? What if the player can make many choices but none of them alter the main plot, only provide minor deviations along the way? For the purposes of this paper, a story will only be considered truly player-driven if the choices made by the player have at least a moderate impact on the main plot. By this definition, not all interactive stories are truly player-driven, though all player-driven stories are interactive. A detailed look at the different types of player-driven stories, and their use in various form of media, is presented in Chapter 2.

A *branching path* is a place in a story where the player is allowed to make a choice that has an impact on upcoming events. Depending on the option chosen, the story will go in one of multiple directions. In this paper, a choice will only be considered to be a true branching path if it provides at least a moderate impact on the main plot. So, the decision to aid a friend in battle instead of running away would likely be a true branching path; while deciding to discuss another character's favorite color instead of discussing their tastes in clothing would probably not constitute a true branching path (though the importance of both example situations could vary significantly depending on the specific story).

A *NPC*, or non-player character, is a character in an interactive story that is not under the direct control of the player. NPCs can be anyone from bit players to important secondary characters, but the term is most often used to refer to minor characters such as unimportant

villagers. Enemy characters and non-player controlled allies, while technically NPCs, are typically referred to as merely enemies and allies.

### Assumptions and Limitations

Due to the difficulties associated with conducting a research study on consumer opinions, it will be assumed that the consumer feedback and survey data presented in this paper are not necessarily indicative of the world-wide or United States consumer base as a whole. A detailed analysis of the sample group can be found in Chapter 3.

It will also be assumed that past and current trends in consumer storytelling preferences are at least fairly indicative of future trends.

### Nature of the Study

Much of the necessary research for this topic has been carried out by examining related literature, past and current, as well as national and international sales data. Additional data has also been gathered from a consumer opinion survey designed by the author of this thesis.

### Organization of the Remainder of the Study

Chapter 2 covers several key subjects including: a thorough examination of the different types of player-driven storytelling, the uses of traditional and player-driven storytelling in all three mediums, the primary arguments for and against both traditional and player driven storytelling, and the differences in the creation processes of traditional and player-driven stories.



The following chapters build on the arguments presented in Chapter 2 by focuses on the survey data collected by the author of this thesis. Chapter 3 details the research methodology for the study. It includes a detailed analysis of the survey and sample along with information about how the survey results have been sorted and analyzed. The resulting data has been listed in Chapter 4, with a final analysis, summary, and conclusion in Chapter 5.

## CHAPTER 2. LITERATURE REVIEW

### Introduction

As previously stated, it is often said that, as technology allows for more and more interactive player-driven stories to be developed, they will eventually become the norm and overshadow, if not completely replace, traditional stories. While it is often easy to imagine new and supposedly superior methods replacing the old, history has shown that things do not always follow such a pattern. In addition, whether or not player-driven storytelling is truly superior to traditional storytelling is a matter that is subject to heated debate.

### Organization of This Chapter

To begin, this chapter presents detailed descriptions of the primary types of storytelling, starting with the most traditional form, and ending with the most purely player-driven form. Once a full understanding of the terms has been established, this chapter delves into the uses of storytelling in the three key mediums, starting with print, then film, and finally video games, in order to show how the various forms of storytelling have been used and developed in each medium. Special attention is paid to important advances in storytelling, particularly in regard to player-driven stories and how they have affected the mediums as a whole. This is followed by a summary of the key arguments both for and against the supremacy of player-driven storytelling.

Particular challenges related to the creation of player-driven stories, as opposed to traditional stories, are also noted. Finally, a conclusion is reached based on the amassed research, providing a bridge into the further studies detailed in Chapter 3.

## Primary Types of Storytelling

### *Fully Traditional Stories*

The pure form of traditional storytelling contains no interactive elements whatsoever. Stories using this method are completely or almost completely consistent from one telling to the next, changing little, if at all, from their original form. This is the type of storytelling that is used in the vast majority of printed stories and films but it is never used in video games. (It is important to note that even the most linear video games contain some form of interaction, no matter how small, as their defining trait. Without a measure of interaction, a game would cease to be a game and become a film or the digital equivalent of a printed work.) Oral storytelling generally uses this form as well though, as it is reliant on the memory and mood of the teller (which can, in some cases, be influenced by the audience) it is somewhat more fluid than print or film works and at times may be better classified as interactive traditional storytelling (which will be discussed later on).

Fully traditional stories are likely the oldest form of storytelling and can be found in the oldest known writings. Today, they continue to dominate print and film media. Recent popular examples include the book *Harry Potter and the Sorcerer's Stone* (Rowling, 1997) and the film *Pirates of the Caribbean: Curse of the Black Pearl* (Bruckheimer & Verbinski, 2003). No matter how many times one reads the book or watches the movie, they do not change and the

player has no opportunity to influence the events in any way.

The greatest strength of fully traditional storytelling is that every moment of the experience is controlled by the creator. In print media, every word, description, and illustration is chosen specifically by the author to create the intended impact upon the reader. Film takes a similar approach, working to ensure that not only the words, but also the appearance and inflection of the actors, the visuals, lighting, and music all come together to bring out the feelings and emotions that the creator intended for the viewer to feel. When done correctly, the people experiencing the story can be reasonably expected to feel wonder, fear, sadness, joy, love, anger, and the like at precisely the right points of the story, heightening the immersion and the quality of the experience.

However, that same rigidly controlled structure could also be called the style's greatest weakness as it limits the player to being nothing more than a passive observer who can watch the story but is unable to truly become a part of it (Ryan, 2004). As the player is unable to influence events in any way, he is therefore unable to try and change events that he does not like or to further explore areas on which he would like more information. The entire experience, while carefully crafted, is also extremely limited.

### *Interactive Traditional Stories*

Interactive traditional stories allow the player a certain amount of interaction while maintaining much of the carefully structured control found in fully traditional stories. As in fully traditional stories, the main plot in interactive traditional stories can not be changed in any significant way. However, the player is given some power over what happens outside of the key

scenes (with the exact amount of power and control given to the player varying significantly by title). Therefore, despite being an interactive method of storytelling, it is not truly player-driven, as none of the player's actions have a significant impact on the main plot. This is the form of storytelling used in a very large portion of video games.

While this style could be used in print and film, the author of this thesis has been unable to find any examples of such. Instead, interactive print and film projects tend to focus on somewhat more player-driven storytelling styles such as multiple ending stories and branching path stories, which will be discussed further on.

The game *Metal Gear Solid 4* (Konami, 2008), represents the more limited type of interactive traditional stories. In the game, the player controls the main character, Snake, as he pursues his long time enemy, codenamed Liquid Ocelot, across a series of war-torn battlefields. During key parts of the story, the player loses most or even all control and watches the events play out, much like a film. The player can not make Snake say different things, betray his comrades, go home and retire, or take any other action that would impact the progression and ultimate outcome of the story. However, when not watching important events unfold, the situation changes drastically. While guiding Snake through the battlefields, the player is in direct control of many of his actions. Snake can quietly sneak through without being seen, aid the local armies in their battle against Liquid's forces, or make enemies out of both sides. He can also utilize a number of possible routes to move through the areas or even explore them all while making use of any combination of various weapons and equipment to accomplish his goals. He can also choose to complete his missions in silence or frequently radio his allies to find out their thoughts on the current situation. Although the player is still unable to perform any actions that would significantly change the main story (aside from allowing Snake to die, which merely ends

the story prematurely), he does have a significant amount of control over Snake's actions, methods, and very survival, increasing his immersion and connection to the character.

Another game, *Final Fantasy X* (Square Enix, 2001), is similar to *Metal Gear Solid 4* (Konami, 2008) in regards to the amount of control exercised over the main plot, but allows the player even greater freedom outside of key scenes. When the player is not watching important scenes play out, he is free to guide his party of adventures across the world, fighting monsters, exploring new areas, and conversing with townspeople and other NPCs. As the main story advances, the player gains new equipment and methods of transportation, which allow him to visit more areas and partake in a large number of optional activities. While these purely optional side-quests have no major effects on the main plot, they allow the player to increase the power of the heroes, find new items and equipment he can use, and learn more about the world, its inhabitants, and the events leading up to and surrounding the main plot. Such interaction greatly increases the depth of the experience and immersion while giving the player a sense of control over the story, even if that control is mostly an illusion (Kohler, 2005).

*Final Fantasy X* also makes use of minor branching paths, both during optional portions of the game and important story scenes. However, while the player's choices can lead to different dialogue between characters and other small changes, they have no effect on the overall plot and therefore can not be considered true branching paths, but merely serve to further increase the depth of the story and the illusion of control.

It should also be noted that, while no interactive traditional stories allow the player to make any real changes to the main plot, a few do allow for a certain amount of freedom during important story scenes. For example, in the popular First Person Shooter game *Half-Life 2* (Valve Corporation, 2002), the player remains in control of the hero during key story scenes and

is free to wander around the area, view the important happenings from different angles, ignore them all together, or even perform random and absurd acts such as bouncing boxes off the heads of other characters. However, the NPCs will continue with their scripted activities without regard to the player's position or actions, rendering any actions taken by the player during these scenes as rather pointless. While such a technique does somewhat increase the illusion of control, the benefits are questionable as it allows key moments in the story to lose their carefully planned scripting, be missed entirely (whether on purpose or by accident), or even be turned into a complete farce.

### *Multiple Ending Stories*

The most basic form of player-driven stories, multiple ending stories are also one of the most popular as they allow the player to have a significant impact on the final outcome of the story without sacrificing control over the rest of the plot. Such stories are used frequently in video games and have also been used in some films (though, whether or not the majority of films with multiple endings truly qualify as player-driven stories is questionable and will be further discussed later in this chapter).

A multiple ending story is essentially a fully traditional or interactive traditional story in which the player is allowed to choose (either consciously or unconsciously) between multiple endings. Other than that single choice, the main plot remains unchanged. Typically, little other than the ending itself, and perhaps a very short portion of the story leading up to the ending, is affected by the player's choice. The usual number of endings in such stories is two or three, often classified as the bad ending, normal ending (not included in two ending stories), and good

ending. This structure is used in the game *Castlevania: Dawn of Sorrows* (Konami, 2005). In the bad ending, the hero, Soma, reaches a dead-end in the search for his kidnapped friend and is forced to give up, hoping others will succeed in his place. In the normal ending, he succeeds in finding her but is too late to prevent her death at the hands of the villain. Finally, in the good ending, he not only finds and saves his friend, but discovers and destroys the true villain who was manipulating events from behind the scenes.

However, many multiple ending stories break from that trend and instead feature endings that are neither better nor worse than others, but simply reflect different decisions that the hero made. It should also be noted that, from a creative perspective, there is no real limit to the number of potential endings that such a story can have. The main constraints placed on the number of potential endings are the imagination of the writer and the time and money needed to create each additional ending (which will be discussed further later in this chapter). Although two or three is the most common number of endings, the classic Super Nintendo game *Chrono Trigger* (Squaresoft, 1995) features twelve distinct endings while the Playstation RPG (role-playing game) *Star Ocean: The Second Story* (tri-Ace, 1998) contains over eighty.

In many multiple ending games, and some films, the ending received is determined by a single branching path choice given to the player close to the end of the story. For example, in the cult classic vampire game *Blood Omen: Legacy of Kain* (Silicon Knights, 1996), the hero, Kain, is given a choice upon completion of his journey. He can either sacrifice himself in order to repair the damage done to the world, or remain alive as the world falls into darkness and decay. Neither of these can be considered a truly good ending and it instead becomes a moral dilemma. Should Kain die and save others, or doom everyone to save himself? Neither choice is particularly appealing, and in fact, Kain spends the rest of the series attempting to manipulate



events in order to create a compromise in which he can live on without bringing about the destruction of the world.

An important thing to note about *Blood Omen* and many similar games is that the player is given full control over choosing which ending he receives and is at least somewhat aware of the importance of the choice. While this is the approach which many, perhaps even the majority, of multiple ending stories use, it is not the only option.

In some games, the method of choosing endings is less obvious, though still easily controlled by the player. In the aforementioned *Chrono Trigger* (Squaresoft, 1995), the player is allowed to challenge the main villain, Lavos, at multiple times throughout the story. At first, the heroes are likely to lose due to the overwhelming difference in power, but it is still possible to defeat Lavos before the true conclusion of the story is reached. Players are later given the option to replay the game with their powered up heroes, allowing them to challenge Lavos at nearly any time during the game. While it might not be instantly obvious, defeating Lavos at different points during the story provides a variety of different endings, most of which are based on what the various characters would and would not have done had their quest ended early. For example, if the player defeats Lavos before the point in the game where the heroes confront the evil sorcerer Magus, the ending depicts one of the heroes, Frog, striking out to find and challenge Magus on his own. While, if Lavos is defeated before the point in the story where the heroes meet their future ally Ayla, she is shown living out her normal life with no knowledge of the heroes or Lavos.

There are also games in which the methods of achieving the various endings are mostly or even entirely hidden from the player, despite still being technically under his control. In *Star Ocean: The Second Story* (tri-Ace, 1998), the ending received is chosen based on the how much

each of heroes care for each other. In the end, each hero may go off on their own, become close friends with another, or even enter into romantic relationships with each other, all depending on their levels of affection. However, the player is not informed of this fact and is given no exact way to measure the affections of the various characters (though several hints can be found throughout the game). Nevertheless, those affections are under his complete control. The options the player chooses when talking to different characters and the way he has the heroes work together in battle changes their affections in ways that are quite obvious at times and extremely subtle at others. This type of approach has the advantage of making the choice of ending as natural and unobtrusive as possible, but it can also frustrate players who have trouble manipulating the system to receive the particular ending they want.

A final important point needs to be discussed when talking about multiple ending stories. While having more than one ending is fine for a story that stands alone, it can be difficult for a story that is part of a series, especially when the various endings contradict each other. While there are numerous ways that have been used to approach this problem, including parallel universes and attempts to combine all possible endings into one, the most common solution is for the creator to take one of the possible endings and declare it to be the true ending. From that point on, the chosen ending becomes canon; its events are the actual outcome of the story and what all future sequels are based on, while the other endings are merely outcomes that could have happened but did not.

### *Branching Path Stories*

While multiple ending stories barely qualify as truly player-driven stories because the player is only able to change a single part, albeit a very significant one, of the main plot, branching path stories allow the player control over multiple important decisions. As previously described, a branching path is a point where the player is given a choice between two or more options and the plot branches off in different directions depending on which choice was made. Some branching paths are not true branching paths and any changes they make are momentary, others are larger and more important but still return the player to same main plot eventually, regardless of which choice was made, and still others branch off entirely, taking the main plot in completely different directions. Branching path stories are the simplest type of interactive stories, after multiple ending stories, and can be seen in books, film, and video games.

Figure 1 shows the structure of a simple branching path story which includes all three types of branches. The first branch, deciding what to do with a friend, is a minor one and has no impact on the main plot, as all branches quickly converge back into one, though different information could potentially be gleaned from each option. The second branch, deciding how to enter the abandoned building, is a more important moderate branch, as it takes longer for the two separate paths to converge back into one. But, in the end, neither significantly changes the main plot even though both may contain potentially interesting information that can't be learned elsewhere. The third branch is a major branching path and the only one that actually changes the outcome of the story. Does the character aid the police or become a thief? Both have the potential to lead the story in entirely different directions.

Figure 1

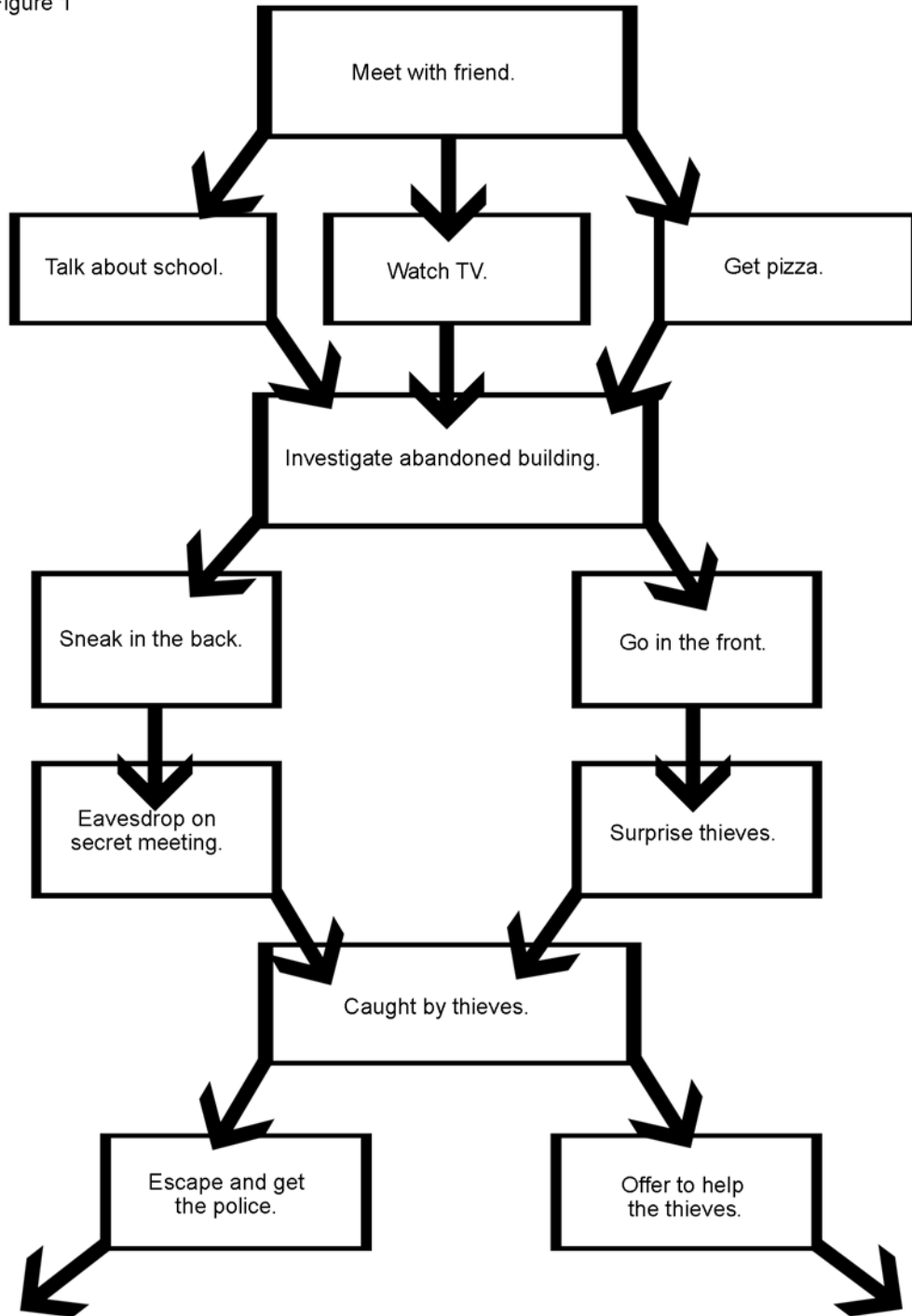


Figure 1

One of the most common examples of branching path stories is the *Choose Your Own Adventure* series of books, which includes titles such as *Journey Under the Sea* (Montgomery, 1978). As the player reads through the books, he frequently comes across choices that can be made, with instructions telling him to turn to different pages of the book based on his decision, from which point the story continues. Targeted at children and young-adults, the *Choose Your Own Adventure* series was extremely popular for a time but eventually fell out of popularity and was discontinued (Katz, 2008). However, Montgomery is currently working to revive the series by republishing the best of the old books along with a collection of new titles (Lodge, 2007).

Due to their young target audience and the large number of paths vying for page space, the *Choose Your Own Adventure* stories tend to be short and simplistic. Earlier entries in the series such as *Journey Under the Sea* (Montgomery, 1978) tended to feature very large numbers of endings (the vast majority of which typically result in the main character dying or giving up), further reducing the amount of pages available for the rest of the story. Later volumes such as *Beyond Escape* (Montgomery, 1986) often had far fewer endings (in this particular case, only twenty as opposed to *Journey Under the Sea's* forty-two), allowing more pages to be devoted to plot development. The *Choose Your Own Adventure* series will be discussed further later on in this chapter.

Interactive films follow a similar format to the *Choose Your Own Adventure* books. As they tend to blur the line between films and video games, they can, at times, be rather difficult to assign to a particular medium. *Dragon's Lair* (Advanced Microcomputer Systems, 1983) is arguably the first interactive film, despite being advertised at the time as a video game. At first glance, interactive films seem like any other films but they frequently pause to allow the player to choose between two or more options. However, due to the limited amount of storage space

available and the cost of creating professional quality video for all the different paths, most branches are either minor (quickly returning to the main plot) or result in the hero's untimely death.

Most video games which use branching paths follow the same basic structure as print and film media. However, the nature of the medium tends to bring about several changes. First, in many branching path games there are few if any branches that lead to the hero's death, as life and death in most types of video games is based solely on the player's skills. The only notable exceptions to this rule are old style adventure games (though most of those utilize interactive traditional stories or multiple ending stories rather than true branching path stories) and Japanese visual novel games such as *Fate/Stay Night* (Type-Moon, 2004) (which will be discussed further later on in this chapter). In addition, many branching path video games feature at least one, and sometimes several, major branches that completely change the main story. These stories also tend to last far longer than those in print or film (though they still tend to be shorter than the main plot in similar non-branching games).

The game *Front Mission 3* (Squaresoft, 1999) is a good example of a typical video game branching path structure. It features one major branch, several branches of moderate importance, and some minor branches as well. The major branch occurs near the beginning of the game when the hero must decide whether to help his friend with a delivery or stay at the office to finish his work. While this initially seems like an entirely inconsequential decision, it determines how soon the hero receives a very important message. If he stays behind and gets the message immediately, he is able to react quickly enough to rescue his sister from danger. But, if he was out, he receives the message too late and ends up pursuing his sister's captors instead. This single choice changes the entire course of the story. Characters who become strong allies in one

path are often bitter enemies in the other and the hero himself will end up on different sides of several major conflicts, all depending on the choice made at that initial branch.

The moderate branches occur at various points in the story and have an impact on the main plot, though not as large as the major branch does. For example, at one point, the hero must choose whether to attack an enemy base head on or sneak in through the long route. If he chooses to sneak in, he will meet and team up with a character who will prove to be a valuable ally as the story progresses. But, if he breaks in the front, he will end up fighting and killing that same character. The story will still continue on the same path, but without the aid and insight that character would otherwise have offered throughout the remainder of the journey.

Finally, the minor branches are sprinkled throughout the game. In one instance, the hero and his allies are sneaking through enemy territory when they spot a vulnerable enemy group. The player can choose whether to ignore the enemies and pass by unnoticed, or to ambush and destroy the unit, losing his cover in the process. The decision affects the next several battles the hero's team is involved in but has no impact on the overall plot.

### *Open-Ended Stories*

Open-ended stories can be seen as highly advanced branching path stories. While they ultimately operate on a similar system, there are far more paths available than in ordinary branching paths stories and the branches tend to be less obvious, creating a more fluid story progression. Due to these two attributes, the player is given much more influence over both the main plot and the less important parts of the story than in regular branching path stories. Though, due to the less obvious choices and excessive freedom offered, it can at times be

difficult for the player to determine exactly how to obtain the desired outcome. Such stories also tend to feature an extremely large amount of optional side-quests which, similar to those in the aforementioned *Final Fantasy X* (Squaresoft, 2001), have little to no effect on the main plot but can provide additional back-story and allow the hero to grow stronger and experience new things.

Due to the large amount of work necessary to create games that utilize open-ended storytelling (which will be discussed further later in this chapter) comparatively few games use this approach. Of those that do, their main plots tend to be shorter and less complex than that of games using more traditional storytelling methods. However, due to the large amount of optional side-quests that are typically included, the reduced length of the main plot is often not readily apparent.

Because of the increased levels of freedom that open-ended stories allow, it is often quite easy for players to lose sight of, or even willingly ignore, the main plot and lose themselves in the numerous optional branches and diversions that are available. This issue was particularly noticeable in *The Elder Scrolls III: Morrowind* (Bethesda, 2002). Because of its massive game world, it was not uncommon for players to get sidetracked exploring or performing optional tasks only to find themselves unable to determine how to return to the main plot later on. The open nature of the world also made it easy for weak players to accidentally wander into areas containing enemies too strong for their hero to defeat, something that is generally avoided in games using more traditional storytelling methods. Depending on the preferences of the player, such potentially harmful side effects of excessive freedom can either be seen as exciting realism enhancing features or as extremely annoying problems.



It is also interesting to note that *Morrowind* allows players to kill virtually any NPC in the game, including characters that are vital to the main plot. In this way, it is possible to derail the main plot entirely, rendering it, and thereby the game itself, impossible to complete. However, the player is given notice if such a situation arises and receives the option to continue playing anyway or to restart the game from a previous save, before the damage took place.

*Fable 2* (Lionhead, 2008) provides another strong example of open-ended storytelling. Much like *Morrowind* (Bethesda, 2002), it gives the player relative freedom to explore a large world, ignore the main plot as much as desired, and participate in all manner of optional activities. Depending on the player's actions, the hero may become good or evil (or somewhere in-between), can woo and marry the person of his/her choice, take up various professions, and even become the ruler of many areas. Despite this immense freedom, *Fable 2* uses a compass-like system to provide an easy way for lost players to find their way back to the main plot, solving one of the more common problems present in such games.

It is interesting to note that, while the large amount of freedom in *Fable 2* and similar games is often said to make them more realistic, the relative ease in which a *Fable 2* player can change his hero's moral alignment, and therein his standing in the game world is in no way realistic. Such moral alignment systems generally work on a point scale, with the hero earning "good" points for performing good deeds, such as helping people in need or donating money to charity, and "evil" points for performing morally wrong or dubious acts like pick pocketing or murdering innocent NPCs. When the majority of the player's points are "good" he is perceived as a good character while if the majority of his points are "evil" he is perceived as an evil character (some games also include a neutral gray area if the point totals are similar). Because of way the system works, the player can, for example, become evil by slaughtering the inhabitants

of a village, and then quickly become “good” again by performing a few good deeds, such as helping some old ladies across the street. At this point, as the hero’s alignment has been changed back to good, all of the game’s NPCs will forget about the slaughtered villagers and hail the hero as a great and wonderful person. Such a result is lacking in proper character development and fails to in any way convey the way real people would react to the hero in such a situation.

A final important thing to note when discussing games utilizing open-ended stories is that, despite the amount of freedom presented, the player is still unable to do anything which was not specifically allowed for by the designers of the game. For example, if the player wants to build his own house or smash down a locked door with an axe instead of finding the key, he might be able to do so or he might not, depending on whether or not the designers had the time and inclination to allow for that particular behavior. Similarly, while the player does have some control over the main plot, the events which he can change and the exact ways in which he can influence them are all predetermined. If the player decides he does not like any of the options available and would like to attempt an entirely different approach, he is unable to do so.

### *Fully Player-Driven Stories*

Just as fully traditional stories mark one end of the interactivity spectrum, fully player-driven stories mark the other. Fully player-driven stories are so open and provide such a large degree of freedom that it is debatable whether or not they even qualify as stories. A fully player-driven story has no main plot in and of itself. Instead, it provides the player with a setting, a basic framework of rules, and, at times, a cast of characters with which to interact. Some allow

for players to create their own main plot to follow, while in others the story is nothing more than a summary of the player's actions in the setting provided.

While fully player-driven stories are impossible to realize in film due to the inherent limitations of the medium, they can, with the aid of a human moderator, be realized in print. They can also be at least partially realized in video games. The word partially is used because, no matter how much control and how many options are available to the player in a video game, he is still unable to take any actions which the designers did not specifically account for. Considering the entire possible range of actions (both plausible and implausible) that a human could take in any given situation, accounting for all of them in a game would require far more planning, programming, and time than is feasible (or likely even possible) for even the largest and best teams of designers. The only possible solution to this problem would be the creation of a near sentient artificial intelligence which could then moderate the game while it's being played, much like the human moderator in the aforementioned fully player-driven print stories.

A good example of a fully player-driven story in a video game is *The Sims* (Maxis, 2000), an extremely popular life simulation game. In *The Sims*, the player creates a virtual human (a sim), builds a house where his sim can live, and then attempts to guide his sim successfully through the activities of everyday life. Sims can get all sorts of jobs in order to earn money, which can be used to pay bills or spent on a variety of objects (most realistic, some not) to improve his home life. The player must ensure that his sim's basic needs, including nutrition, hygiene, and companionship, are met in order to keep the sim healthy, happy, and alive. Sims can also interact with other sims, allowing them to forge relationships, become romantically entangled, marry, and have children. There is no plot or overall goal in *The Sims*, it merely allows the player to direct the life of his sims in any way he sees fit, be it good or bad, intelligent

or foolish. Players are free to form their own stories about the lives of their sims or create goals for themselves, such as getting a high paying job or purchasing a certain item, but those stories and goals exist entirely in the mind of the player and are not recognized by the game itself.

Perhaps the most pure form of fully player-driven storytelling to be found in any of the three mediums considered in this thesis are tabletop RPGs such as *Dungeons & Dragons 4<sup>th</sup> Edition* (Wizards of the Coast, 2008), the series which has led the genre since the 1970's. *Dungeons & Dragons* is comprised of a collection of printed works which contain detailed descriptions of settings, including worlds, and the races and creatures which inhabit them, and rules governing the development of characters, the use of magic and items, and the progression of battles. The books are meant to be used in a group setting. One member of the group takes the role of the leader, or dungeon master, and is in charge of the overseeing and moderating the players. In *Dungeons & Dragons* and other similar tabletop RPGs, the players have complete or near complete control over their characters and can have them perform any action which is physically and mentally possible for them at the time. Meanwhile, the dungeon master uses his imagination and knowledge of the rules of the game to inform the players of the outcomes of their actions. The dungeon master is also responsible for creating a plot which the players can follow if they so choose.

A good dungeon master is able to properly react to any given action by the players, allowing them near total freedom in their actions in any given situation, something a non-thinking computer could never begin to accomplish. However, without the dungeon master's constant supervision, the story cannot progress and the world cannot function. Moreover, the quality of the story itself relies heavily on the dungeon master's skills, knowledge, and creativity.

It should be mentioned that the requirement of a human moderator makes it difficult to definitively place tabletop RPGs in realm of printed storytelling. They are, in many ways, a medium unto themselves, combining elements of print, games, and other mediums into a unique experience. They are also by essence a very impractical method of storytelling, as the players are only able to experience the story when the dungeon master is available to lead it, which considerably reduces their potential uses in storytelling.

## The Uses of Storytelling in Media

### *Storytelling in Print*

The book is an ancient storytelling medium that continues to thrive even in the age of technology and interactivity. Starting with early works such as the various parts of *The Bible*, and continuing on to more modern stories like *Harry Potter & The Sorcerer's Stone* (Rowling, 1997), printed stories have long been an important part of society. As the shining example of traditional storytelling throughout centuries of history, books prove the continuing appeal of, and desire for, fully traditional stories.

Any attempt at a serious discussion of the history of books and, by association, traditional storytelling itself, would be far beyond the scope of this thesis. Instead, this thesis will discuss the use of player-driven storytelling in print, current trends in printed works, and the strengths and weakness of print as a storytelling medium.

Being the oldest of the three mediums discussed here, it should be no surprise that printed books were the first to adopt player-driven storytelling. This was done in the form of branching path stories such as the *Choose Your Own Adventure* books, the main series of which ran for

nearly twenty years and contained one-hundred and eighty-five titles (Katz, 2008). While not the first books to utilize player-driven storytelling, the *Choose Your Own Adventure* series was responsible for the style's sudden surge of popularity. In its wake, numerous similar branching path books were created and enjoyed a fad-like level of popularity in the 1980's and early 1990's (Lodge, 2007).

It should be noted however, that the focus of *Choose Your Own Adventure* and similar books was on children and young adults. Because of that, and the amount of pages taken up by the numerous endings and branches, the stories themselves tend to be very simplistic, with a minimum amount of plot and character development. Relatively few of the endings were actually good or even neutral, and some titles exhibited a surprising lack of consistency. For example, in *Journey Under the Sea* (Montgomery, 1978) the hero is a deep sea explorer searching for the legendary city of Atlantis. Depending on the branches chosen, the player may discover that Atlantis actually is: an ancient civilization ruled by an evil king, a different ancient civilization divided into two warring factions, a secret government research facility, an alien stopping point, or a gate to the center of the world where a strange race of thought based beings reside. As can be seen, the possibilities share no real consistency and even directly contradict each other. Later titles such as *Beyond Escape!* (Montgomery, 1986) generally aimed for greater consistency and more plot development, though they featured fewer possible branches and endings as a result.

Like most fads, branching path books eventually lost popularity and faded into near obscurity, replaced by strong fully traditional stories such as the afore mentioned *Harry Potter & The Sorcerer's Stone* (Rowling, 1997), which has become one of the best selling books in history. Although the *Choose Your Own Adventure* series has recently been revived with a

combination of reprints and new titles (Lodge, 2007) they have yet to achieve their past level popularity, much less that of the best selling fully traditional story books targeted at the same age group (Amazon, 2009).

The author of this thesis has been unable to find any branching path books designed specifically for an older market, although it is quite possible that some were created during the height of the style's popularity. However, the Japanese visual novel genre offers a view of what longer and more serious *Choose Your Own Adventure* style books would be like. Though technically a type of video game, visual novels are essentially a branching path story, told primarily through text, accompanied by static visuals, music, and sound effects. On occasion, movies are also used but the primary focus remains on the text itself, while the audiovisual elements tend to serve as nice but unnecessary additions.

Though they have virtually no presence in the United States, visual novel games make up a popular genre in Japan with some titles such as *Fate/Stay Night* (Type-Moon, 2004) going on to inspire comics, television shows, and assorted merchandise. As the amount of text in *Fate/Stay Night* is equivalent to that of several commercial adult novels, it is able to create a branching path story with depth and character development on par with that of full length novels which use fully traditional storytelling. Just as in *Choose Your Own Adventure* books, *Fate* frequently asks the player to choose between one of several alternatives, many of which lead to the hero's untimely demise. *Fate* contains three primary branches, numerous minor and moderate branches, and over forty endings, five of which are full length good endings. The story structure itself does gain one aspect from its digital nature, as some key branches in the story are hidden from the player, with the path taken depending entirely on decisions made during previous minor branching points. Despite this, however, it remains easy to picture *Fate* more as

a novel than a game and, had it been released in printed form, very few changes to the writing would have been needed.

*Fate/Stay Night* and similar visual novel games prove that *Choose Your Own Adventure* style branching paths stories can be created with enough depth to appeal to an adult audience, though it is uncertain whether or not such titles will ever be created in printed form, much less gain any significant popularity in the US. Due to the ease of use factor provided by digital versions, particularly when dealing with hundreds or thousands of pages of text, they may instead continue to straddle the line between books and video games, playing to the strengths of both mediums.

The strengths of printed works are often tied with those of traditional storytelling itself. Though, as has been shown, books are not limited to fully traditional storytelling. An advantage unique to printed works, when compared to film and video games, is that books allow the author to create a story as short or long as he desires with little regard to development costs or the time limits imposed on TV shows and movies. In addition, unlike with the more visual storytelling mediums such as film and games, the characters, world, and events in the story need not be limited by what can be successfully created and shown on screen (though rapid increases in technology have nearly removed this barrier), the only limit is the creativity of the author's mind and his ability to describe his thoughts to the readers. Printed stories are also given more leeway with subject matter and style, allowing for drawn out and at times seemingly mundane sections that are typically shunned in the faster moving audiovisual based mediums.

For player-driven storytelling in particular, one of the largest weaknesses with printed works is the interface. Lacking a machine to automate the process, books utilizing player-driven stories require the player to flip back and forth between the pages with each choice that is made.



While workable, such an approach is inconvenient and greatly increases the risk of the player spoiling the story (discovering upcoming events and developments before he was meant to) either intentionally or unintentionally. Such an interface also makes highly player-driven styles of storytelling such as open-ended stories and fully player driven stories difficult if not impossible to create without enlisting the aid of a human moderator.

However, the primary weakness of books as a medium for storytelling is their lack of inherent audiovisual elements. While the author can do his best to describe the appearance and sounds of characters and objects, in the end it is left the player's imagination to fill in the gaps. While this issue can be, for the most part, reduced or mitigated by a skilled author, few will argue that well done audiovisual elements add to a story. It was in part the desire for audiovisual elements in stories with led to the rapid growth of the next of the three key mediums, film.

### *Storytelling in Film*

While film can be considered a fairly new medium compared to print, it can also be argued that, in a way, it dates back many centuries, encompassing live performances such as plays and puppet shows. Despite its relatively short lifespan, the art of telling stories via film has advanced tremendously since its inception and, while improvements continue to be made in the areas of filming equipment and special effects, it can nevertheless be considered a very mature medium. Once again, a complete history of the medium would be outside the scope of this thesis and would have little bearing on the core subject, so more attention will be paid to the use of player-driven storytelling in film and the strengths of film as a medium for storytelling.

Like print, film remains a popular stronghold of fully traditional storytelling. The majority of film's history was focused not so much on evolving the art of storytelling itself, but on discovering the best ways to match the visuals and audio to the story and how to present the entire story in a reasonable amount of time. To accommodate this focus, the majority of improvements to the film genre have revolved around image and sound quality instead of the stories themselves.

In all the mediums of storytelling discussed in this thesis, film is where player-driven storytelling has made the least progress. While some plays and other stage performances have allowed for a limited amount of audience interaction, the primary methods of presentation for both movies (the movie theater) and television (over the air broadcasts), make the implantation of interactive elements difficult from a technical standpoint. As with print, the nature of the medium greatly limits the amount of possible interaction that the player can have with the story, leaving any forms of player-driven storytelling other than multiple ending stories and branching path stories nearly impossible to create. And, as it is quite common to have large audiences experiencing films at the same time, more potential problems are introduced.

To demonstrate this, imagine a film utilizing branching path storytelling playing in a modern movie theater. As there is only one screen, the fair method of choosing between the branches would be to allow every audience member to vote for their desired choice, with the majority winning out. While such a scenario is technically possible, and has even been experimented with at times, there has never been any significant push make large numbers of branching path movies or outfit theaters with voting devices. The reasons should be clear. From a production standpoint, the costs of creating a modern movie are already very high. A branching story would require additional props and sets, many additional scenes, and possibly

even additional actors, significantly increasing production costs. From the standpoint of the audience, the problems are no less serious. While a majority rules vote is fair, the portion of the audience that lost the vote is likely to be disappointed. Experiencing the desired outcome may require multiple ticket purchases on the part of the players and even then success would depend entirely on the majority preference of the audience. Most importantly, if the choices made lead to a premature or bad ending, most of the audience may leave feeling that they were cheated out of their money.

Modern cable television could alleviate some of these issues. Instead of relying on majority rule, each household could be sent the part of the show which follows their chosen branch. However, the number of different variations of the show would likely soon become far too great for the production team to handle and branches that ended prematurely or received too few viewers to be worth continuing would still lead to many angry viewers.

With the aforementioned issues taken into account, it should come as little surprise that most serious attempts at using player-driven stories in film have either come under the guise of video games or have been created specifically for the home DVD market, effectively giving the lone player full control over which branches are chosen, while also making it easy for him to backtrack and make a different choice if the current branch does not turn out the way he wanted, similar to the method used in branching path books. It should be noted that, due to the combination of interactive and audio/visual elements, such interactive films straddle the line between film and video games and their proper classification is debatable, depending on how much control and interactivity is considered necessary to constitute a true video game. To clarify, interactive movies are not games so much as a collection of pre-made video clips (either

animated or live-action) tied together with a *Choose Your Own Adventure* style branching path story.

The first truly player-driven film was *Dragon's Lair* (Advanced Microcomputer Systems, 1983). Though originally released and marketed as a video game, and somewhat closer to true games than later titles, it can be said that was due more to the technological limitations of the time, which forced it to require an arcade cabinet to house the necessary hardware. However, the development of DVD movies and home DVD players has long since removed this need, and *Dragon's Lair* has since seen multiple re-releases on ordinary DVD movie disks.

*Dragon's Lair* enjoyed an initially strong run of popularity, mostly due to its professional quality animation, putting it graphically years ahead of the true video games of the time. However, the limited game play and repetitious video clips made for little lasting appeal and the series faded from prominence shortly after (Kent, 2001).

Although interactive films have continued to be sporadically released and the DVD movie format makes them easily playable by consumers, they have, as of yet, failed to gain any significant market share. Some recent children's titles such as *Choose Your Own Adventure – The Abominable Snowman* (Crames, Norton, & Doucette, 2006) have performed moderately well, but fall far behind the performance of popular traditional children's films (Amazon Bestsellers in Movies & TV – Kids & Family, 2009)

Some might argue that the plethora of DVDs being released today with alternate endings could also be called player-driven stories. However, that is a misclassification. A story is only player-driven if the player is allowed to influence the events in order to change the story. In a true multiple ending story, the player's own actions at one or more points during the story are the deciding factor in which ending is received. In a DVD with an alternate ending, such as *Heroes*

*Season 2* (Kring, 2008), the player is unable to influence the story and change the ending. The alternate ending is merely bonus content, which can be selected and watched from the DVD's menu, providing a look at a different way that the story could have gone. Since the alternate ending can only be viewed from a bonus menu, and not as a result of the player's interaction with the story, it does not qualify as a true multiple ending story.

The primary strengths of film as a medium for both traditional and player-driven storytelling clearly lie in the audiovisual presentation. The ability to see the landscape and events unfold, while also noticing even the subtlest nuances in a character's looks and voice, remove the need for large portions of the text found in printed works and make film far less reliant on the imagination of the player to interpret the creator's intent.

That same strength, however, can also be a weakness. The amount of work and manpower required to create the visuals and audio can be extremely expensive and time consuming. Film also seems to require a much tighter pacing in order to maintain player interest which, among other reasons, greatly limits the length of many potential film works and renders some types of stories nearly unworkable in a filmed format. In addition, the audiovisual presentation tends to force the story to focus more on outward events, often leaving small details and the inner thoughts and feeling of the characters hidden (Ryan, 2004).

While the amount of potential interactivity provided in certain film formats such as DVDs is a slight improvement over that of print, it is still too limited for anything other than simple multiple ending and branching path stories and the necessary production costs are far higher. Also, even though true multiple ending and branching paths stories are possible in both print and film, they still allow for only the smallest possible amount of player control, forcing the player to do nothing more than observe the events that take place in-between the various

branching points. For a far higher degree of interactivity in any type of storytelling, it is required to look to the newest medium, video games.

### *Storytelling in Video Games*

Video games are a far younger type of media than print or film and are in many ways still growing and evolving as both an art form and a medium for storytelling. They are also the most versatile medium, allowing for all the forms of storytelling mentioned except for fully traditional stories (since video games must, by definition, include some form of interaction). Because of these factors, they are the best medium in which to compare the merits of traditional and player-driven storytelling.

Due to hardware limitations, the earliest video games had no story, instead providing only a barebones setting where the action could take place. What story there was, if any, was limited to brief descriptions printed in instructions manuals or on the sides of arcade cabinets (DeMaria & Wilson, 2004) (Kent, 2001). The situation changed drastically when *Donkey Kong* (Nintendo, 1981) became the first game to make use of cut-scenes to tell a story in-game (Guinness World Records, 2008). Though *Donkey Kong*'s plot was extremely simple, showing the kidnapping of Pauline by the ape Donkey Kong and her subsequent rescue by Jumpman (the first incarnation of gaming's biggest icon, Mario), it marked the first use of the traditional three act story style in arcade history and slowly but surely began a wave of storytelling in games (Kohler, 2005).

It should be noted that, while *Donkey Kong* was the first arcade game to tell a story in-game, it was not the first video game to do so (though this can be argued depending on how the

term video game is defined). It was predated by the earliest IF (Interactive Fiction) and PC RPG titles. The IF genre (often referred to as text adventure games) began with *Colossal Cave Adventure* (Crowther & Woods, 1977), the first version of which was released in 1976.

Though fans of IF often prefer to think of it as its own unique medium (Montfort, 2005), it can be argued that IF is merely a genre of video games. Pure IF titles are entirely text based, with all areas, characters, and events being described solely in text. In turn, the player types the actions he wants the main character to take using simple vocabulary such as “go west.” Throughout its history, IF has utilized all the storytelling methods described here (other than fully traditional storytelling), with the most common being interactive traditional stories and branching path stories.

Though originally limited primarily to expensive mainframe computers, the rise of the PC gave IF a brief run of commercial popularity in the 80’s before being overshadowed and eventually replaced by graphical adventure games. Nevertheless, IF has continued to maintain a dedicated (though mostly non-commercial) niche following (Montfort, 2005).

Outside of IF, video games began to shift away from the quarter driven arcade market and towards the home with the advent of affordable home gaming consoles. This movement brought about a change in the nature of the games themselves, allowing for longer and deeper titles with more developed stories (DeMaria & Wilson, 2004) (Kent, 2001). Such a movement had already begun with PC titles, though differing technologies and user demographics kept the PC game market and the home console game market mostly independent of each other for quite some time, allowing both to develop slightly different preferred types of game play and storytelling.

The push for larger and more complex stories in games was primarily led by RPGs and adventure games, which soon began to rely on the strength of their stories as much as, if not more than, their game play to attract potential players (Kohler, 2005). While early games relied almost solely on interactive traditional storytelling or a complete lack of storytelling, it was not long before developers began experimenting with various forms of player-driven storytelling as well. What began with multiple ending stories such as *Chrono Trigger* (Squaresoft, 1995), soon led to a full exploration of player-driven storytelling of all types and now, popular titles can be found utilizing each of the forms of interactive storytelling discussed in this thesis. Today, games feature stories in all styles and genres, some of which contain a depth and quality which many claim rivals that of even the best books, movies, and television shows (Boyer & Cifaldi, 2006). A few standout titles using each method include: *Metal Gear Solid 4* (Konami, 2008) for interactive traditional storytelling, *Chrono Trigger* (Squaresoft, 1995) for multiple ending storytelling, *Front Mission 3* (Squaresoft, 1999) for branching path storytelling, *Fable 2* (Lionhead Studios, 2008) for open-ended storytelling, and *The Sims* (Maxis, 2000) for fully player-driven storytelling. Despite this diversity, a significant portion of the most popular story-centric titles continue to utilize interactive traditional storytelling or multiple ending storytelling instead of the more player-driven methods, although player-driven stories have still seen far greater success in video games than in any other medium and continue to gain ground (Amazon, 2009) (NPD Group, 2008).

As the stories in video games grew deeper, the technology used to present them improved as well. While early games such as *Donkey Kong* (Nintendo, 1981) were limited to blocky sprite based characters with a bare handful of colors and simplistic electronic sounds, modern systems



are capable of producing CD quality audio and images that are rapidly approaching photorealism (Guinness World Records, 2009).

This rapid progression can best be seen by comparing games from progressive generations of hardware (DeMaria & Wilson, 2004). *Donkey Kong's* simple sprites and beeps, characteristic traits of the early arcade and 8bit eras, evolved into complex detailed sprites and sweeping, though obvious digitized, musical scores in games such as *Chrono Trigger* (Squaresoft, 1995) during the 16bit era. This in turn led to better digitized sound, blocky 3D graphics, and stunning full-motion video scenes in 32bit games such as the groundbreaking *Final Fantasy VII* (Squaresoft, 1997). Voice acting was also experimented with during that period but did not become commonplace until the following generation of hardware when high capacity DVDs allowed for large amounts of pre-recorded voice work and music. That was also the era where 3D graphics quality improved to the point that characters could begin to show subtle facial emotions even outside of pre-recorded video sequences. These techniques were used to great effect in games such as *Final Fantasy X* (Square Enix, 2001) and refined and improved for the current generations of hardware. Today, games such as *Metal Gear Solid 4* (Konami, 2008) approach the level of quality seen in the best computer animated films, utilizing not only high quality graphics, sound, and voice acting, but film like camera and lighting work as well.

These advances in technology, combined with the myriad of possible storytelling and game play types which can be used, allow video games to combine many of the greatest strengths of both the print and film mediums along with strengths that are all their own. In addition to their strong film like audiovisual performances, games have no set time constraints, much like printed works, with popular titles taking anywhere from several hours to over a hundred hours to complete (Guinness World Records, 2009). In another nod to printed works,

games can provide deep insights into the thoughts and feelings of the characters if the creator so chooses.

But the innate strength of games is the level of interaction allowed. Though the exact details vary by game, even those utilizing the strictest forms of interactive traditional storytelling allow the player some freedom in deciding what is done between key events and let him aid the main characters in their quest by creating effective battle strategies, solving puzzles, and the like. This level of interaction can help the player form deep bonds with the characters, which may in turn lead him to feel emotions related to the events of the story differently and, at times, in a far stronger way than in print and film stories (Tavinor, 2005).

Despite all their strengths as a storytelling medium, video games are not entirely without weaknesses. The largest is the aforementioned fact that a game, by definition, must include some form of game play to truly be a game (Rollings & Adams, 2003). Without interaction a game ceases to be a game, becoming instead a type of film or digital novel. Because of this fact, some stories are ill-suited to video games because they contain few if any elements which could be used to create an entertaining form of interaction. As such, the types of stories best suited for games are those with strong elements of action, exploration, and/or puzzle solving. Though, as games continue to grow and evolve as a medium, there is a possibility that this situation will begin to change.

From a technical standpoint, although game designers are free to add numerous levels of interactivity to their games and stories (so long as they have the time, money, and desire to implement them), all of the game's rules, behaviors, and possible outcomes are still predetermined due to the innate limitations of modern technology. As such, limits must be placed on how players can interact with the stories including where they can go, what they can

say, and what they can do in any given situation. While the range of potential options presented to the player continues to grow, the technology and AI (artificial intelligence) that would be required to remove this limitation entirely does not currently exist and many question whether it ever will (Ryan, 2001).

This leaves player-driven stories, even in their strongest medium, as a limited and rather imperfect form. No matter how many options and forms of interaction are given to the player, there are still some which will be unavailable. Though, as will be discussed later in this chapter, both creators and players may in fact find (consciously or unconsciously) such limitations preferable to complete freedom, the reasons for which lie in the arguments for and against player-driven storytelling.

#### Arguments for Player-Driven Storytelling Supplanting Traditional Storytelling

The arguments for the supremacy of player-driven storytelling can most often be distilled into several key points. To avoid redundancy, this thesis will summarize the elements themselves, instead of attempting to directly cover every major work on the subject.

First, traditional methods of storytelling, having existed since the dawn of man, have long since been perfected and refined to a fine art. While writing styles and popular subjects change throughout history, many stories that were written decades or even centuries past retain their popularity today and are seen in no way as being inferior in plot, characterization, or style to the best modern works. Indeed, the works of great storytellers from ages past such as Shakespeare, Dickens, and Homer are still considered by many to be some of the finest ever created. Because of this simple fact, it can be argued that traditional storytelling has long ago reached its peak and

can advance no further as an art form (Barth, 1967). While good traditional stories can still be created, there will no longer be any great advancements to traditional storytelling itself, just more stories. Therefore, the freedom offered to the player, and to some extent the author, by player-driven storytelling is the true evolution of storytelling. The ability to influence the story, bend it to the player's preferences, and explore numerous deviations and side trails, allows player-driven storytelling to utterly surpass the old traditional styles, greatly increasing the player's interest and immersion (Boyer & Cifaldi, 2006).

Another argument is that, in the end, stories are created for the player. Therefore, the player's enjoyment or edification should be paramount. If the player is not happy with the way a story goes, particularly in regards to the ending, he may become disappointed and form a negative opinion of the story as a whole (Adams, 2004). Such a result may additionally discourage the player from purchasing other works created by the same author or studio. Allowing the player to move the story in whatever way he chooses should, in theory, ensure that he enjoys the story no matter what his preferences may be.

A somewhat opposing but still supportive viewpoint is that player-driven storytelling allows the story's creator to freely explore multiple potential outcomes and progressions of the story. The creator may feel that several different outcomes all provide important aspects of the story and better demonstrate the consequences of the decisions made by the hero (Adams, 2004). Therefore, the player should be allowed to experience as many of those outcomes as he wishes, whether he just chooses the path that most closely matches his preferences or is drawn to explore them all and discover every last possibility.

Finally, it is argued that the ability to more fully control the characters in a story will allow the player to form a deeper and more meaningful bond with the characters. And the deeper

his connection to the characters grows, the greater the player's stake will be in the story as a whole. Able to do more than merely observe and make minor decisions, the player can potentially become far more attached to and invested in the story than he can with any traditional story (Glassner, 2004).

When looking at player-driven storytelling with a mindset based around these arguments, it becomes easy to believe that traditional storytelling is forever doomed to be an imperfect form. It has long ago reached its potential, served its purpose, and is ready to be put aside in favor of a newer and better form (Barth, 1967) Linear and unchanging, it allows the player to observe stories as they take place but prevents him from ever fulfilling his true desire and becoming an actual part of story (Ryan, 2004). While it can be argued whether or not such desires are truly inline with the views of the average player, it is an undisputable fact that traditional forms of storytelling either prevent the player from becoming a part of the story entirely or at least severely limit his involvement. If it is assumed that what the majority of people want most from a story is to enter and truly become an active part of it, then traditional storytelling methods can never fully fulfill that desire. Only player-driven storytelling can provide the level of immersion the player wants so it is clearly the way of the future and no further discussion should be needed.

## Arguments Against Player-Driven Storytelling Supplanting Traditional Storytelling

### *Arguments Based on Story Structure and Player Preferences*

Although player-driven storytelling has many passionate supporters, traditional storytelling does as well. While the superiority of player-driven storytelling can not be denied if

it is assumed that what most people really want is become as active a participant in the story as possible, the merit of that assumption is questionable.

To begin, it can not be denied that most of what are considered the greatest stories, even in video games, the medium best suited to player-driven storytelling, fall decidedly on or near the traditional end of the storytelling spectrum (Kumar, 2008). While it can be argued that traditional stories are better regarded in print and film works due to the limitations of the mediums, their continued dominance in video games is harder to push aside. Personal preferences must be accounted for but if player-driven stories are innately superior, the vast majority of people should regularly hold them above even the best traditional stories, something that has yet to happen.

In fact, it can be argued that the reason traditional storytelling has lasted so long in its current form is not because mankind lacked the inspiration or technology to create a more interactive method, but because traditional methods of storytelling not only work well, but are what most people expect and want (Glassner, 2004). As previously stated, it can be argued that traditional storytelling has reached its peak as an art form. But that viewpoint does not necessarily imply that traditional storytelling is outdated and soon to be surpassed. It could be said that skilled storytellers do not have to worry about reinventing the wheel or chasing hazy uncertain goals such as advancing the art form, but can instead devote all their effort to creating high quality stories.

Regardless of which view is taken, it can safely be assumed that what most people want most from a story is to be entertained. Whether a story is happy, tense, terrifying, or heartbreaking, there is a certain degree of enjoyment and entertainment present in a good story no matter which emotions are evoked. The issue is whether or not people find being an active

participant in the story more enjoyable than taking a somewhat passive role. This brings up two important questions. Does interactivity itself make a story more enjoyable? Does the ability to influence events innately make a story more interesting or engaging? To better explore the possibility, some “what if” scenarios are necessary.

In the bestselling novel *Harry Potter and the Sorcerer’s Stone* (Rowling, 1997), early in the story Harry discovers that he is a wizard and can journey to Hogwarts School in order to learn magic, which leads to a long series of discoveries, friendships, and adventures. But what if the player did not trust the message Harry received and decided not to go to Hogwarts? Would it still be an interesting story? Maybe. But then again, maybe not. Similarly, if Harry later accepted an offer to join the dark lord Voldemort, the entire story would change drastically, and not necessarily in a good way. It might still make for an interesting story, or perhaps Voldemort would betray and kill Harry shortly after. To be fair, turning down the chance to be wizard or deciding to join with the main villain are probably choices which relatively few people would make. Preventing the murder of Harry’s parents at the beginning of the story however, seems like a far more plausible choice, though still one which would in all likelihood make the rest of the story far less interesting.

To state it simply, the most common decision does not always make for a good story. When given the choice, people often take the path that seems safer in order to reduce tension and conflict (Glassner, 2004). For a good example, one only needs to look at the genre of slasher horror films. In many such films, the characters are frequently thrust into deadly confrontations with the villain, often because of their own poor decision making. It is quite reasonable to assume that, if given control, most players would wisely keep the heroes from wandering off alone in the dark or opening a cursed tomb. Such decisions naturally stem from both common

sense and a desire to protect the heroes from the danger that they would otherwise foolishly walk into. But without the foolish mistakes made by those heroes, the entire story would fall apart. The villain would have far less opportunity to terrorize the heroes and would likely be defeated rather easily. It would still be a story but, despite his careful control of the events, probably not the one that the player really wanted to see.

Similarly, in *Metal Gear Solid 4* (Konami, 2008) many players might be inclined to shoot the shifty arms dealer Drebin when he first appears, either out of suspicion or surprise at his sudden appearance. But without Drebin's assistance, hero Snake would quite likely be overpowered and killed by enemy forces during a later mission, providing a very unsatisfying conclusion to the story, despite the player's best efforts.

This concept is also clearly illustrated in *Choose Your Own Adventure* books such as *Journey Under the Sea* (Montgomery, 1978). Although the player is free to make a large number of choices throughout the course of the story, the vast majority of those choices end with the hero either dying or being forced to give up his quest. While some choices are obviously foolish or dangerous, other bad choices initially appear perfectly sensible.

Often, it is only a particular series of events that truly makes a story interesting. If given too much control, most players will undoubtedly make a wrong choice at some point during the story. Whether that choice is due to compassion (i.e. saving a character's life), intelligence and common sense (i.e. not releasing the evil monster), personal preference (i.e. wanting the hero to fall in love with a certain person), or any other reason, the remainder of the story could potentially become far less enjoyable as a result and may even come to an abrupt and disappointing end. When faced with such a result, some players will merely return to an earlier



point and try again, but others will likely lose interest entirely and never uncover the most enjoyable parts of the story.

It even stands to reason that the chance of players abandoning the story or missing the best path increases with the amount of freedom they are given. In branching path stories such as *Journey Under the Sea* (Montgomery, 1978) and *Fate/Stay Night* (Type-Moon, 2004), most if not all of the branching points are obvious as the player is clearly asked to make one of several possible choices. If the choice made leads to an undesirable outcome, it is generally a rather simple matter for the player to backtrack to the point where the bad choice was made and choose a different option. However, in open-ended stories and fully player driven stories, where many more choices are made and both the options and outcomes are often far less obvious, it can prove extremely difficult for the player to determine exactly where he went wrong or what he could have done differently in order to produce better results.

Even the more controlled forms of player-driven storytelling such as multiple ending stories and branching path stories can be said to have their potential drawbacks. Although such stories allow players a certain degree of influence over the main plot without allowing them to get lost or turn the story down an uninteresting path, they can also serve to reduce the tension and impact of many key decisions and events (Adams, 2004).

For a poignant example, a key moment in the game *Final Fantasy VII* (Squaresoft, 1997) involves the sudden and unexpected death of a very important character. The scene led to an unprecedented player reaction at the time and has been frequently called one of the most shocking and emotional moments in the history of video games by both fans and respected publications such as *Gamepro Magazine* (The Gamepros, 2006). However, would the scene have created same impact on individual players or the gaming community at large had it been

part of a branching path story? Certainly not. While the initial scene may have been shocking enough the first time it was viewed, it would ultimately be lacking in both power and impact since the player would know that he could merely return to the previous branch and select another choice in order to obtain a different outcome. While it is possible to create scenes with a strong emotional impact in any type of story, they are far less powerful when the player knows he can simply go back and choose a happier outcome (Adams, 2004).

Similarly, multiple endings can potentially reduce the power of the story's finale. If one ending is clearly the best, others will become less satisfying. In addition, the theme of the ending and the story itself can easily become lost or muddled if the player is able to watching several alternate endings in a row by merely going back and making a different choice at the final branch. In his paper on multiple ending games, veteran game designer *Ernest Adams* states that what story motivated players most want in an ending is a satisfying, sensible conclusion to what came before, which does not necessarily require multiple possible outcomes (Adams, 2004).

Game writer *Chris Kohler* provides a strong synthesis of these arguments in his book *Power-Up* (Kohler, 2005), noting that the most effective stories in recent video games are told in an entirely linear fashion while the player interacts with other aspects of the game such as side-quests and battles. He concludes that, in the end, the best goal is to make the player feel as though he is in control of the story even though he is not. This would mean that what most players truly want, either consciously or unconsciously, is not full control over the story but the illusion of control. And, as can be seen by the continuing popularity of novels and films using fully traditional stories across all demographics, despite the rise of video games, even being a mere observer with no illusion of control is often enough.

### *Arguments Based on the Creation Process of Player-Driven Stories*

While many arguments in support of traditional storytelling are based on the strength of various storytelling methods and assumptions about what players want most from a story, others look at the problem from a more practical level. Instead of attempting to determine which type of storytelling method is best suited for telling a story or entertaining the players, the following arguments are built around the creation process of traditional and player-driven stories.

Essentially, the basic process is the same for both types of stories. The story is thought up, written down, and then either printed, filmed, or adapted into a game. But that is where a potential problem arises. Because they must account for multiple branching paths, endings, and the like, media which utilizes player-driven stories requires more time and money to create than comparable media utilizing traditional stories. The more branches, endings, and other potential interactive elements that are added, the more time and money is needed to create the story (Adams, 2004).

There are only two partial exceptions to this rule. First, player-driven stories in print media, while still far more time consuming to create than an equivalent traditional story, are still relatively inexpensive due to the low amount of people and equipment needed to create them. Second, fully player-driven stories, as they consist solely of a setting and rule-set, vary significantly in the amount of time and money required in their creation. Depending on the particular title, their creation can require either far less or far more time and money than fully traditional stories.

To give a simple example of this rule, suppose that a print author can write a six-hundred page fully traditional story in one year. But what if the author wanted to write a similar branching path story instead? The original six-hundred pages would still be required, but the

author would also have to write a large number of additional pages to describe what happens when the player chooses a branch which deviates from the original plot. Depending on the number of branches and how long the story continues after branching, what was originally a six-hundred page novel could easily end up with eight-hundred pages, one-thousand pages, or far more. Each additional page required would in-turn increase the amount of time necessary to complete the story. Finally, since the author cannot receive royalties until after the story is complete, he will have to wait far longer for the expected funds.

While a lone author could potentially afford to take the necessary time to create a massive player-driven story, his day to day expenses are far less than that of even the smallest film or game studio. Employee salaries and operating expenses must be paid regularly throughout the entire development process. The longer a film or game takes to create, the higher the total development costs will rise, and the more money the finished product will have to earn in order to become profitable. It is true that some assets can be reused during development, so a player-driven story with two main branching paths will not take twice as long to create as an equivalent fully traditional or interactive traditional story, but the additional time and expense will still be significant and will increase greatly with every new branch (whether major or minor) that is added.

There are some common ways to work around this issue. For branching path stories, the branches can be made as similar as possible to allow the creators to reuse a large amount of assets and significantly reduce the necessary development time. In video games, procedurally generated content (which refers to assets which are automatically generated by the computer, based on a certain rule set) can also be used to much the same effect (creating new areas and NPCs with little time and effort). However, if the branches are too similar there is little reason to

use a branching path story to begin with and players may grow tired of the repetition.

Procedurally generated content often suffers from heavy repetition as well and, if not carefully checked over by a real person, has a tendency to produce bland and occasionally problematic content.

Another approach, which works with all types of player-driven stories, is to simply make main the main plot shorter. For example, suppose a developer creates a game using a branching path story with two main branches, each one fifteen hours in length. But, if that developer spent the same amount of time and money creating a similar game with an interactive traditional story, it could have potentially been twenty-five hours long instead. The question is, which is the better approach? Would the story and players have benefited more from a single twenty-five hour path or two fifteen hour paths? There is no definitive answer to such a question, as it would depend entirely on the developer and the writers. But typically, the more branches, endings, and possible interactions a story has, the more time and money is required to create it and, as a result, the shorter and simpler the main plot becomes. Though there are notable exceptions to this principle, an examination of popular traditional and player-driven stories across all mediums appears to confirm it as a general rule.

## Conclusion

When comparing the arguments both for and against the supremacy and eventual dominance of player-driven storytelling, both sides present strong points. Though traditional storytelling can potentially be said to win out, due to the larger number of supporting arguments, there is no definitive victor.

Traditional storytelling also has a much stronger historical presence across all three mediums and titles based on traditional stories have continued to thrive despite the growth of various player-driven methods of storytelling. However, it could be argued that traditional storytelling only maintains its current dominance because of its strong history and that, given time, people will grow more used to player-driven stories and come to accept them as the better format, at least in some mediums.

From a development perspective, player-driven storytelling can allow for some very unique experiences and open up many interesting new directions in all mediums. Though, at the same time, it can create new problems and prevent creators' stories from achieving their intended flow, progression, and impact. The additional development time and costs required by player-driven stories also hinders their potential. Such issues could potentially encourage many creators to avoid player-driven stories, regardless of superiority or preferences. And, though that problem could eventually be reduced by advances in technology, it seems unlikely to ever disappear entirely.

Despite all these factors, in the end, most of the key arguments made by both sides are based on nothing more than assumptions of what players want and enjoy most in stories. While logical assumptions can be made based on history and the basic elements of storytelling itself, they are still nothing more than assumptions. To better determine which form of storytelling is likely to dominate in the future, more research is needed into consumer thoughts and preferences on the issue of storytelling in all three mediums. The following chapters will focus on the methodology and results of one such study.

### CHAPTER 3. METHODOLOGY

As detailed in Chapter 2, many of the key arguments both for and against the supremacy of player-driven storytelling are based on assumptions of what players want most from stories. While such assumptions are generally well thought out, they are still no more than assumptions. In order to form a more decisive conclusion, additional research is needed to determine the preferences of the average player.

It should also be noted that, as also detailed in Chapter 2, what a player consciously thinks he wants from a story may not be the same as what the player truly wants, as judged by his enjoyment of the story. To briefly reiterate, a player who says he prefers the control given in a highly player-driven story might, as a result of that control, turn the story down a path that he finds less enjoyable than he originally thought. In such a case, it is quite possible that the player would have received more enjoyment from something such as an interactive traditional story, which gives him a strong illusion of control while still ensuring that the main plot progresses in an interesting and entertaining way. Because of situations such as these, any related study must not only record a player's stated preferences, but also attempt to ascertain if they are the same as his true preferences.

## Research Design

The author of this thesis believed that that the most effective way to research storytelling preferences was through the use of a widely disseminated survey. Following is a copy of the survey along with a detailed analysis of the purpose behind each question.

### Age:

While gathering information about the respondent's age was not strictly necessary, it was thought that patterns might emerge when comparing the respondents' ages to their preferred storytelling styles.

### Gender: M / F

Knowledge of the respondent's gender, while not absolutely necessary for the study, was also seen as a source of interesting additional information. Specifically, it could confirm or deny whether there is a gender gap in storytelling preferences, something which is often assumed in relation to video games.

1. On average, how many hours a week do you spend playing video games:

--0-5

--6-10

--11-15

--16-20

--20+



As the primary medium for player-driven storytelling, video games are likely the best medium in which to accurately gauge player preferences. Determining the average playtime of the respondents helps show their interest the medium as a whole. Such data could also potentially relate to the type of storytelling preferred.

2. Mark your three favorite types of video games:

--Action

--Adventure

--Fighting

--FPS (First Person Shooter)

--MMO RPG (Massively Multiplayer Online Role Playing Game)

--Music/Rhythm

--Platformer

--Puzzle

--Racing

--RPG (Role Playing Game)

--Sports

--Strategy

--Other (please specify)\_\_\_\_\_

Many game genres tend to focus on one method of storytelling over another. Therefore, knowing the respondent's favorite genres helps put the rest of his answers into context. Because of the tendency of genres to favor one storytelling method over others, there is also a possibility of a relationship between favorite genres and preferred storytelling methods. All of the major

video game genres are listed, with an additional space remaining for respondents to write any other genres.

3. When playing games I generally:

--Pay close attention to dialogue and cut-scenes.

--Pay some attention to dialogue and cut-scenes.

--Pay little attention to dialogue and cut-scenes.

--Skip past dialogue and cut-scenes.

--Other (please specify)\_\_\_\_\_

If a player has a tendency to ignore or pay little attention to the story in a game, it is likely that he will have far less interest in the style of storytelling than one who closely follows every word. This question provides that context and can also be used to highlight a potential trend, as players who pay more or less attention to stories in general might prefer certain storytelling methods.

4. I prefer games that...

--Have a single well done story, even though I can't change the outcome.

--Have a single well done story, but with multiple endings.

--Have two or three very different story paths I can choose between.

--Are very open and let me make my own story.

--Have no story at all.

--Other (please specify)\_\_\_\_\_

This is a key question, as it directly asks about the storytelling method preferred. The options given were created based on the most common types of storytelling structures found in games. An additional write-in option was left for those with less common preferences.

5. List three games you have played that you think have extremely good stories.

As previously mentioned, it is possible that a respondent's stated storytelling preferences may not match his true preferences. This question acts as a check for such a situation by comparing the storytelling methods used in the listed games with the response given to question four to see how closely the two match.

6. Do you have any experience with Interactive Fiction (aka. text adventure games)? If so, what is your opinion of the style?

--I like the style.

--I dislike the style.

--I neither like nor dislike the style.

--They need graphics.

--I've never played any.

This is a simple question to gauge the respondent's experience, if any, with Interactive Fiction titles. As it is not a mainstream genre, it was assumed that many respondents would have little to no experience with them. Despite that, IF provides a strong example of certain types of player-driven storytelling so the data from respondents who are familiar with IF could be particularly valuable. As an additional note: as IF titles are most often composed entirely of text,

with no accompanying imagery or sound, an option was added for those who dislike the style specifically for that reason.

7. Have you ever watched an interactive movie (one that allowed for choices on your part which changed the story)? If so, what is your opinion of the style?

--I like it better than regular movies.

--I like it less than regular movies.

--I like it just as much as regular movies.

--I've never watched any.

This is another simple question, the goal being to gauge the respondent's experience with interactive films. Since interactive films currently comprise a very small niche, it was unlikely that this question would generate many positive responses. The opinions of those that are familiar with the style, however, may help determine its future appeal.

8. Have you ever read an interactive novel (such as the *Choose Your Own Adventure* books)? If so, what is your opinion of the style?

--I like it better than regular novels.

--I like it less than regular novels.

--I like it just as much as regular novels.

--I like the idea, but want a more diverse selection of books.

--I've never read any.

Because player-driven branching path novels had a very popular run in the past, it seemed reasonable to assume that the majority of respondents would have at least some

experience with them, despite their current slump. As with interactive films, the responses to this question can potentially be used to determine the future popularity of the style. As an additional note: because the majority of interactive novels in the past have focused on children's adventure stories, an option was added for those who would be interested in seeing the style branch out to cover more genres of writing.

9. If given a choice, I prefer my video games to have...

--A single well done story which I can't change.

--A single well done story where I can choose the ending.

--A story with several different paths I can choose from.

--A basic story where I can do as I please and make my own story.

--No story at all.

--Other (please specify)\_\_\_\_\_

Though similar to question four, this question has a slightly different context and, when combined with the following two questions, acts as a summary of the respondent's opinions. It also served as a consistency check by comparing the respondent's answer to that of previous questions such as question four to ensure that they were not choosing answers at random.

10. If given a choice, I prefer my movies to have...

--A single well done story which I can't change.

--A single well done story where I can choose the ending.

--A story with several different paths I can choose from.

--Other (please specify)\_\_\_\_\_

Similarly to the previous question, the respondent was asked to summarize his storytelling preferences in film, both to provide a direct answer and as a consistency check.

11. If given a choice, I prefer my novels to have...

--A single well done story which I can't change.

--A single well done story where I can choose the ending.

--A story with several different paths I can choose from.

--Other (please specify)\_\_\_\_\_

The last of this series of summary questions deals with the respondent's storytelling preferences in printed works. When taking questions nine, ten, and eleven as a set, it was interesting to see if the majority of participants preferred the same storytelling method across all mediums or if their preferences varied.

12. Do you have any additional comments about your story preferences in games, movies, or novels?

The final question allowed the respondent to write in any additional comments they may have had on the subject which they were not able to bring to light in the previous questions.

### Sample

A survey of this type could be carried out using a completely random sampling of at least two hundred and fifty respondents in order to generate a solid conclusion on the views of the American population as a whole. Though, due to the importance of video games in such a study,

the author of this thesis instead used a targeted random sample of one hundred and eighty people to obtain a reasonable view of consumer preferences by focusing on people who have at least a moderate amount of experience with all three key storytelling mediums (print, film, and video games). The survey was deployed over the internet to facilitate easy data gathering with minimum expense. While this method did make it difficult to record many concrete details about the sample group itself other than that they are internet users (most likely from English speaking countries) of a certain age and gender (which were asked for in the survey) but, considering the subject matter of the survey, few personal details were needed. Also, considering the sites where it was posted, it can be reasonably assumed that most respondents are residents of the US and Canada. By nature, any randomly sampled survey contains risks related to the size and origin of the sample. Though, when disseminated widely enough, it is likely that an internet survey can be counted on to bring in a solid, though not perfect, random sample of people. That was the method taken by this study.

### Data Collection

Data collection for the survey operated on a very straightforward process. As the survey itself was self-explanatory, participants needed no coaching or additional instructions. The survey was hosted at <http://pebbleversion.com/LSurvey/> for approximately eight weeks during the summer of 2009, allowing participants to complete the entire survey in a several minute period from virtually any computer with an internet connection.

In order to attract an appropriate group of participants, links to the survey were sent out to professional members of the print, film, and game industry using the IGDA (International

Game Developers Association) writers' mailing list. Links were also posted on several game related websites and / or their forums including GameFAQs (<http://www.gamefaqs.com>), 1Up (<http://www.1up.com>), and GameSpot (<http://www.gamespot.com>) in order to attract ordinary consumers from outside of the industry.

Participants' responses were recorded by the survey software (LimeSurvey) and sent to the author of this thesis, who then exported them into a spreadsheet to track the overall totals and patterns. Copies of each individual survey were also kept in order to review write-in answers and perform consistency checks.

### Data Analysis

The collected data was analyzed in Microsoft Excel. The contents of each completed survey were first checked for consistency (as mentioned in the Research Design) to ensure that the respondent did not choose answers at random. Any potentially questionable responses are noted as such in Chapter 4. The primary analysis required nothing more than a breakdown of what percentage of respondents chose each response to the various questions. Afterwards, further analysis was conducted by searching for correlations between the responses to certain questions, such as gender and storytelling preferences, using simple mathematics. The final analysis of the data involved comparing the storytelling methods used in the games listed in response to question five with the preferred storytelling method chosen by respondents in questions four and nine, to determine how frequently the two matched, as low correlation between the two could indicate that many players do not consciously realize what they truly want most from stories.



## Validity and Reliability

The author of this thesis believes that, if answered truthfully, the questions in the survey provided an adequate and accurate method of determining the storytelling preferences of the average consumer, provided that there were no undetected problems with the sample. A token system was utilized to help ensure that no one took the survey more than once, but, considering the content and nature of the survey, it seems unlikely that respondents would have had any reason to answer untruthfully so there should be no issues with the authenticity of the data.

The only likely issue which could compromise the validity or reliability of the data would be a problem with the sample group. As is possible with any random sample, there is a small chance that the sample became overpopulated with a particular sub-group, therefore skewing the data towards the preferences of that group instead of the consumer base as a whole. However, as no obvious imbalances were noticed during the analysis of the data, it should be safe to assume that no such skewing occurred.

## CHAPTER 4. RESULTS

### Demographics

Out of 180 total respondents, a total of 132 (73.3%) listed their gender as male while the remaining 48 (26.7%) identified themselves as female. Listed ages ranged from 13 to 60 with a mean of 24.5 and a median of 22, with largest concentration of respondents lying in the 16 – 26 range. The full data spread is represented in Figure 2. Note that the data contained one clearly erroneous age entry of 150. For this analysis, it was assumed to be 15.

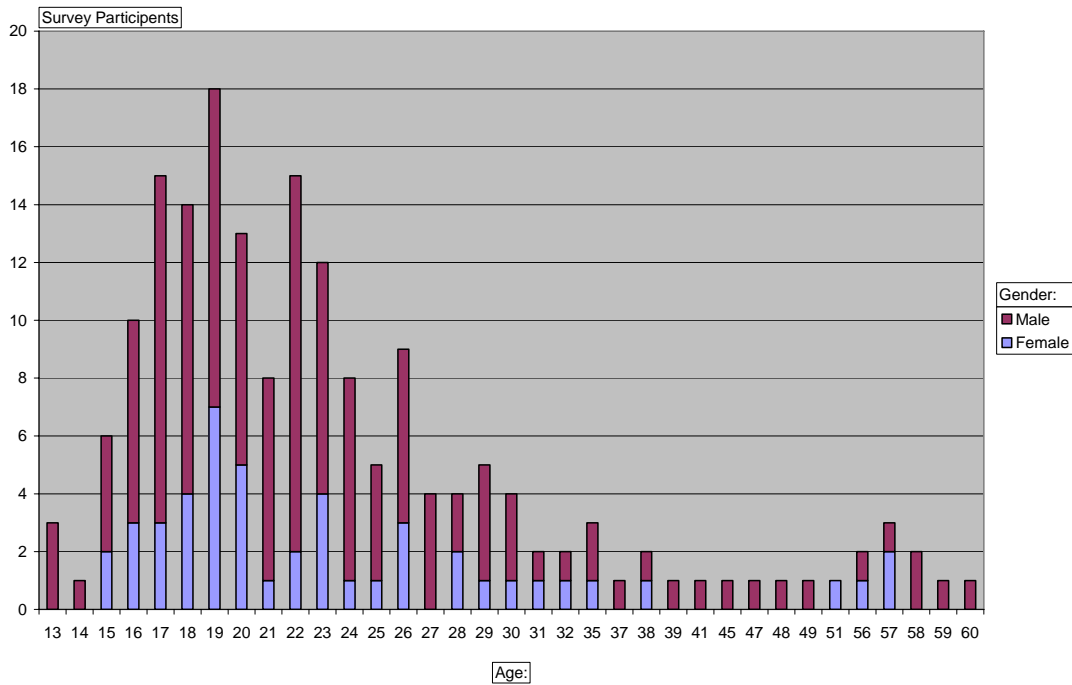


Figure 2

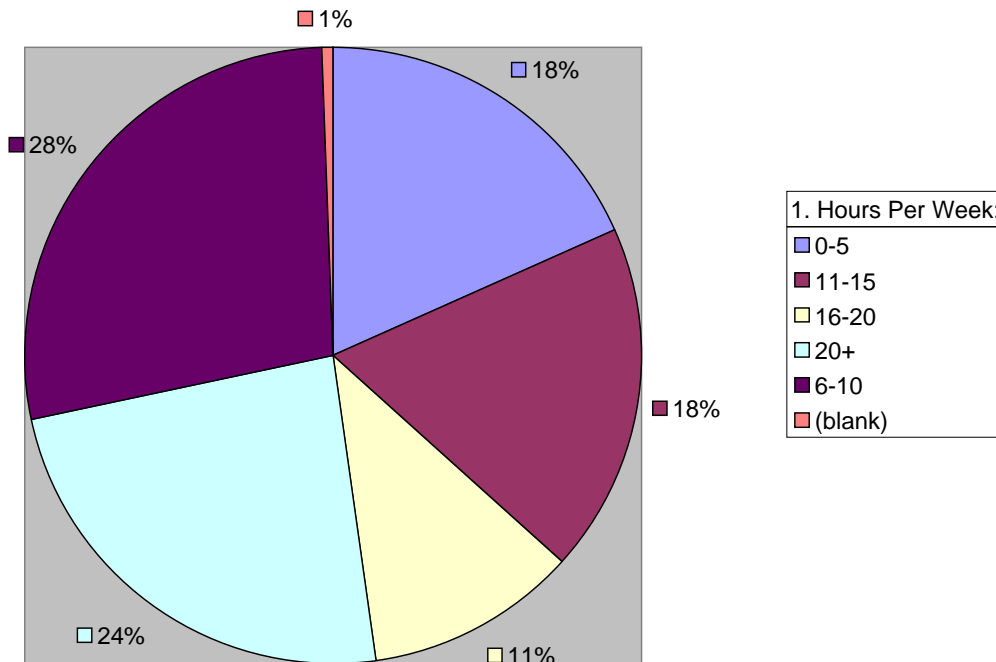
## Data Consistency

As detailed in Chapter 3, responses to the similar questions 4 and 9 in the survey were used as a consistency check to guard against random answering. Of the 180 respondents, five marked highly inconsistent responses to the two questions and an additional eight marked somewhat inconsistent responses. These thirteen questionable respondents were further analyzed by looking closely at their responses to other questions, particularly write-in answers such as questions 5 and 12. This further analysis led to the reasonable assumption that eleven of the thirteen inconsistent answers were due to simple user error, as there was a high degree of consistency and intelligence present in those respondents' other answers. In the case of the remaining two respondents, the author of this thesis was unable to conclusively determine if their inconsistent answers were due to user error, random answering, or deliberate intent to provide false data. After some consideration, those two responses were left in with the assumption that the inconsistency was caused by user error because, even if the assumption proved false, they would have little negative impact on the overall results of the data analysis.

## Gaming Habits

As shown in Figure 3, 81% of respondents can be considered to be at least fairly serious gamers, spending six hours or more per week playing games, with the largest concentrations being in the 11-15 and 20+ hour ranges.

### Gaming Hours Per Week



**Figure 3**

When allowed to select their three favorite genres of video games, the three most popular choices were RPGs (131 responses), adventure games (72 responses), and FPS games (52 responses). Both RPGs and adventure games are genres traditionally known for highly story centered games. While FPS titles are traditionally lighter on stories, there are some notable exceptions and, over the past few years, the genre has seen an increased focus on storytelling. To contrast, the three least popular genres were racing games (9 responses), sports games (13 responses), and music/rhythm games (16 responses). Games from all three of those genres typically feature little to no story. A complete breakdown of the respondents' favorite genres can be found in Table 1.

Action	39	21.67%
Adventure	72	40.00%
Fighting	18	10.00%
FPS (First Person Shooter)	52	28.89%
MMORPG (Massively Multiplayer Online Role Playing Game)	41	22.78%
Music/Rhythm	16	8.89%
Platformer	31	17.22%
Puzzle	26	14.44%
Racing	9	5.00%
RPG (Role Playing Game)	131	72.78%
Sports	13	7.22%
Strategy	47	26.11%
Other	13	7.22%

**Table 1**

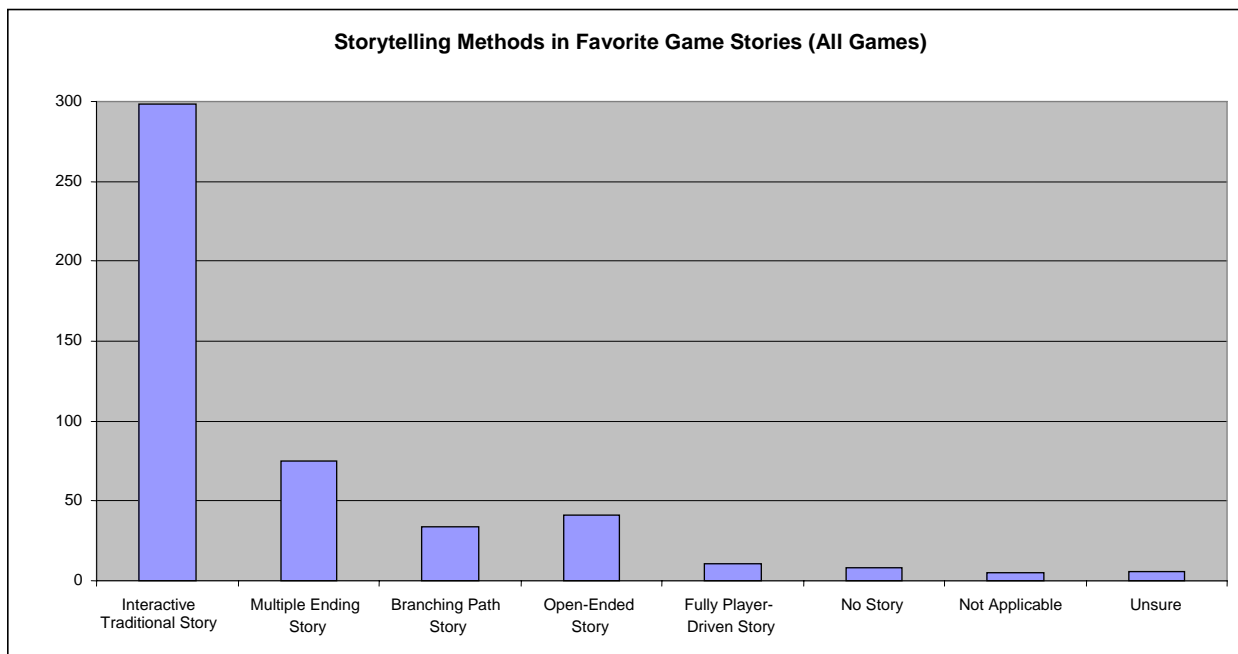
In addition, nearly 70% of respondents described themselves as paying close attention to dialogue and cut-scenes in games while less than 10% reported paying little attention to or skipping dialogue and cut-scenes.

When asked to list three games which they thought had particularly good stories, respondents listed a total of 478 games and series. 199 of those responses were unique games and an additional 24 were unique series, as opposed to individual games from those or other series. Series mentions are, for the purposes of this analysis, treated the same way as individual games, though some are listed as having two storytelling styles due to a strong history of using different styles throughout the series.

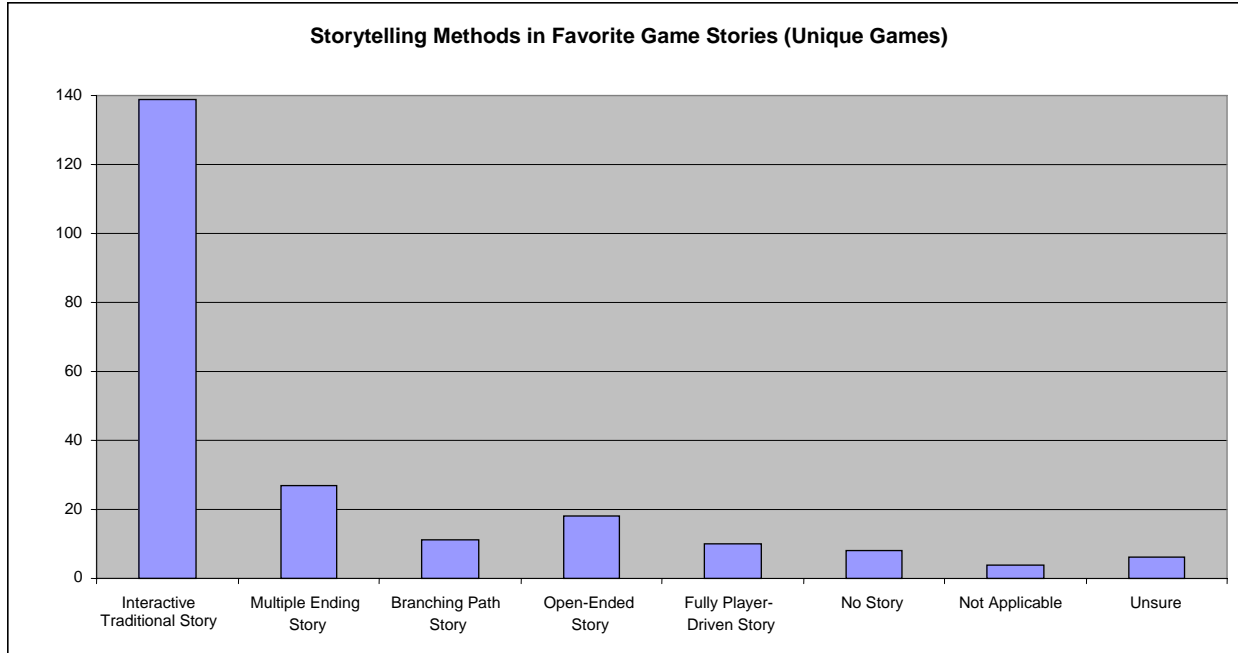
The five games cited most often by respondents, and the storytelling styles used in them, were: *Final Fantasy VII* with 16 mentions (ITS (Interactive Traditional Story)), *Chrono Trigger*

with 14 mentions (MES (Multiple Ending Story)), *Xenogears* with 14 mentions (ITS), *Final Fantasy X* with 13 mentions (ITS), and *Mass Effect* with 13 mentions (BPS (Branching Path Story)). It is interesting to note that all of the top five games except *Mass Effect* were created by Japanese developer Square Enix (formally known as Squaresoft), as are many other of the more frequently cited titles.

Approximately 62.3% of both all the cited games and series and only the unique entries use interactive traditional storytelling methods. A breakdown of the storytelling methods used in the games is shown in the following figures.



**Figure 4**



**Figure 5**

A complete list of all the cited games, alphabetized and marked with the storytelling methods used, can be found in Appendix A. Please note that in order to improve readability and ease of analysis, various spelling and formatting errors have been corrected and answers such as, “N/A”, “not sure”, and other generic filler answers have been removed from the aforementioned list. One legitimate game was also removed because, at the time of this writing, it had not yet been released to the public, leaving the writer of this thesis unable to determine the storytelling style it will use.

### Story Preferences

The responses to questions about different types of storytelling are summarized in the following tables.

<b>Question 4. I prefer games that...</b>		
Have a single well done story, even though I can't change the outcome.	58	32.22%
Have a single well done story, but with multiple endings.	46	25.56%
Have two or three very different story paths I can choose between.	26	14.44%
Are very open and let me make my own story.	15	8.33%
Have no story at all.	9	5.00%
Other	22	12.22%
No Answer	4	2.22%

**Table 2**

<b>Question 6. Do you have any experience with Interactive Fiction (aka. text adventure games)? If so, what is your opinion of the style?</b>		
I like the style.	52	28.89%
I dislike the style.	12	6.67%
I neither like nor dislike the style.	30	16.67%
They need graphics.	16	8.89%
I've never played any.	61	33.89%
No Answer	9	5.00%

**Table 3**

<b>Question 7. Have you ever watched an interactive movie (one that allowed for choices on your part which changed the story)? If so, what is your opinion of the style?</b>		
I like it better than regular movies.	10	5.56%
I like it less than regular movies.	39	21.67%
I like it just as much as regular movies.	12	6.67%
I've never watched any.	109	60.56%
No Answer	10	5.56%

**Table 4**



<b>Question 8. Have you ever read an interactive novel (such as the Choose Your Own Adventure books)? If so, what is your opinion of the style?</b>		
I like it better than regular novels.	11	6.11%
I like it less than regular novels.	56	31.11%
I like it just as much as regular novels.	30	16.67%
I like the idea, but want a more diverse selection of books.	54	30.00%
I've never read any.	19	10.56%
No Answer	10	5.56%

**Table 5**

<b>Question 9. If given a choice, I prefer my video games to have...</b>		
A single well done story which I can't change.	51	28.33%
A single well done story where I can choose the ending.	39	21.67%
A story with several different paths I can choose from.	48	26.67%
A basic story where I can do as I please and make my own story.	8	4.44%
No story at all.	7	3.89%
Other	16	8.89%
No Answer	11	6.11%

**Table 6**

<b>Question 10. If given a choice, I prefer my movies to have...</b>		
A single well done story which I can't change.	142	78.89%
A single well done story where I can choose the ending.	12	6.67%
A story with several different paths I can choose from.	14	7.78%
Other	1	0.56%
No Answer	11	6.11%

**Table 7**

<b>Question 11. If given a choice, I prefer my novels to have...</b>		
A single well done story which I can't change.	147	81.67%
A single well done story where I can choose the ending.	12	6.67%
A story with several different paths I can choose from.	7	3.89%
Other	3	1.67%
No Answer	11	6.11%

**Table 8**

As shown, the vast majority of respondents expressed a preference for traditional storytelling styles in both print and film. While video games did not have such a definitive leader, interactive traditional storytelling is still the most popular choice in both game related questions with Multiple Ending stories second (when comparing the total number of votes from both relevant survey questions) and Branching Path stories in third.

### Correlations

The data showed no significant differences between storytelling preferences for male and female respondents across all mediums. Age likewise appeared to have little to no impact on storytelling preferences.

There was a strong correlation between storytelling preferences in novels and film. Nearly 92% of respondents who preferred a single unchanging story in novels preferred the same

in film. While the percentage of those who preferred multiple ending stories or branching path stories in both novels and film were lower, they did outnumber those who prefer different storytelling styles in both mediums.

Interestingly, nearly 72% of respondents who reported liking interactive films as much as or more than traditional films still said that they prefer films which use traditional non player-driven storytelling. A similar correlation was found in respondents who reported liking interactive novels as much as or more than traditional novels, with approximately 73% still saying that they prefer novels with traditional non player-driven stories.

There appeared to be no direct correlation between respondents' experience with IF titles and their opinions of interactive novels. When comparing respondents' IF experience with their overall storytelling preferences for novels, every respondent who reported disliking IF, and all except one who reported disliking the lack of graphics, expressed a preference for traditional non player-driven stories in novels, as did nearly 79% of respondents who liked the IF genre. Though, those who reported liking IF did show a slight preference towards multiple ending stories in games.

The correlation of novel and film storytelling preferences to game storytelling preferences is far lower than that of novel preferences to film preferences. The vast majority of the few respondents who preferred player-driven forms of storytelling in novels and films also preferred games with more player-driven storytelling methods, though no particular type of player-driven storytelling was significantly more popular than the other. Of those who preferred traditional non player-driven stories in print and film, game preferences were far more varied. Among those respondents, interactive traditional storytelling was the most popular, receiving around 36.5% of their votes, multiple ending stories followed with approximately 26%, and then

branching path stories with about 14%, with the remainder split between the far less popular open-ended and fully player-driven stories, no stories, and write-in answers. This is fairly close to the opinions of the sample group as a whole as shown in their responses to question 4.

Respondents that report playing games an average of 0-5 hours per week showed a higher preference for games without stories than any of the other groups, though the number was still small compared to those that preferred a story of some type. In the same group, very few respondents preferred games with highly player-driven storytelling methods such as open-ended storytelling and fully player-driven storytelling. Though, as previously shown, those storytelling methods had a rather low level of popularity overall so it is possible their lack of support among less serious gamers is merely a quirk of the sample.

The implications of the collected data and aforementioned correlations will be discussed in the following chapter.

## CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

### Discussion

#### *Data Analysis*

The lack of correlation between gender, age, and storytelling preferences was somewhat surprising. It can likely be taken to show that good stories are equally appealing to male and female, young and old alike; with individual tastes coming down to nothing more than personal preferences rather than a perceived age or gender gap. However, a new study focused solely on this issue would likely be needed in order to form any definite conclusions.

As shown in the accumulated data, users show a very strong preference for traditional storytelling methods in print and film. This was expected and supports the findings discussed in Chapter 2. That fact that even among respondents who liked interactive films and novels, nearly two-thirds still preferred the traditional non player-driven variety shows that traditional storytelling methods are unlikely to lose traction in either medium.

While respondents' storytelling preferences in video games were less clearly defined than those in print and film, they still showed a strong preference for less player-driven methods of storytelling with the dominance of interactive traditional stories in both related questions and the high popularity of multiple ending stories which, as discussed in Chapter 2, offer the player little to no control over the events of the main plot, other than the choice of ending. Branching path

stories also garnered a moderate amount of support though open-ended stories and fully player-driven stories fared very poorly. Supporters of highly player-driven storytelling may claim that the lack of popularity is due to an audience which has had little time to grow used to less traditional storytelling methods or possibly the immaturity of the styles themselves as writers continue to experiment with and adapt to the challenges of writing these types of stories. There may be some truth to both claims, though it is also a simple truth that, the more freedom that is given to the player, the less story is being told. Instead, it is up to the player to fill in the gaps and make his own story which, as previously discussed, may often create a story far less interesting and engaging than one crafted by a professional writer.

That said, the data does show that many gamers do prefer at least a small amount of control over the main plot of a game. Or, at the very least, they think they do. As shown in Figures 4 and 5, and Appendix A, when respondents were asked to list three games which they thought had particularly good stories, games using interactive traditional storytelling clearly dominated the list. As the percentages remained very close when comparing both the entire contents of list and only the unique entries, the results can not be attributed to the extreme popularity of a handful of titles. As discussed in Chapter 2, it is possible that what many consumers think they want from a story is not what they really want, as no amount of interactivity can make up for an uninteresting story. These results could show that, while many consumers think that they want stories with multiple endings or branching paths, they actually get more enjoyment out of games with interactive traditional stories and all they really need is the illusion of control, not actual control. However, the results could also be taken to say that, while many consumers may truly want games with more player-driven stories, most game designers and writers have yet to learn how to tell compelling stories using more player-driven

storytelling methods. Most likely, the data reflects a mixture of both possibilities, along with the general preference for interactive traditional stories which has already been shown.

Finally, the correlations of the less serious gamers (those averaging 0-5 hours of play time per week) are likely due to a combination of demographics and time management. The higher preference for games without stories is quite possibly due to the rising popularity of casual games, which focus on providing a quick and easy pick up and play experience that appeals to a very wide audience, including those who have little interest in video games in general. Such games typically have little to no story, many being variations on card games and match three puzzles games. The lack of interest in games with open-ended stories and fully player-driven stories could potentially be because of the extremely large amounts of playtime often required to master and/or complete such games. It could easily take a player who is only averaging several hours of playtime per week months or, in some cases, even years to finish such a game, which is likely more time than they would want to devote to a single title.

#### *Additional Respondent Feedback*

An analysis of the write-in answers provided by survey participants mainly served to confirm the results generated by the rest of the data. One of the more common topics was pointing out the inherent differences present in the three mediums covered (print, film, and video games), primarily in regards to why player-driven forms of storytelling are impractical and in many cases unwanted in print and film, despite having potential in games. It was also common for participants to delve into why they preferred a certain storytelling method or talk about favorite stories. In contrast, others stated that, as long as the plot and characters were interesting,

they did not care which storytelling method was used (though many of those people still had a favorite).

### Implications and Recommendations

Based on the conclusions reached in Chapter 2 and the data collected in the survey, it seems clear that traditional storytelling will remain dominant in both print and film. As such, traditional storytelling is both the most cost effective method and appeals to the largest potential audience. However, interactive movies and novels do have a dedicated, if rather small, following, providing a viable niche market. Though the majority of said niche is made up of children and early teens, the amount of respondents who showed interest in seeing a more diverse selection of branching path novels shows that there could be room to expand into other demographics. It is possible that longer and more complex branching path novels, or a type of game similar to the Japanese visual novel genre (quite possibly even straight translations of some Japanese visual novel titles), could attract a respectable following. Further research into the interest in such titles among both young-adults and older readers would provide more details on the potential viability of such a venture.

Interactive traditional storytelling is also still the method of choice in video games, though multiple ending stories and branching path stories are in strong demand as well and even titles using the far less popular open-ended stories and fully player-driven stories have very vocal supporters and occupy a popular niche. It is likely that, over time, the various forms of player-driven storytelling will continue to grow in popularity, and even now there are large markets for games using all of the previously discussed storytelling methods. That said, taking the numbers



into account, as well as the information covered in Chapter 2, it seems unlikely that any form of player-driven storytelling will surpass interactive traditional storytelling as the storytelling method of choice for video games as a whole. To better understand the relationship between storytelling styles and player preferences, this author recommends further study on the relationship between what players say they want in a story, and the content of the stories they most enjoy because, as shown in this study, they are not always the same. Additional research on what role story has in the average player's decision of whether or not to buy a game and/or recommend it to others would also provide valuable information for game developers and writers.

### Conclusion

All forms of traditional and player-driven storytelling have advantages and disadvantages. While some are clearly better suited for certain mediums than others, each form has its supporters. Though it appears that the author of this thesis was correct in his assumption that more traditional storytelling will continue to dominate in not only print and film but video games as well, there is a growing market for more player-driven types of storytelling as well, allowing skilled writers a chance to flourish no matter what type of story they want to tell. It is this diversity and the creativity of the myriads of writers, producers, and designers that has, throughout history, drawn people into stories of all kinds and will always continue to do so.

## REFERENCES

- Adams, E. (2004, December 22). The designer's notebook: How many endings does a game need?. *Gamasutra*. Retrieved September 24, 2008, from [http://www.gamasutra.com/view/feature/2179/the\\_designers\\_notebook\\_how\\_many\\_.php](http://www.gamasutra.com/view/feature/2179/the_designers_notebook_how_many_.php)
- Advanced Microcomputer Systems. (Developer). (1983). [Interactive Movie]. In *Dragon's Lair*. El Cajon: Cinematronics.
- Amazon.com Sales Rankings and Reviews. (2002 – 2009). *Amazon.com*. Retrieved March 5, 2009 from <http://www.amazon.com>
- Amazon.com Best Sellers in Movies & TV – Kids & Family. (2002 – 2009). *Amazon.com*. Retrieved March 5, 2009 from [http://www.amazon.com/gp/bestsellers/dvd/163414/ref=pd\\_ts\\_d\\_nav](http://www.amazon.com/gp/bestsellers/dvd/163414/ref=pd_ts_d_nav)
- Amazon.com Best Sellers in Video Games. (2002 – 2009). *Amazon.com*. Retrieved March 5, 2009 from [http://www.amazon.com/gp/bestsellers/videogames/ref=pd\\_zg\\_hsr\\_vg\\_1\\_1](http://www.amazon.com/gp/bestsellers/videogames/ref=pd_zg_hsr_vg_1_1)
- Barth, J. (1967). The literature of exhaustion. *The Atlantic*. Boston: Atlantic Monthly Group.
- Bethesda Game Studios. (Developer). (2002). [Video Game Xbox & PC]. In *The Elder Scrolls III: Morrowind*. Rockville: Bethesda.
- Boyer, B. & Cifaldi, F. (2006, November 3). The Gamasutra quantum leap awards: Storytelling. *Gamasutra*. Retrieved September 24, 2008, from [http://www.gamasutra.com/features/20061006/quantum\\_01.shtml](http://www.gamasutra.com/features/20061006/quantum_01.shtml)

- Bruckheimer, J. (Producer), & Verbinski, G. (Director). (2003). *Pirates of the Caribbean: Curse of the Black Pearl* [Motion picture]. United States: Walt Disney Pictures.
- Charles, F., Mead, S. J., Cavazza, M. (2002). From computer games to interactive stories: Interactive storytelling. *The Electronic Library*, 20(2), 103-112. Retrieved October 22, 2008, from Research Library Core database. (Document ID: 208465911).
- Crames, M. & Norton, J. (Producers), & Doucette, B. (Director). (2006). *Choose your own adventure – The abominable snowman*. [DVD movie]. United States: Goldhill Home Media.
- Crowther, W. & Woods, D. (Developers). (1977). [Video Game PC]. In *Colossal Cave Adventure*.
- DeMaria, R. & Wilson, J.L. (2004). *High score! The illustrated history of electronic games*. Emeryville: McGraw-Hill/Osborne.
- Desilets, B. J. (1989). Reading, Thinking, and Interactive Fiction. *English Journal*, 78(3), 75. Retrieved October 22, 2008, from Research Library Core database. (Document ID: 1632062).
- Freeman, C. (2004). *Creating emotion in games*. Berkeley: New Riders Publishing.
- Glassner, A. S. (2004). *Interactive storytelling: Techniques for 21st century fiction*. Wellesley: A K Peters LTD. Retrieved October 4, 2008 from <http://books.google.com/books?id=Pkku-bapISwC&printsec=frontcover>
- Guinness World Records. (2008). *Guinness World Records Gamer's Edition 2008*. Guinness World Records Limited.
- Guinness World Records. (2009). *Guinness World Records Gamer's Edition 2009*. Guinness World Records Limited.

- Jerz, D. G. (2001, May 3). *Dennis G. Jerz's Site*. Retrieved September 27, 2008 from <http://jerz.setonhill.edu/if/adams/intro.html>
- Katz, D. (2008). *Damian's Gamebook Web Page*. Retrieved September 27, 2008 from <http://www.gamebooks.org/index.php>
- Kent, S.L. (2001). *The ultimate history of video games*. New York City: Three Rivers Press.
- Kohler, C. (2005). *Power-up: How Japanese video games gave the world an extra life*. Indianapolis: BradyGAMES.
- Konami, (Developer). (2008). [Video Game Playstation 3]. In *Metal Gear Solid 4*. Tokyo: Konami.
- Konami, (Developer). (2005). [Video Game Nintendo DS]. In *Castlevania: Dawn of Sorrows*. Tokyo: Konami.
- Kring, T. (Producer). (2008). *Heroes Season 2* [Television series DVD set]. New York City: NBC.
- Kumar, M. (2008, February 20). GDC: Deconstructing the best interactive storytelling. *Gamasutra*. Retrieved September 24, 2008, from [http://www.gamasutra.com/php-bin/news\\_index.php?story=17537](http://www.gamasutra.com/php-bin/news_index.php?story=17537)
- Lancy, D. F., Hayes, B. L. (1988). Interactive Fiction and the Reluctant Reader. *English Journal*, 77(7), 42. Retrieved October 22, 2008, from Research Library Core database. (Document ID: 1630214).
- Laramee, F.D. (2002). *Game design perspectives*. Hingham: Charles River Media.
- Lionhead Studios, (Developer). (2008). [Video Game Xbox 360]. In *Fable 2*. Redmond: Microsoft Game Studios.

- Lodge, S. (January 18, 2007). Chooseco embarks on its own adventure. *Publisher's Weekly*. Retrieved September 27, 2008, from <http://www.publishersweekly.com/article/CA6408126.html>
- Maxis. (Developer). (2000). [Video Game PC]. In *The Sims*. Redwood City: Electronic Arts.
- McCarthy, D., Curran, S., Byron, S. (2005). *The art of producing games*. Boston: Thomson Course Technology.
- Miller, K. (2008). Grove Street Grimm: Grand Theft Auto and Digital Folklore. *Journal of American Folklore*, 121(481), 255-285. Retrieved October 23, 2008, from Research Library Core database. (Document ID: 1498227751).
- Montfort, N. (2005). *Twisty Little Passages*. Cambridge: MIT Press. Retrieved October 4, 2008, from <http://books.google.com/books?id=XiJFORKEm0oC&printsec=frontcover>
- Montgomery, R. A. (1978). *Choose your own adventure: Journey under the sea*. New York City: Bantam Books.
- Montgomery, R. A. (1986). *Choose your own adventure: Beyond escape!*. New York City: Bantam Books.
- Nintendo, (Developer). (1981). [Video Game Arcade]. In *Donkey Kong*. Kyoto: Nintendo.
- Noyle, J. (2006, April 26). Techniques of written storytelling applied to game design. *Gamasutra*. Retrieved September 24, 2008, from [http://www.gamasutra.com/view/feature/2677/techniques\\_of\\_written\\_storytelling\\_.php](http://www.gamasutra.com/view/feature/2677/techniques_of_written_storytelling_.php)
- NPD Group. (2002 - 2008). Video game industry sales data. *NPD Group*. Retrieved September 24, 2008 from [http://vgsales.wikia.com/wiki/Video\\_Game\\_Sales\\_Wiki](http://vgsales.wikia.com/wiki/Video_Game_Sales_Wiki)

- Pinhanez, C. S., Davis, J. W., Intille, S., Johnson, M. P., Wilson, A. D., Bobick, A. F., Blumberg, B. (2000). Physically interactive story environments. *IBM Systems Journal*. Retrieved October 4, 2008, from <https://www.research.ibm.com/journal/sj/393/part1/pinhanez.txt>
- Revolution Software. (Developer). (1994). [Video Game PC]. In *Beneath a Steel Sky*. London: Virgin Interactive.
- Rollings, A. & Adams, E. (2003). *Andrew Rollings and Ernest Adams on game design*. Indianapolis: New Riders Publishing.
- Rowling, J. K. (1997). *Harry Potter and the Sorcerer's Stone*. New York City: Scholastic.
- Ryan, M. (July, 2001). Beyond myth and metaphor – The case of narrative in digital media. *The international journal of computer game research*, vol. 1, is. 1. Retrieved October 4, 2008, from [http://itp.nyu.edu/isco/pdfs/Ryan\\_BeyondMyth\\_and\\_Metaphor.pdf](http://itp.nyu.edu/isco/pdfs/Ryan_BeyondMyth_and_Metaphor.pdf)
- Ryan, M. (2004). *Narrative across media*. Lincoln: University of Nebraska Press. Retrieved October 4, 2008, from <http://books.google.com/books?id=wStBECWtPwcC&printsec=frontcover>
- Silicon Knights. (Developer). (1996). [Video Game Playstation]. In *Blood Omen: Legacy of Kain*. Redwood City: Crystal Dynamics.
- Spierling, U. & Szilas, N. (2008). *Interactive storytelling*. Cambridge: Springer. Retrieved February 19, 2009 from <http://books.google.com/books?id=vIkhA9zuvSUC&printsec=frontcover>
- Square Enix. (Developer). (2001). [Video Game Playstation 2]. In *Final Fantasy X*. Tokyo: Square Enix.
- Squaresoft. (Developer). (1995). [Video Game Super Nintendo]. In *Chrono Trigger*. Tokyo: Squaresoft.

Squaresoft, (Developer). (1997). [Video Game Playstation]. In *Final Fantasy VII*. Tokyo: Squaresoft.

Squaresoft. (Developer). (1999). [Video Game Playstation]. In *Front Mission 3*. Tokyo: Squaresoft.

Tavinor, G. (2005). Videogames and interactive fiction. *Philosophy and Literature*, 29(1), 24-40. Retrieved October 22, 2008, from Humanities Module database. (Document ID: 833981281).

The Gamepros. (2006). The 55 greatest moments in gaming. *Gamepro Magazine*. Retrieved February 27, 2009 from <http://www.gamepro.com/article/features/75048/the-55-greatest-moments-in-gaming-page-9-of-9/>

tri-Ace. (Developer). (1998). [Video Game Playstation]. In *Star Ocean: The Second Story*. Tokyo: Enix.

Type-Moon. (Developer). (2004). [Video Game PC]. In *Fate/stay night*. Tokyo: Type-Moon.

Valve Corporation (Developer). (2002). [Video Game Xbox 360, Playstation 3, & PC]. In *Half-life 2*. Los Angeles: Sierra.

Wizards of the Coast. (2008). *Dungeons & Dragons 4<sup>th</sup> Edition*. Renton: Wizards of the Coast.

## APPENDIX A. Survey Respondents' Top Game Stories

### KEY

x X = Number of people who cited the game.

(*ITS*) = Interactive Traditional Story

(*MES*) = Multiple Ending Story

(*BPS*) = Branching Path Story

(*OES*) = Open-Ended Story

(*FPDS*) = Fully Player-Driven Story

(*NS*) = No Story

(*NA*) = Not Applicable (A non-video game title such as a board game or tabletop RPG.)

(*U*) = Unsure (The author of this thesis was unable to find enough information about this game to determine its storytelling method.)

.Hack Series (*ITS*)

.Hack//G.U. Series (*ITS*)

Prototype (*ITS*)

Age of Mythology x 2 (*ITS*)

Animal Crossing (*FPDS*)

Another World x 2 (*ITS*)

Ar Tonelico (*BPS*)

Assassins Creed x 2 (*ITS*)

Baldur's Gate Series (*ITS*)

Baldur's Gate (*ITS*)

Baldur's Gate 2 (*ITS*)

Baten Kaitos Origins x 3 (*ITS*)

Baten Kaitos Series (*ITS*)

Battle Moon Wars (*U*)

Battlefield: Bad Company (*ITS*)

Big Brain Academy (*NS*)

BioShock x 10 (*MES*)

Blue Dragon (*ITS*)

Braid x 2 (*ITS*)

Brain Age (*NS*)

Brain Age II (*NS*)

Breath of Fire II

Breath of Fire V: Dragon Quarter (*ITS*)

Brothers in Arms: Hell's Highway (*ITS*)

Call of Duty 4 x 2 (*ITS*)



Carcassonne x 2 (*NA*)  
Chrono Trigger x 14 (*MES*)  
Chronos (*U*)  
Command & Conquer: Tiberian Sun (*ITS*)  
Conquests of the Longbow: The Legend of Robin Hood (*MES*)  
Custom Robo (*ITS*)  
Dark Cloud 2 (*ITS*)  
Dark Messiah of Might and Magic (*MES*)  
Day of the Tentacle (*ITS*)  
Dead Space (*ITS*)  
Deus Ex x 6 (*MES*)  
Devil May Cry (*ITS*)  
Disgaea x 2 (*MES*)  
Donkey Kong Country (*ITS*)  
Doom 3 (*ITS*)  
Dragon Warrior VIII (*ITS*)  
Dragon Fable (*ITS*)  
Duck Hunter (*NS*)  
Dungeons and Dragons (*NA*)  
Earthbound (*ITS*)  
Elder Scrolls II – Daggerfall (*OES*)  
Elder Scrolls III – Morrowind x 2 (*OES*)  
Elder Scrolls IV – Oblivion x 2 (*OES*)  
Elder Scrolls Series (*OES*)  
Eternal Darkness (*ITS*)  
Evergrace (*ITS*)  
Fable x 2 (*OES*)  
Fable 2 x 2 (*OES*)  
Fable Series (*OES*)  
Fahrenheit x 2 (*ITS*)  
Fallout 2 x 3 (*OES*)  
Fallout 3 x 7 (*OES*)  
Fate/Stay Night x 2 (*BPS*)  
Final Fantasy Series x 3 (*ITS*)  
Final Fantasy (*ITS*)  
Final Fantasy III (*ITS*)  
Final Fantasy IV x 4 (*ITS*)  
Final Fantasy VI x 9 (*ITS*)  
Final Fantasy VII x 16 (*ITS*)  
Final Fantasy VIII x 4 (*ITS*)  
Final Fantasy IX x 5 (*ITS*)  
Final Fantasy X x 13 (*ITS*)  
Final Fantasy X-2 (*ITS*)  
Final Fantasy XII x 4 (*ITS*)  
Final Fantasy Tactics x 7 (*ITS*)

Final Fantasy Tactics A2 (*ITS*)  
Fire Emblem Series x 2 (*BPS*)  
Fire Emblem: Genealogy of the Holy War (*BPS*)  
Fire Emblem: Path of Radiance x 2 (*BPS*)  
Fire Emblem: The Sacred Stones (*BPS*)  
Freelancer (*ITS*)  
Frogger (*NS*)  
Gears of War (*ITS*)  
Gears of War 2 (*ITS*)  
God of War x 2 (*ITS*)  
Golden Sun Series (*ITS*)  
Gothic (*ITS*)  
Gothic II (*OES*)  
Grand Theft Auto Series (*OES*)  
Grand Theft Auto IV x 5 (*OES*)  
Grand Theft Auto: San Andreas x 2 (*OES*)  
Grim Fandango (*ITS*)  
GrimGrimoire (*ITS*)  
Growlanser Generations (*MES*)  
Guilty Gear X2 (*ITS*)  
Half Life Series (*ITS*)  
Half-Life 2 x 2 (*ITS*)  
Halo Series x 2 (*ITS*)  
Halo x 3 (*ITS*)  
Halo 3 (*ITS*)  
Harvest Moon (*FPDS*)  
Hotel Dusk (*ITS*)  
Ico x 5 (*ITS*)  
Inuyasha: Secret of the Cursed Mask x 2 (*MES*)  
Jak 3 (*ITS*)  
Killer7 (*MES*)  
Kingdom Hearts x 9 (*ITS*)  
Kingdom Hearts II x 3 (*ITS*)  
King's Quest VI (*ITS*)  
Klonoa Door to Phantomile (*ITS*)  
Legacy of Kain: Soul Reaver 2 x 2 (*ITS*)  
Legend of Dragoon x 2 (*ITS*)  
Legend of Mana (*ITS*)  
Legend of Zelda Serues x 3 (*ITS*)  
Legend of Zelda Ocarina of Time x 6 (*ITS*)  
Legend of Zelda: Twilight Princess x 5 (*ITS*)  
Lineage II (*FPDS*)  
Lost Odyssey (*ITS*)  
Lord of The Rings Online (*OES*)  
Lufia 2 (*ITS*)

Lunar 2: Etranal Blue x 2 (*ITS*)  
Lunar Knights (*ITS*)  
Mabinogi (*FPDS*)  
Mario Cart Wii (*NS*)  
Mary Kate and Ashley Olson's Great Adventure (*U*)  
Mass Effect x 13 (*BPS*)  
Max Payne x 3 (*ITS*)  
Metal Gear Series (*ITS*)  
Metal Gear Solid x 8 (*MES*)  
Metal Gear Solid 2 x 2 (*ITS*)  
Metal Gear Solid 3 x 3 (*ITS*)  
Metal Gear Solid 4 x 3 (*ITS*)  
Monkey Island (*ITS*)  
Monster Rancher 3 (*FPDS*)  
Mother Series (*ITS*)  
Mother 3 x 2 (*ITS*)  
Myst x 2 (*MES*)  
Neverwinter Nights (*OES*)  
Neverwinter Nights 2 (*OES*)  
Oddworld: Stranger's Wrath (*ITS*)  
Odin Sphere (*MES*)  
Off Road (*U*)  
Ogre Battle 64 x 2 (*MES*)  
Okami x 4 (*ITS*)  
Paper Mario Series x 2 (*ITS*)  
Paper Mario: The Thousand Year Door x 2 (*ITS*)  
Perihelion: the Prophecy (*U*)  
Phoenix Wright Series (*ITS*)  
Phoenix Wright: Ace Attorney x 2 (*ITS*)  
Phoenix Wright: Justice for All (*ITS*)  
Phoenix Wright: Trails and Tribulations (*ITS*)  
Planescape Torment x 8 (*OES*)  
Pokemon Series x 2 (*ITS*)  
Pokemon Crystal (*ITS*)  
Pokemon Mystery Dungeon (*ITS*)  
Pokemon Ranger 2 (*ITS*)  
Pokemon Silver x 2 (*ITS*)  
Portal x 5 (*ITS*)  
Prince of Persia: Sands of Time x 2 (*ITS*)  
Psychonauts x 2 (*ITS*)  
Ragnarok Online (*FPDS*)  
Resident Evil 5 (*ITS*)  
Resistance (*ITS*)  
Riven (*MES*)  
Runescape (*FPDS*)

Seiken Densetsu 3 (*BPS*)  
Serious Sam (*ITS*)  
Settlers of Catan (*NA*)  
Shadow Complex (*ITS*)  
Shadow Hearts Series x 2 (*ITS*) (*MES*)  
Shadow of the Colossus x 5 (*ITS*)  
Shadows over Camelot (*NA*)  
Shaun White Snowboarding (*NS*)  
Shin Megami Tensei: Digital Devil Saga (*ITS*)  
Shin Megami Tensei Nocturne (*MES*)  
Shin Megami Tensei: Persona 3 x 4 (*ITS*)  
Shin Megami Tensei: Persona 4 x 3 (*MES*)  
Siege of Avalon (*ITS*)  
Sigma Star Saga (*MES*)  
Silent Hill (*MES*)  
Silent Hill 2 x 4 (*MES*)  
Sims x 2 (*FPDS*)  
Skies of Arcadia (*ITS*)  
Sonic Adventure (*ITS*)  
Sonic Adventure 2: Battle (*ITS*)  
Sonic the Hedgehog (*ITS*)  
Soul Calibur II (*ITS*)  
Soul Nomad (*MES*)  
Splosion Man (*ITS*)  
Star Ocean (*MES*)  
Star Ocean: Second Story (*MES*)  
Star Wars: Knights of the Old Republic Series x 2 (*BPS*)  
Star Wars: Knights of the Old Republic x 8 (*BPS*)  
Star Wars: Knights of the Old Republic 2 (*BPS*)  
Star Wars Tie Fighter x 2 (*ITS*)  
Steambot Chronicles (*OES*)  
Suikoden Series (*MES*)  
Suikoden 2 x 6 (*MES*)  
Super Mario Series x 2 (*ITS*)  
Super Mario 64 x 2 (*ITS*)  
Super Mario RPG (*ITS*)  
System Shock 2 x 2 (*ITS*)  
Tales Series (*ITS*)  
Tales of Phantasia (*ITS*)  
Tales of Symphonia x 6 (*ITS*)  
Tales of Symphonia: Dawn of the New World (*MES*)  
Tales of the Abyss (*ITS*)  
Terranigma (*ITS*)  
Tetris (*NS*)  
The Hitchhiker's Guide to the Galaxy (*ITS*)

The Way (*U*)  
The World Ends With You x 8 (*ITS*)  
Thief x 2 (*ITS*)  
Uncharted: Drake's Fortune (*ITS*)  
Vagrant Story x 2 (*ITS*)  
Valkyria Chronicles (*ITS*)  
Voodoo Vince (*ITS*)  
Wild ARMS 2nd Ignition (*ITS*)  
Warcraft Series (*ITS*) (*FPDS*)  
Warcraft 3 x 3 (*ITS*)  
World of Warcraft (*FPDS*)  
Xenogears x 14 (*ITS*)  
Xenosaga Series (*ITS*)  
Xenosaga x 2 (*ITS*)  
Xenosaga 3 (*ITS*)  
Ys Book I & II (*ITS*)