Carnegie Mellon University
Research Showcase @ CMU

ETC Press | Entertainment Technology Center

2008

Stories in Between: Narratives and Mediums @ Play

Drew Davidson
Carnegie Mellon University

Follow this and additional works at: http://repository.cmu.edu/etcpress

This Book is brought to you for free and open access by the Entertainment Technology Center at Research Showcase @ CMU. It has been accepted for inclusion in ETC Press by an authorized administrator of Research Showcase @ CMU. For more information, please contact research-showcase@andrew.cmu.edu.

stories in between:

narratives and mediums @ play

Copyright By

Drew Davidson, Ph.D.

&

ETC Press

2008

ISBN: 978-1-4357-2080-0

Library of Congress Control Number: 2008906706

This work is licensed under a

Creative Commons Attribution-NonCommercial-ShareAlike 2.5 License

(**http://creativecommons.org/licenses/by-nc-sa/2.5/**)

http://etc.cmu.edu/etcpress/

thank you

This book and the idea for publishing it under ETC Press would not have happened without the support and help of many people. It started during my doctoral studies and has been a project on and off for many years. My greatest thanks to all my mentors and colleagues who shared their ideas and helped make this happen. And a thank you to everyone who continues to participate in this experiment of how stories are shared across media and people. Finally, thanks to my wife, whose support is immeasurable.

preface

"One describes a tale best by telling the tale. You see? The way one describes a story, to oneself or to the world, is by telling the story. It is a balancing act and it is a dream. The more accurate the map, the more it resembles the territory. The most accurate map possible would be the territory, and thus would be perfectly accurate and perfectly useless.

The tale is the map that is the territory. You must **remember** this."

-Neil Gaiman **link**

This book is not a book. It's a map of a territory. It is a cartography of a rhizome. It is a line drawn of 4 dimensions. A static from the **dynamic**. A story about stories. A book that is not a book.

"There are only two worlds - our world, which is the real world, and other worlds, the fantasy. Worlds like this are worlds of the human imagination: their reality, or lack of reality, is not important. What is important is that they are there. These worlds provide an alternative. Provide an escape. Provide a threat. Provide a dream, and power; provide refuge, and pain. They give your world meaning. They do not exist; and thus they are all that **matters**."

-Neil Gaiman

start

This is an academic study and a narrative about stories and their mediums **[1]**. **[4]** If you choose, you can decipher the puzzle and connect the links; if not, you can read straight through **[5]**. **[3]** Links in and between the digital and analog are keyed through repeated symbols (colors, words, numbers, images, etc.) creating a rhizomatic web **[4]**. **[2]** Images, colors, words, numbers and links are used to code and layer this chapter **[3]**. **[5]** Either way, stories are related and experienced **[repeat]**. **[1]** You can experience the story and play with the ideas as you puzzle through the words and images **[2]**.

This study is being released under a **Creative Commons** license (Attribution-NonCommercial-ShareAlike2.5-**http://creativecommons.org/licenses/by-nc-sa/2.5/**). This license covers the text and images found in the downloaded version (**http://www.etc.cmu.edu/etcpress/**).

With this work, you are free to copy, distribute, display and perform this work, as well as make derivative works, under the following conditions:

-Attribution: You must attribute your work back to this work.
-Noncommercial: You may not use this work for commercial purposes.
-Share Alike: If you alter, transform, or build upon this work, you may distribute the resulting work only under a license identical to this one.

The ideas in this study are organized rhizomatically and linearly. In other words, it exists as a website and a text. The website was concepted by Jessica Dale and Erica Volkman, Interactive Media Design graduates of the Art Institute of Pittsburgh and was developed by Charles Palmer, a Faculty member at the Entertainment Technology Center of Carnegie Mellon University. The text was designed with ocreations (**http://ocreations.com)** by Shawn O'Mara, a Graphic Design Faculty member of AiP, as well as Jen Bauman and Nick Baldini, AiP Graphic Design graduates. The linear text starts with an introductory section covering the purpose and objects of study, along with concepts, definitions and methodologies. The text then moves examples and discussion of the cross media involved; books, comics and hypermedia. Finally, the text concludes with an analysis of the current state of affairs and looks forward to possible future developments.

The rhizomatic website (found at **http://etc.cmu.edu/etcpress**) provides readers with a more interactive, hypertextual agency in how they can explore the ideas in this study and the web at large. Online, each section of the text becomes a webpage with a section for adding comments. Also, this discursive text has some elements that refer to the website and to multi-linear ways to navigate the text itself. Hyperlinks are represented in the text with bold, underlined words. Some links are internal and will take you to other associated sections in this text. Others are external and will take you to other websites that resonate with the linked section of the study. If you are interested in following the links, they will be live on the website in the near future and soon you will be abble to find the webpage that corresponds with the section from the book and you will be able to explore all the links.

In conjunction with the above, this study has thematic threads based on the various definitions provided in the introductory section of the text. These themes are denoted with specific graphic icons that are used to illustrate how the themes are woven throughout the study. So follow the icons to follow the themes.

In any case, you are invited and encouraged to actively and interactively engage with the ideas found in this study. My one request is that if you do create work using this study, please let me know (**drew@waxebb.com**) so I can reference and link to the work you're doing. Plus, when a variety of works are created and comments are posted I will incorporate them into a version 2.0 of this study. Enjoy!

organization(s)

illustrating rhizome

analyzing codex

introduction: from here to there

the written word: the Myst novels

sequential art: the Myst Comic and the Sandman series

hyper media: Myst, Ultima OnLine and MitterNachtSpiel

conclusion: what for to begin

cites, sights, sights

enter preface intro start not a website from here to there purpose
objects of study myst as an object myst explained
sandman as an object ultima online as an object mitternachspiel as an object
why these objects speculative fiction interactivity
organizations definition
narrative hypertext&hypermedia representation media&genre text&context performance
methodologies analytical illustrative why the
web
the written word myst story grand
first myst novel second myst novel third myst novel
sequential art
myst comic
sandman
preludes and nocturnes the doll's house dream country season of mists
a game of you fables and reflections brief lives world's end
the kindly ones the wake final sandmen
comics explained
hypermedia
myst ultima online
mitternachtspiel
hypermedia explained
in conclusion in between
words comics hypermediums
ludic narrans @ play
penultimate
the end cites sights
sites

from here to there: an introduction

Throughout my academic life I have become increasingly interested in the structure and process of the **stories** we tell each other. From a **structural** point of view, I have been exploring the methods and media of storytelling, looking at the way we use words, images, sounds, etc. to relate stories. From a perspective of **process**, **I have been** examining the interaction between the sender and receiver of a story, the dance through which meaning occurs. In talking of structure and process, I am essentially discussing form and function. Or in other words, structure is the architectural building, the medium, and process is the creation of that building and then the interaction within it. And when we tell stories, I am more than aware that these terms **blur** quite nicely.

It seems that we stitch the fabric of our lives together with and through **narrative**; it's how we make sense of our world(s). And there are so many different ways that we can tell stories; through various media with different audiences we strive to communicate and narrate our stories to each other. Although each form of media (television, novels, performances, movies, paintings.

As **McLuhan** is famous for saying, "the medium is the message" (Understanding Media, 7). The structure shapes the process of the story. So, given

that each medium adds to the experience of a narrative in a different way, can we not complementarily combine media together to relate and experience a **new type of story**?

I believe that such a combination of multiple media would create a unique form of narrative in which the story is linked among mediums through the echoing of words, images, characters and environment. To get the story, the reader has to play within and among the various mediums. It would be a distributed narrative across mediums (Walker, "Distributed Narrative..."). Granted, the stories we have heard, seen and read in a single medium have not lacked impact, but incorporating several mediums offers a whole new experience. And I agree with Henry Jenkins' notion of transmedia, which he uses to describe how stories can be told across media in such a way as to take advantage of what each medium does best ("Transmedia Storytelling"). So, I am not advocating that we supplant or replace older forms of media with new ones, but instead that we use old and new together and see what they have to say about each other and how they allow us to gather the best of each to offset the worst of each. New developments in technology may give us new mediums that change our conceptions of what a story is and can do, but older forms of storytelling still work quite well. Computational media does bring a **whirlwind** of new potential, but a good old book is still a nice thing with which to curl up. Creating a cross media experience to relate a story would give us varied structure and process; the sender(s) and receiver(s) would be involved with each medium in different ways, and the "**story**" may or may not be the focus of the experience. And together a form of ubiquitous entertainment develops, allowing the audience to experience a narrative whenever and wherever they please. This would not only refine our understanding of the subject at hand, but also refine our awareness of the structural and processual narrative strengths and weaknesses of

the incorporated mediums themselves. Thus, we would understand more about the narrative itself and the components (the mediums) through which it was expressed. We are within a **computational** revolution and we have the chance to make an informed **choice** about how we use these new mediums by seeing how they inter-relate with other, and preceding, media.

purpose of study

This study focuses on the structure and process of **narrative** in various mediums and explores the potential applications of combining multiple media to tell stories differently. In other words, **I will** look at how a story is told and received in a given medium in comparison, contrast and combination with other mediums. It is my belief that the **process** of the narrative will change because the **structure** has changed. The narrative phenomenon of **Myst**, my main object of study, occurs in **books**, **comics** and **hypermedia.** Similarly, I will be talking about these three mediums as I see what, if anything, about narrative is being changed by the technological advances connected to the computer.

This blending of old and new media will be accompanied by a blending of old and new narrative theories - meta-stories about how stories are shared and understood. Since **Plato**, scholars and philosophers have explored and debated how meaning occurs between artists and audiences. As new mediums are developed, new theories have been formed as well. The scholars proposing these newer theories are exploring whether a new medium raises new questions, or if the questions of narrative that prior scholars have posed are still pertinent. **Richard Lanham** argues that literary study must come to terms with how technology changes the face of narrative (through digital reproduction and replication) in order to truly comprehend contemporary stories (26). And **Janet Murray** believes that immersive simulations are the most problematic and promising issue of narrative in hypermedia, allowing us completely into worlds which may, or may not, be worth visiting (280). The computer allows us to have almost infinite worlds in

which we virtually enter and act.

In this study, **I will** incorporate a range of theoretical viewpoints from Plato to post-modern to represent how the nature of narrative has changed with the development of hypermedia. And hypermedia itself has several layers to consider. While **Myst** and **MitterNachtSpiel** are experiences captured on CD-ROM, the hypermedia game of **Ultima OnLine**, another of my objects of study, takes place on the internet. The internet is a vast network of connected computers and it is a new and different arena for a story to be related and experienced, one that is highly flexible and ephemeral. By analyzing the new, hyper-hybridity of hypermedia, the older hybridity of sequential art, and the singularity of discursive texts, I will **explore and express** the structure and process of narrative. In other words, I will **show** and **tell** you a good story.

objects of study

To help focus my analysis and illustration, I will use the narrative phenomenon of **Myst** as the main object of study. **Myst** is a seminal example of a cross media narrative experience. The story grand of Myst occurs across three different mediums: **hypermedia**, traditional **novels** and **comics**. With this study I intend to look at the strengths, weaknesses, differences and similarities of these three mediums. To do this, I will examine each medium involved in the story grand of **Myst**. And each medium will have objects of study that are thematically related to the mediums involved. In other words, since text is a singular medium, there will only be one object of study, the **Myst** trilogy discussed textually. But **comics** incorporate two mediums (text and **graphics**) and there will be two objects of study, the **Myst** comic book and **Myst V** webcomic as well as Neil Gaiman's **Sandman** series. And the explosion of mediums within hypermedia will be explored through the various Myst CD-ROMs and also Richard Garriott's **Ultima OnLine** gaming experience as well as Kveta Pacovska's **MitterNachtSpiel** and many more as the study concludes. Granted these categories of media do **blur** and I will **use** this as I **analyze** these mediums throughout this study.

Neil Gaiman's **Sandman** comic book series and Origin's **Ultima OnLine** gaming community designed by Richard Garriott and Kveta Pacovska's **MitterNachtSpiel** help me to better engage the issues of stories in different mediums. Unlike **Myst**, **Ultima OnLine** is a constructive hypermedia story experience. Myst is an exploratory hypermedia with definite endings, **Ultima OnLine** is a never-ending hypermedia story developed by Garriott and the software company Origin and furthered by each and every participant who joins in the

experience. Pacovska's CD-ROM, **MitterNachtSpie**l is a lovely rhizomatic experience of interwoven sights and sounds.

The narratives of **Myst**, **Sandman**, **Ultima OnLine** and **MitterNachtSpiel** serve not only as objects of study, but as inspiration as well. Learning from these narratives and incorporating them within my own will help me to tell how we can utilize multiple media, theories and stories to better express our own. These chosen objects of study will in a large part shape this study. Other objects would more than likely lead to a different study altogether, but I have carefully chosen objects that will offer up the most to my examination.

myst as an object

I chose **Myst** for several reasons. It is the landmark CD-ROM that first gave us a glimpse of what a hypermedia CD-ROM is capable. It is illustrates the best in CD-ROM storytelling. It shows how "image, sound and narrative [are] woven into a new form of experience" of storytelling (**Miles**, 4). Also, it is one of the best contemporary examples of a cross media story that progresses across several media.

Now, let me describe the cross media phenomenon of the **Myst** story grand. **Myst** is an award-winning "immersive environment" that occurs on a CD-ROM, but the story grand progresses and continues in several books and web sites with hints and clues (to help you get through the CD-ROMs if you get stuck), a subsequent trilogy of novels, a comic book and a short webcomic, as well as further CD-ROMs with immersive environments, **Riven**, **Myst III**, **Myst IV**, **Uru** (online and then CD-ROM) and **Myst V** (hailed as the final **Myst** game). Also, at one point, a theme park and movie were discussed, but have yet to move forward and look to be permanently stalled (so I am not sure how these would have added to the narrative) (**Carroll**, "(D)**Riven**" 3). Exploring how the narrative of **Myst** has developed over multiple media will allow me to pinpoint the strengths and weaknesses of the media involved in the narrative. Also, I will be able to use **Myst** as a window into the theoretical issues of **narrative**, **multiple media**, **structure** and **process**, and come out the door with an idea of how they might be applied to better tell **stories** in general and also be used to help improve the academic endeavor and the classroom environment.

sandman as an object

I chose **Sandman** because it is one of the best comic book series on two levels very pertinent to this study. This series has won numerous awards and stretches across 75 1/2 single issues and is also collected in 10 graphic novels, with 3 subsequent additions. **Frank McConnell** notes that the **Sandman** series is "one of the most extraordinary events in the history of comics" with a complex story related through images and words (1). Gaiman and many different artists have effectively and gracefully used the dance between images and words to tell these stories. Sandman is a great example of how two mediums can be blended into a new one.

Gaiman, as primary creator, has skillfully woven several older myths from **various** cultures and epochs in the medium of sequential art (or comics). To name a few; there are Greek, Egyptian, Nordic, Shakespearean, Fairie, and contemporary urban myths included within the storyline. Gaiman incorporates these myths into his contemporary story, adding depth and resonance to the stories incorporated. He is blending older stories and myths within his new frame. Words, images and stories are put into play together within the overarching story about the concept of dreaming and storytelling itself. Unlike the **Myst** comic, the **Sandman** series is a graceful and complex blending of words and images.

ultima online as an object

Richard Garriott's **Ultima OnLine** was chosen because it is the first successful massively multiplayer online game. It is a story and game that takes place entirely on the internet (hence, 'on-line'). It has dynamic and interactive stories that do not evolve without the socially constructive participation of its audience of players. **Myst** may have more lush and immersive graphics and atmosphere, but **Ultima Online** immerses the participants into a thriving environment in which they interact with others to shape the course of events. It is a "brilliant breakthrough" that shows how we will be "playing - and perhaps learning - in cyberspace" as we interact with others online (**Kim**, "**Ultima Online**").

The story grand of **Ultima** was originally developed over nine versions of a CD-ROM role-playing adventure game. **Ultima OnLine** takes place in the fictional world of Britannia where multiple players can log on and interact with each other within the two-dimensional graphic realms. It is an epic fantasy story with good and evil, magicians and monsters. The twist is that it is a socially developed and persistent **hypermedia** environment; there is the foundational story developed by Garriott at Origin, but the activities of the myriad of players are what motivates and creates the stories that literally never end. What I mean by constructive and persistent is that the participants not only add through their actions, but their actions have lasting consequences. If you build a house, it will be there the next time you play. Origin maintains a community paper titled the 'Town Cryer' that allows participants to see the various stories that are developing in the world. The stories are related and experienced, and the world is constantly

changed, through the participants' performances within the **Ultima Online** story grand.

mitternachtspiel as an object

Kveta Pacovska's **MitterNachtSpiel** ("MidNightPlay") is one of the best examples of interactive art and narrative. It uses interface and context to open up and encourage exploration. As **J.C. Herz** notes, this is how interactive pieces should be ("Making Art...").

MitterNachtSpiel is an elegant piece of interactive artistic storytelling, the only words involved are on the packaging, which basically set up the context that on nights when the moon is not in the sky, it is actually down on earth at a play, and the moon and cast of characters interweave in a dreamlike fluidity from place to place and activity to activity as sights and sounds echo and entwine in a midnight play. It deftly weaves sounds and images together and uses **iterations** of both to build a thematic story arc.

why these objects

The various **media** and **genres** employed are also incorporated by choice and I have picked the ones that I believe could best serve together in a complementary combination. There are two reasons for analyzing the **three** particular mediums of traditional text, sequential art and hypermedia. First, the narrative phenomenon of **Myst** is my main object of study and it occurs in these three mediums. So, I am using the mediums that are a part of **Myst**.

Secondly, I am interested in how the ever-developing technology of **hypermedia** has created a new medium that has, and has not, changed what narrative is and can be in relation to what it was and used to be in older mediums. To do this, I will compare the narrative **structure** and **process** of written **texts** and **sequential art** with that of **hypermedia**.

The **discursive text** is an old and singular medium that simply does not go away because it works so well. Academe has relied heavily on words and for good reason: in this day and age, books are easily documented and disseminated so the ideas can travel far and wide. It is mainly through and with discursive symbolism that we create and share our philosophies and logics. Books give us a permanent record and allow us to communicate, through words, our ideas and arguments. Also, I am not interested in throwing out the old as we ring in the new. The technological advances of hypermedia do not necessarily forecast the death of the written word. Books are being repositioned in regard to this new medium and discursive texts are constantly being used to analyze it.

Sequential art, or comics, is another older medium, but like hypermedia, comics are a hybrid medium, incorporating images and words along with their graphic layout to convey a story. This is a prime example of how different mediums can be blended together to give us a new medium. And like film, another older medium that borrows from drama and photography, the medium of sequential art serves as a historical illustration of what a hybrid medium has done, and can do, to tell a story.

Hypermedia is an interesting theoretical can of worms because it makes undeniably obvious a post-structuralist notion of reading (in which the reader plays a large and active role in the creation of meaning). This problematizes issues of authorship and citation which some find laudable while others find deplorable. Hypermedia allows for a fluid document full of images, QuickTime movies, text, sound effects, immersive virtual reality and potentially endless links and paths for the user to follow. It is a prime example of the benefits and problems of technology for storytelling. And this study would be negligent if it were not addressed and illustrated. It is the a contemporary and advanced hybrid medium, incorporating aspects from almost all older media: texts, graphic design, film, music, drama, photography, sequential art, theatre, architecture, landscape, puzzles and games.

speculative fiction

All of the objects of study, while occurring in different **mediums**, share the genre of speculative fiction (and **Myst** also has a mystery element to it as well). Speculative fiction as a genre category contains several other genres: science fiction, fantasy, utopic and dystopic. Each of these genres speculates on potential worlds and our lives in them. **Anthony Wolk** discusses how speculative fiction pushes the envelope of our knowledge, focusing our attention on our boundaries (28). It is a genre of fiction concerned with imagining worlds beyond our present reality that just may be possible. A great example is Star Trek. We see Scotty beam up Captain Kirk and Mr. Spock which is, as of today, quite impossible. But the computers aboard the Enterprise presage the computers that have since been invented and are now being used around the world. Speculative fiction is about the potential of seeing imagination become reality, whether it is a scientific invention or a social change. Granted, fiction in general is full of imagination and possibility, but speculative fiction posits an alternative worldview that can reflect or refract with our reality. And it seems like a genre readymade for **hypermedia**, a medium that allows you into immersive simulated worlds. These worlds can be magical or mechanical, but they give us a "reality" just on the edge of our own. **Myst** has the labyrinths of D'Ni where writing is an art of world creation or connection. **Sandman** takes us into our dreams, and introduces us to the Endless, meta-mythological figures touching our world across eras and cultures. **Ultima OnLine** places the participant in the magical world of Britannia, filled with rogues, sorcerers and monsters galore. **MitterNachtSpiel** takes us to a midnight theatre to play with the moon and company. Speculative fiction opens up to the

imagination, and allows us to see what may be possible in our **world**.

interactivity

All these speculative objects of study encourage interaction from their audiences. Indeed, the advent of the computer and digital media is most definitely not the beginning of **interactive stories**. In fact, I believe there is always a level of interactivity with every medium and genre, it just **differs** in terms of **intensity** required from the audience. A reader interacts with a book, and a "reader" interacts with a hypertextual story online, and we all interact with mediums **in between**. So prior to the computer, there have been a variety of overt attempts in various mediums to get the audience to interact with a story.

In fact, books have some overt interactivity. Dickens published his works serially and constantly responded to audience desires in between chapters. And there have been many post-modern books that encourage readers to do as they will with the text. Then there are the "choose-your-own-adventure" books. These are books with branching narratives that allow the reader to **choose** which branch(es) they would like to follow as they read their way through the story.

Traditional oral storytelling often encourages the audience's participation. We have the classic call-and-response of gospel and blues music. And performance art is full of interactive stories, ranging from performances like Yoko

Ono's piece, in which audience members came up and cut off her clothing, to plays, like "The Mystery of Edwin Drood," where the audience votes on the endings. Comedic improv is another venue that gets immediate audience input and puts it into play. And we had the artistic Happenings of the Sixties where the performance required interactive audience participation.

Films and television have also garnered audience interactions. Some small experimental films have had the audience vote its way through the story. There is the present day practice of focus group testing on films before they are released. So, these small audiences often effect how a film is re-edited before it is released to the public at large. And TV is always responding to ratings, so the most watched shows continue to tell their stories. The TV show, Mystery Science Theater 3000 (in which 3 characters sat in front of a B-movie and threw out entertaining commentary on the films) has spawned live versions, like the Mr. Sinus Theater 3000, where 3 people with mikes get up and comment on movies in the theatre itself and encourage the audience to chime in as well. And then there is the Rocky Horror Picture Show phenomenon. Here, audiences show up in costumes fitting in with the movie's characters and often get up on stage and perform along with the movie as a group. And with digital technology, people are actually re-editing, and distributing, new **adaptations** of movies. Case in point, there is a "Phantom Edit" of the Star Wars movie, "The Phantom Menace," that cuts out several scenes, and some say, improves on the original.

And **games** have always built on the premise that the user is interactively doing something with the story (or doing something **without a story** in it at all). This goes back to classic games like go and chess, where you are enacting an

abstraction of war. It gets more overt with role-playing games, like Dungeons and Dragons, in which the players become characters and go on adventures together. There are even some games where the point is to tell a story. "Once Upon a Time" is a card game in which you win by telling a coherent and entertaining story. Arcade games gave players computational interactivity within a story. And new, cutting edge, virtual reality **theme rides** are immersing us in wildly interactive environments and experiences.

The preceding examples show just some of the attempts at interactive narratives. The computer, and the internet of interconnected computers, lean more heavily on the past interactive explorations of games and film, as opposed to performance. Even so, computational mediums have opened up new levels of digital interactivity. Levels in which the "reader" is always already the interactive protagonist and participatory co-author of the unfolding story. In the digital world, where a copy is exactly the same as the original and there is no there, there, we are truly only limited by the author's and reader's technical and conceptual **imaginations**. The stories come out of the interactive collaboration between authors and readers. The authors set up the dynamic and interactive **foundations** and the readers then take these stories to where no narratives have gone **before**.

def.i.ni.tion(s)

Before I proceed with this exploration of stories and their media (and mediums and their narratives), I should define some of the key terms. Hopefully, this will decrease any potential confusion when these terms are used throughout this **study**. I have defined the following terms; **narrative and story**, **story grand and storyline**, **hypertext and hypermedia**, **representation**, **media and genre**, **text and context**, and **performance**.

narrative & story, story grand & storyline

In the flow of our lives, it is through and with narrative that we construct meaning for ourselves. **Walter Fisher** states that human beings primarily make and use symbols to create narratives (63). We use stories in order to contextualize what we are saying so that our audience gets a sense of time and space. As **Miller** notes, plot is the most important feature of narrative (66, "Narrative"). It is the plot of the story, from beginning to middle to end, that helps us follow it.

There are many different **perspectives** from which we can consider **narrative** - formalist, Bakhtinian dialogical, Chicago Neo-Aristotelian, psychoanalytical, hermeneutic, phenomenological, structuralist, semiotic, tropological, Marxist, sociological, reader-response, post-structuralist, and deconstructionist (67, Miller, "Narrative"). I will not go into detail about all of the above, but I believe that such perspectives should be noted if only to show that the meaning and place of narrative in our lives has been, and continues to be, studied intensely.

To best conduct this study of narrative, I need to make some distinctions between the terms narrative, story, storyline, and story grand. Narrative and story are easily confused and closely linked. In this study, story is the signified, the narrative content of a text (**Genette**, 27). Narrative is the signifier, the formal discourse of the text itself (27). In addressing narrative, I will consider four key characteristics; **setting**, **character**, **plot** and **theme**. The setting is where the story occurs, the characters are the personalities within the setting, the plot is the course

of action and the theme is an overall meaning found within the story. The story grand refers to the whole story that occurs across several mediums or texts. The storyline refers to the specific story occurring in a particular medium or text. So, narrative changes from medium to medium and text to text across the story grand, and the story grand is a story composed of several storylines from various mediums and texts.

hypertext & hypermedia

If this study is going to discuss hypertext, the first place to go is to the writings of **George Landow**. In his books, **Hypertext** (versions 1.0 and 2.0), **Hyper/Text/Theory**, and **Hypermedia and Literary Studies**, Landow and others look at the potential of the realization of a post-structuralist theory of reading. Hypertext does not necessarily kill authors, but it does make **readers** authors unto themselves. That being the case, Landow puts his money where his mouth is and advocates that we **use** hypertext to **express** ourselves in ways that were not possible before (**Hyper/Text/Theory**, 36). Like I do in this study, Landow tries to make use of the medium itself as well as to analyze it through traditional textual writing. Now, looking at texts in other media (film, print, audio, etc.) one can talk of how they inter-relate in a hypertextual manner and how any open-ended and intertextual reading is hypertextual as well. Unless I note differently, I will be using the term hypertext to refer to the electronic, computational medium with active links.

Hypertext as an electronic medium started in 1945 with **Vannevar Bush**'s memex system (Berk and Devlin, 13). For Bush, memex is an associative storage system similar in function to how our brains store information and how we remember things. In the early Sixties, Douglas Engelbart, like Bush, conceived of an electronic medium with links between texts that could augment our intellectual capabilities (13). In 1965, Theodor Nelson coined the term "hypertext" and invented the hypertextual operating system, Xanadu (14). In the late sixties, Andries Van Dam worked with several hypertextual systems at Brown University in order to help teach classes. His latest project is called Intermedia (14). In the

early seventies, ZOG was developed at Carnegie-Mellon and was one of the last of the first generation hypertext systems that ran on mainframes only (14). In the early eighties there was the emergence of second generation, workstation-based hypertext products, such as Intermedia and KMS (a new version of ZOG) (14). The faster computers allowed more people to utilize hypertext technology. In 1985, Peter Brown introduced hypertext to personal computer users with Guide (15). A year later, Xerox released Notecards that supported graphics and animation as well as text (as did Intermedia and KMS at this time) (15). The next year, Apple bundled Hypercard with all its Macintoshes, allowing millions the chance to explore hypertext documents (15). In the nineties the explosion of the internet and the hypertext-based world wide web has opened the floodgates to a plethora of products and browsers that allow users to read and write in hypertext (15).

Landow notes that hypertext is composed of words, images and sounds linked by multiple paths in an open-ended perpetually unfinished form (**Hypertext**, 3). In general, hypertext occurs on a computer. Words and images are not only a part of the "page" in front of you but can serve as a link to another page and so on and so forth. You follow these links by pointing and clicking with a mouse or some other input device. A seminal example in hypertextual storytelling is **Michael Joyce**'s "**Afternoon: A Story**" in which readers click on words to work their way through the story. Harry Goldstein quotes **Stuart Moulthrop** in noticing that there are two kinds of hypertextual documents, "exploratory and constructive" (131). In exploratory, you follow alternative paths or links while the hypertext, "retains its fundamental identity under all transformations" (132). In constructive, you add your own words to the hypertext, so readers become writers (132).

Hypermedia and hypertext are two closely related terms with a subtle distinction. Hypermedia refers to dynamic multimedia objects that have hypertextual aspects. As Landow and Delany note, hypermedia is a multimedia extension of hypertext that is more complex and interactive, integrating visual and auditory experiences as well as texts and links to give a more contextual synthesis of the information explored (7). For example, a web page with just regular **HTML** links is a hypertext even if it has graphics, a little video and plays some music. But a web page with java scripting and interactive graphics, videos and sounds is more of a hypermedia object. **Myst** is hypermedia, because it has an immersive environment with sight and sounds galore and many different potential (hypertextual) actions to take. But a DVD that has a movie with lots of action and adventure and some other trivia added on, but has few active choices for the viewer, is a multimedia piece. Hypertext offers the reader a myriad of associative links, multimedia combines graphics, sounds and such; hypermedia is hypertextual multimedia. The user is immersed in a world and can interactively explore it. The performative nature of hypertext and hypermedia on computers has led **Brenda Laurel** to look at computers as theatre. For Laurel, computers have the "capacity to represent action in which humans [can] participate" (1).

representation

Representation plays a large role in the **relating** and **experiencing** of stories. The act of representation has two aspects pertinent to this study. The first is the idea of **symbolism**, using signs and symbols to represent an object and/or idea. In the **performative** aspect of representation, an object or idea is being presented again, or re-presented each time a spectator engages the symbols and signs. It is a performance in the moments of engaging. A performance itself is a means of representation, but every means of representation has a performative aspect. As **David Summers** notes, the process of representation has three factors - an object, its actual image, and a mental image (3). The mental image is the performative interpretation by an audience member and is a representation itself (3). Each time an audience engages a text, whether a CD-ROM, book, comic, etc., the representation occurs again but with present interpretations of the representation. So, representation is not only a symbolic act of portrayal and description, but is also a performative moment that lives in the present(ation) again and again.

WJT Mitchell states that the process of representation occurs in three forms: iconic, symbolic and indexical (14). Iconic representation stresses resemblance by association (14). For example, the folder icon on a **Macintosh** or **Windows** screen is more than an image of a folder, it resembles a real folder in that you can put (electronic) documents into it. A symbolic representation is more of an agreed upon, arbitrary and associative stipulation; no resemblance is specified (14). The word "dog" is accepted as a symbol for an actual dog. It doesn't look or act like a dog, but the word represents the dog for us. An indexical

representation stands for an absent object. In terms of cause and effect, the existence of the index indicates the presence of the absent object (14). A great example is a footprint. The footprint is an index of the passing foot, illustrating the existence of the absent object. Representations can share and combine the characteristics of an icon, symbol and/or index (14).

According to Mitchell, Aristotle "defined all the arts as modes of representation" and went further to make "representation the definitively human activity" ("Representation," 11). As humans, we use and manipulate symbols and signs - things that "stand for" and "take the place of" something else (11). Mitchell's graph (above) illustrates the process of representation with the two bisecting axes of communication (maker and beholder) and representation (stone and dab of paint) (12). He points out that the intersection of these two axes shows how communication occurs through representation and that representation can also be a "barrier to communication, presenting the possibility of misunderstanding, error or falsities" (12). Plato worried that a representation was merely a substitute for reality and at worse a "false or illusory substitute" (14). So, representation is a "means and obstacle," a necessary part and problem of the process of communication (13).

Aristotle notes that representations can differ in three ways: **object**- what is represented, **manner**- the way it is represented, and **means**- the materials used to represent (13). The stories related and experienced in this study will be represented differently in **manner** and **means**. As Mitchell so eloquently states,

"Representation is that by which we make our will known. . . [There is] no representation without **taxation**. Every representation exacts some cost, in the form of lost immediacy, presence or truth, in the form of a gap between intention and realization, original and copy. . . Sometimes the tax imposed by representation is so slight we scarcely notice. . . Sometimes it is as ample as the gap between life and death. But representation does give us something in return for the tax it demands, the gap it opens. One of the things it gives us is literature (21)."

media & genre

The dance between the medium and the genre is an intricate and interlocking one. Aristotle states that **representations** can differ in three ways: object, manner and means (**Mitchell**, 13). The means of literature is language. Words are the materials, but the manner of using these words can be different–poetry, short story, essay, etc. The subtle difference between **means** and **manner** is the distinction between medium and genre (14). The choice of a medium calls for another choice to be made as well: what form, or genre, to use.

When I refer to media, or a medium, I am referring to a process using specific techniques and materials through which communication occurs. For example, painting is a medium; so is **film**, print, etc. I am less interested in the political ramifications associated with media in terms of a mass form of communication than in the structure and process of communicating through a medium, whether it is a book, film or performance. There is a subtle, and often blurred, distinction between media and mediums that should be made here. The term media is more abstract and refers to variety of mediums as a whole. The term mediums is more concrete and is used to discuss two or more particular mediums a part from each other. So in a media studies department, the multiple mediums of film, text and theater can be discussed specifically, while the value of multimedia can be debated as well. This is a multimedia study that has several mediums in it.

Another way I discuss media throughout this study is by using the terms cross media and transmedia. These are two distinct terms, but they have similar connotations. Transmedia is a term coined by Henry Jenkins to describe how

stories can be told across media in such a way as to take advantage of what each medium does best ("Transmedia Storytelling"). Cross media is a form of transmedia that explicitly incorporates interactivity in order to position the audience in the middle of the experience (**Bjork**). In other words, both refer to narratives that occur across multiple mediums, but cross media specifically places the audience into the narrative. And both hint at the possibility of ubiquitous entertainment and narrative experiences across media, time and space.

So, mediums matter. As **McLuhan** has said, "the medium is the message" and has a vital part in the meaning of a story related through it (**Understanding Media**, 7). **David Miles** looks at how a medium has the shape in the meaning of a story when he examines how a new medium borrows heavily on older, more established mediums in his article, "The CD-ROM Novel Myst and McLuhan's Fourth Law of Media: Myst and Its 'Retrievals.'" According to Miles, the hypermedia of the CD-ROM leans on aspects of film, stage and the novel (4). Even so, **Walter Benjamin** notes how a new medium can tell a story like never before. In, "The Work of Art in the Age of Mechanical Reproduction," Benjamin notes that the introduction of a new medium, specifically film, has the potential to change the world because it allows us to see things that we have not been able to see before (226).

Working within a medium necessitates some type of form with which one shapes the message to be communicated and thus genre is involved. Genre is a type or category of composition within a medium. So, the medium of discursive text is filled with genres: poetry, short story, fiction, non-fiction, novels, essays, etc. And painting has still lifes, landscapes, portraits, etc. Film has documentaries, dramas, action-adventure, comedies, etc. In dealing with media, one also has to deal with the genres of the media. Genres have certain conventions that set up

expectations for the audience. And it should be noted that genres can cut across mediums. For example, we can talk about the genre of fantasy (with expectations of magic and mysticism) as it applies to film, fiction and painting.

All of this may seem fairly obvious, but I find it important to discuss genre and media because the two are so closely linked. When examining a medium in and of itself, it helps to note the genres of that medium and to know that looking at a certain genre with a medium will color the exploration of that medium. So by looking at the medium of **texts** and only citing poetic examples, the textual medium's expressive capabilities are not being fully explored. Also, when examining a new medium, it helps to look at the genre employed. Both medium and genre matter. To conduct this study, I need to be aware of the intertwining differences of the old and new forms of them.

text & context

Like **medium and genre**, text and context are intimately related to each other. Text and context are like the old chicken and egg conundrum. You can't really have one without the other. **Mitchell** states that the process of representation occurs in relation to a whole network of signs, in a context of systems of symbols together (13). The meaning of a **story** comes out of the **relationship** between text and context. Aspects of **space and time** form a context around a text. There is the time and space when the author wrote, and there are the repeated performative moments when readers engage the text. The reception of a text occurs within a context, within the many different spaces and times that a text is engaged. It should be noted that I am working with the post-structuralist notion that almost any object can be a text and that I will be exploring the distinctions between discursive and non-discursive texts, looking at the different forms of symbolism and interpretation. So, a text can be found in a variety of mediums. To avoid undue confusion, I will specify what type of text (CD-ROM, book, discursive or non-discursive) I am referring to in a given example.

I am concerned with the process of how the meaning of a story is related and experienced through and within text and context. **M.M. Bakhtin** explores this process in his book, **The Dialogic Imagination**. He discusses how the meaning of a given text is fostered by an open experience between the reader and the author of the text. The text has "an indeterminacy . . . a living contact with unfinished still-evolving contemporary reality (the open-ended present)" of the reading experience (7). So, there is a reciprocated dialogue occurring between both parties involved across the text and the meaning comes out of this conversation.

Similarly, **Roland Barthes** has written many books exploring the ways a text can have meaning for its reader(s). In S/Z, he defines two types of text; writerly and readerly (4). Both of these terms apply to what a text in relation to the position of the reader. A writerly text can be rewritten in the act of reading. The reader is "the producer of the text." Meaning comes forth in the reading (4). A readerly text is one that is simply read and not rewritten. It is a "classic text" that is read (4). In his poetic books, Roland Barthes and The Pleasure of the Text, Barthes attempts to give the reader writerly texts.

Like Bakhtin and Barthes, **Arnold Berleant** is also interested in studying one's contextual experience with an object rather than the interpretations of that object. In **The Aesthetic Field**, he looks to examine the process of experiencing a text itself. Likewise, **Hayden White** is concerned with the questions of how the form of a text means something for a reader. In his book **The Content of the Form**, he looks at the types of narratives we use and how these types, or genres, help us fill out the content of the story. The context of genre is a vital part of the medium of the text. Genre gives an intertextual framework to a narrative's **elements** that form the text.

In their article, "Reading Intertextually: Multiple Mediations and Critical Practice," **Beverly Whitaker Long and Mary Susan Strine** do an excellent job of delineating a process that they call intertextuality. **Intertextuality** is the process of drawing on one's experience with a myriad of texts and making connections between these various texts and the present text being experienced (468). It is the context of other texts that help us to experience a new text. This intertextual context with a text exists on a continuum between unique and universal. There are

our own personal and unique experiences that we bring to bear and there are the more universal and critical dialogues found in other related and critical texts. One type of intertextuality is not necessarily more valid than the other, they both contextually add meaning to a text. Long and Strine illustrate how the process of experiencing a text necessitates that the audience brings an intertextuality to bear in order to understand the text being experienced. So, when we read a book, we bring our intertextual experiences of all the other books we have read to play with the current text itself, and from this playfulness we garner a deeper meaning of the text(s) involved. The stories I am examining and telling are related through texts and experienced in context. Bringing an intertextual awareness to bear will help to fully understand and explain these stories.

performance

The **complexities** of performance as a means for **interpretation** have allowed me to better understand and **represent** the process of **narrative**. There are a myriad of conflicting perspectives on what exactly constitutes performance. Below is an explanation as to why the lens of performance is helpful when looking at stories in different mediums, particularly **hypermedia**.

Stern and Henderson define performance at its most fundamental as an act that is "interactional in nature and involving symbolic forms and live bodies" (3). It can be an act that involves the interactions between a performer and a text, an audience and a performer, and/or two people talking. The symbolism occurs at the "intersection between text and context," with the text being anything ranging from a script to a social norm for interaction. This intersection is where and how the page is brought to life on the stage through the performed gestures and actions, and where a conversation comes to life through the interaction of the two participants. The context of these occurrences is the "social, political, historical, psychological and aesthetic factors that shape the way we understand the text" (17). Context is the culture in which the audience is influenced. A performance is thus positioned within the cultural discourse of its place and time (**Auslander** 8). So, when and where it occurs influences how and what occurs. The context shapes and limits the possible meanings of a performance that the performers and the audience can interpret. So, whether it is a conversation or a stage play, it occurs within its context of time and space.

The intersection of **text and context** is a site where scholars begin to

expand the parameters of performance, exploring beyond the stage and into the various activities of our lives (like reading) and examining the fact that a performance is an event that exists in the present, in the here and now. It cannot be reproduced; it can be repeated, but then it is a different production (**Phelan**, **Unmarked** 146). Each production is a (re)presentation of the event. It is a different conversation, a different play. Each performance varies from the last, each affected by the present time and place. Each is filled with the unique potential of its present. It is happening in the here and now. This immediacy of performance is one of its biggest strengths, but it is a weakness as well, for documentation and reproduction are virtually impossible. It is a presence "imbued in performance" through the knowledge that "it will occur this way only this time" (**Vandon Heuvel** 12).

Looking more closely at the event of a performance reveals another characteristic. In any performance, more than one type of presence exists. There is the enduring presence of the performative event itself, and there is "the series of presents which constitutes whatever 'present' meaning" the audience has of the performance (**Sayre**, Object 19). In other words, the performance exists and endures along with the current meaning(s) found in the audience's responses, whether detailed or fleeting, which create and sustain a process of presents and presence. So, every (re)presentation, every new conversation, takes place within the rubric of an experience of past plays and past conversations. The performance of here and now is built on the preceding and continual process of performance(s).

Thinking of the process of performance opens up yet another facet. One can look at a performance as metonymic, an "additive and associative" process that works on "contiguity and displacement" (Phelan 150). To borrow Peggy Phelan's example, "'**The kettle is boiling**' is a statement that assumes water is contiguous

with the kettle. The point is not that the kettle is like water," as in a metaphor, "but that the kettle is boiling because the water inside the kettle is" boiling (150). **Bert States** discusses performance as metaphor, but I prefer to use the term metonymic. A metaphor has a substitutive function, while a metonym is additive. Performance does not simply substitute the text, it metonymically adds to it and to itself at the same time. It is metonymic in the sense that a performance echoes that from which it springs forth and echoes the process of performing itself. It simultaneously represents the text on stage and itself as well. This idea is analogous to Sayre's example that "the spoken breath is identical with the event that it describes because it is the event" (Object 16). In the process of performing, both text and performance are (re)presented. The embodied orality of the performance opens up its metonymic potential. There is the presence of the text and the presence of the participants in the here and now. Whether they are conversational or theatrical, these performances occur within a dynamic with bodies together in time and space.

To push this trope, several levels of metonymy can be identified that help to highlight the complexity of the spectator-performer dynamic and the context of performance itself. First, metonymy in performance itself exists as described above. Second, metonymy occurs in an audience's experience, which "involves the active role [of] the audience . . . in creating the emergent meanings" of the event (Stern and Henderson 406). The viewers reinterpret a performance within each experience they have of it. In other words, they themselves are a type of performer, creating meaning in their interpretation of an aside made in a play or a conversation. In his article, "How to Rescue Literature," Roger Shattuck goes so far as to say that readers should actually become performers. He espouses that a text needs not only to be experienced but experienced aloud. Shattuck strongly believes that for the reader to better bring the text to life, the reader should perform

it aloud, letting the words out of the pages through our bodies. Third, the viewers become aware of this present interpretation to the performance, becoming "spectators of their own performances, becoming a kind of performer" (Phelan 161). The audience becomes introspectively aware of their response(s) to a performance. In other words, they know what they believe it means. In this awareness, the performing audience members are engaging their present experience of a performance within their collected experience(s) of it (Sayre, "Performance" 103). The audience members are simultaneously representing a performance in their performative viewing as well as representing their interpretation of it. Or, more simply, the audience/listener is helping to make meaning just as the performer/speaker is. Within this dynamic, the power of meaning becomes the meeting of both parties, together the performer and audience create the meaning that occurs within that time and space. Without one or the other, there would be a lot less to talk about.

The above discussion of the variations of metonymy expands the definition of performance. One can look at any present iteration of any event as a performative moment, a moment that can be represented, but will never be reproduced again. So, ideas of performance do not have to just be relegated to staged productions or conversations. We can look at the performative elements of how a reader reads a text; the meaning of a text comes out when someone performs a reading, one that will only happen this way, this time. It is in the performative moment that the meaning of a text is fully realized, for both parties (author and reader) are now involved together. Sayre sees the potential for acknowledging and adapting the playful energy of performance within the pages we write and read ("Performance," 103). Vandon Heuvel also focuses a performative lens upon books. Specifically, he looks at the spontaneity of performance in relation to the

stability of written texts. In the interstices of these two mediums, new meanings arise for the readers and viewers (23). Auslander looks at how performativity need not be solely on the stage as well. He notes that we live in a **mediatized** world and that performance has spread across media, infecting the other mediums with performative spontaneity from both performers and audiences (53).

So, the kaleidoscopic lens of performance is an apt one to use in this study. I will be examining and using the structure and process of stories in three different mediums. I will analyze as a scholar, and illustrate as a producer, to I look and see how meaning is created and **performed** in the relation and experience of these stories. The structure of each medium allows for a different performance and these processes are how the meanings of stories are created and shared.

methodologies

Inspired by the possibilities of interactive performance, this study is meant to work on two levels.

analysis

I am analyzing how cross media stories are related and experienced in texts, comics and hypermedia. I am interested in how technological advances have allowed a new medium to emerge and what this does to our notions of what a story is and can be.

illustration

I will **show** these three mediums together to put my **hypothesis** to the test. If stories are related and experienced differently in various mediums, new and old, then my study will tell a story by incorporating and using the mediums of the objects of study that are also being an

A part of my methodologies will be the development of two forms together. There will be a primary fluid, dynamic and rhizomatic online hypermedia version, and then a secondary indexical and chaptered version. The second version is a discursive and linear artifact, an imprecise map of the primary rhizome of the web territory. Having both will enable readers to interact with the ideas in different ways.

analytical method

scholar

In **discussing** the narratives of **Myst**, **Sandman**,**Ultima OnLine** and **MitterNachtSpiel** I will utilize a **schema** of narrative composed of four characteristics: setting, character, theme and plot. These four characteristics are the building blocks of narrative. Together they combine to give us a story. To **define** narrative as per the Third Edition of **The American Heritage College Dictionary**:

> **Narrative:** a narrated account, a story | the art, technique or process of narrating (to tell a story) | consisting of or characterized by the telling of a story (an account or a recital of an event or series of events | a usually fictional narrative intended to interest, amuse the hearer or reader | an incident, experience, or subject that furnishes or would be interesting material for a narrative | the plot of a narrative or dramatic work | an anecdote | a lie | the complete horizontal division of a building, constituting the area between two adjacent levels).

Referencing the Third Edition of **The American Heritage College Dictionary** again, let's **define** the four building blocks:

> **Setting:** the position, direction, or way in which something is set | the context in which a situation is set, the background | the time, place and circumstances in which a narrative, drama, or film take place | the scenery constructed for a theatrical performance or movie production | a composition written or arranged to fit a text, such as a poetical work | a mounting, as for a jewel.

Character: the combination of qualities or features that distinguishes one person, group, or thing from another | a person portrayed in an artistic piece | characterization in fiction or drama | a mark or symbol used in a writing system.

Theme: a topic of discourse or discussion | a subject of artistic expression | an implicit or recurrent idea, a motif | a principal melodic phrase in a composition especially a melody forming the basis of a set of variations | a root accompanied by derivational affixes | a short composition assigned to a student as a writing exercise.

Plot: a measured area of land | a ground plan of a building | a pattern of events or main story in a narrative or drama | to represent graphically | to scheme | to be located by means of coordinates, as on a chart or with data.

My contention is that these four building **blocks** of narrative differ in degree in relation to each other across mediums. So, setting may be more prominent in one medium, while character is much more prevalent in another. What I propose to do is take the four and compare them in relation to each other within the three mediums used to relate the stories in my objects of study. While there is often a difference between how these four blocks fit together in different mediums, it may have more to **do** with the authors and less to do with the mediums themselves.

Along with these foundational narrative blocks, I will use the ideas of **Wayne Booth** and **Nelson Goodman** to help me discuss the process of storytelling

in different mediums. Booth sets out in **The Rhetoric of Fiction** to look at how literary stories apply certain rhetorical devices to help the reader through the story. These devices pull readers into and through the story by giving them clues and directions as to what is going on in the story. For Booth, these devices are "elements that are recognizable and separable, 'friends of the reader'" that exist within literature (106). So, he tries to make a distinction between the rhetoric of fiction and the fiction itself. And yet, he goes and blurs this distinction. For Booth, the trick is that when these elements, or rhetorical devices, are done well, it is extremely hard to tell whether they are rhetoric or content (105). The best rhetoric comes across as content, and vice-versa. Booth is focusing on the written word, but his ideas are quite useful when examining storytelling in other mediums as well. I will examine these mediums looking for the rhetorical devices employed in them to help the story along. Looking for the rhetoric in the fiction of a medium has helped me better see how a medium tells a story.

In **Languages of Art**, Goodman specifically looks at how symbolism differs across mediums. He discusses how each medium has its own systems of symbolism. These systems of symbols allow examination of each medium in its own right and also illustrate how it compares and converses with others. Goodman helps distinguish the discursive and non-discursive symbolism of texts and images and hypermedia. He also aids in the analysis of the blending of these symbol systems as seen in sequential art and hypermedia. Goodman has been a great help because of his interest in how various mediums have different systems of symbols. His ideas enable me to look at the various ways symbolism functions in the mediums addressed and employed in this study; texts, sequential art and hypermedia.

In novels, the rhetoric of the fiction comes through a discursive system of symbols. Description, point of view and literary allusion are some of the many ways that language is rhetorically used to help construct literature. This may sound obvious, but words are the symbols used to tell the story. With sequential art, the system of symbols expands beyond words to include colors, shapes and layout. The rhetoric of the fiction now includes images. The words matter in comics, but so do the shading, the lines of sight, the color schemes and the actual layout of the page. Hypermedia combines even more mediums than sequential art and includes hypertextual interactivity as well. The system of symbols is an elegant web of sights, sounds and actions. Interface plays an important rhetorical function, for if one is to interact with the world and story, one needs to know how. Sounds and videos become a part of the rhetoric of the story, and the hypermedia world itself is a place and space to explore the story and become immersed in it.

illustrative method

producer

[repeat] This is an academic study and a narrative about stories and their mediums **[1]**. **[4]** If you choose, you can decipher the puzzle and connect the links; if not, you can read straight through **[5]**. **[3]** Links in and between the digital and analog are keyed through repeated symbols (colors, words, numbers, images, etc.) creating a rhizomatic web **[4]**. **[2]** Images, colors, words, numbers and links are used to code and layer this chapter **[3]**. **[5]** Either way, stories are related and experienced **[end]**. **[1]** You can experience the story and play with the ideas as you puzzle through the words and images **[2]**.

I will **borrow** the process and structure of the **objects of study** for this discussion. **Myst**, **Sandman**, **Ultima OnLine**, and **MitterNachtSpiel**, are all hypermedia that incorporate different mediums and stories beautifully. I also want to incorporate these mediums so that the study **shows** what it is extolling. Through this representation, I will not only be analyzing, but **using** the various mediums, theories and stories **together**. I believe the **best** way to do this is to create a hypertextual territory.

This illustrative performance is inspired by those who have written and performed within multiple mediums. Playing with the mixing of two mediums is an interesting way to see how each medium conveys meaning in a slightly different manner than another medium. In his article, "Realism of Low Resolution," **Richard Shiff** notes how a medium best gains a sense of its communicative possibilities in relation to, and interaction with, other mediums. So when I show

multiple mediums in this study, we will be able to get a better sense of the communicative strengths and weaknesses of those mediums.

In the case of comics, or sequential art, we will see the dance between words and images. This dance is gleefully explored and utilized by **Scott McCloud** and **Will Eisner**. Both of these authors/artists are great guides and inspirations for my interests into sequential art. McCloud uses a medium to talk about itself. In **Understanding Comics** and **Reinventing Comics**, he uses comics to explain comics. And Eisner's two seminal books, **Comics & Sequential Art** and **Graphic Storytelling**, literally and figuratively illustrate how images and words combined in the format of a comic to tell a story like no other.

In terms of the multiple **forms** of my endeavor, I was definitely encouraged to see the brilliant work done by both **David Kolb** in **Socrates in the Labyrinth**, and by **Mark Stephen Meadows** in **Pause & Effect**. In Socrates in the Labyrinth, a hypertextual document on CD-ROM, Kolb explores and explains with hypertext, how hypertext can be used in our philosophical arguments, creating associative patterns that enable new forms of discourse. He practices as he preaches, making four uniquely patterned hypertextual essays ("Aristotle Argument," "Earth Orbit," "Cleavings," "Habermas Pyramid"). Meadows does something quite similar to what I am attempting to do, just the reverse. He creates a book that is his primary interactive text, and then he has a supporting **website** for his book. His hypertext is secondary to his playful, insightful discursive text.

The use of the word **play** is not casual. As **Johan Huizinga** notes in **Homo Ludens**, **playing** is one of our most significant functions (1). We communicate a range of our wants and needs, thoughts and feelings through playing with each

other. And in terms of hypermedia storytelling, the **play** is the thing and the game is afoot. Hypermedia stories like **Myst**, **Ultima OnLine** and **MitternachtSpiel** have an obvious game element. They are stories that use play to entice the reader to engage. As Andrew Colman notes in, Game Theory and Experimental Games, games deal with the logic of making decisions in situations in which the outcomes rely on the decisions made (3). In hypermedia, the story needs a context in which the reader then has impetus to act, otherwise the story does not progress. By incorporating a game component into the experience, creators of hypermedia encourage people to play and get involved with the story as they try to solve the puzzle or win the game. In **Myst**, the context is one of a mystery story that will not be revealed unless you puzzle through it. In **Ultima OnLine**, you are a participant in a world where you can kill the bad guys, be a bad guy, win some treasure, and/or become a leader, etc. The story develops as you build up experiences and gain more abilities in its world. In **MitterNachtSpiel**, the play is not engaged until you join the moon and company. It's through your interactions that the midnight play begins, continues and ends. The game is a part of the story.

But as **Brian Sutton-Smith** notes in **The Ambiguity of Play**, our combined theoretical definitions of play are filled with ambiguity (1). We are constantly debating what it means to be Homo Ludens. This is an issue that I find quite telling when it comes to looking at games and narrative. For, not only are our ideas of play ambiguous, our ideas of how stories and play relate are **ambiguous** (and debated) as well. It is my belief, that while we are Homo Ludens, we are also Homo Narrans. We play to learn about our world, but we tell stories to contextualize, relate and remember what we have learned.

Games on computer can have some form of narrative involved, either

directly or not. **Pong**, one of the first electronic games was a simple version of ping pong; the rules were similar, and you kept the "ball" in the "court" (**Bennahum**, 15). **Space Invaders** had the aliens coming to destroy the planet, **Pac-Man** had a round icon with a mouth that constantly ran around in mazes eating up dots while being chased by ghosts, and **Mario Bros.** had Mario saving the Princess from the dragon. Then came **Zork**, if any game can be seen to have an influence on the story of **Myst** it is **Zork**. Like **Myst**, **Zork** puts players into a fantasy world where they must explore and play in order to puzzle through the story (**Murray**, 74). Unlike **Myst**, **Zork** is purely hypertextual, there are no images or sounds, only text. You typed in your actions, such as "pick up box," "go west," etc, and more text would describe the results of your actions. Both games have a strong story within which the reader plays.

Along with an integrated story and game, **Myst**, **Ultima OnLine** and **MitternachtSpiel** incorporate several mediums (text, graphics, music and aural ambiance, video and hypertext). Each has a context that gives the reader a reason to want to play with the story, and because of the computer, each author had to design an interface that enables the reader to engage the story with a minimum of mental effort.

David Miles points out that a current aspect of hypermedia is that it leans on other mediums. In his article, "The CD-ROM Novel **Myst** and McLuhan's Fourth Law of Media: **Myst** and Its 'Retrievals,'" Miles looks at how **Myst** borrows heavily from older mediums, illustrating how these retrievals show the strengths and weaknesses of the mediums involved (4). By illustrating all of these

mediums, I will be able to analyze them differently.

Within this representation will be a threefold blending, a critical choreography and cartography of stories, theories and media. The multiple mediums will be complementarily combined, blending together text, sequential art and hypermedia. Also, various narratives will be incorporated within larger narratives allowing a juxtapositioning that opens up new perspectives on the stories. And a myriad of theories revolving around narrative will be put into play together to shed as much light as possible on the process and structure of narratives across media. This tripartite collage of media, stories and theories will allow us to better comprehend and represent the ways and means in which we try to understand the worlds in which we live through the stories we share with each other.

why the web

Or, in other words, why have I chosen the to relate this collage of media, stories and theories **primarily** through interactive hypertext? And why do I consider the textual version to be a secondary artifact of the first? The **answer** to these questions can be found, implicitly, through this hypertextual experience. It is in **between** all the pages. As Susana Tosca notes, links can have a lyricism that we can explore to find meanings between, among, through and around them (**"A Pragmatics of Links"**). It is the hypertextual, rhizomatic linkings that weave these pages together in a diversity of layers and simultaneously open it up to the almost infinite world wide web, where there is no there, there. It is in the dynamic reading/writing experience, where readers have more overt control to "read" as they choose. And the writer(s) can continually, and performatively, update the document. It is a living document in which the process allows the content to grow and change as long as it is attended to. It never has to be completed as long as I (and very possibly others, and you) continue to add to it.

So, I could have attempted to write this as a **standard** narrative, in textual format and due process as it were. But it would most certainly not be the same story, and it may even be lesser for the difference. A scholarly study is a process of academic logics; it is the studious creation of new knowledge, adding to an extant area of study. As such, the content of the work needs to be new. Normally, this would be a unique look at a subject with possibly some new theories put into play.

All this efficiently documented in a discursive, academic text.

This is a fine standard and I am not arguing for its end, but for the expansion of academic discourse into new **processes**. We already see this in academe, with Performance Studies opening up new modes of academic exploration and knowledge. Performance Studies has amply shown limits to textual discourse: it's static nature and distance between the world observed and the pages preserved. And Performance Studies exists within its own ephemeral limits, always already gone, and then we may have a video, but we always have a written document of the performance.

As **Nancy Kaplan** notes, hypertext (and all technologies) have ontological, aesthetic, and political aspects that shape the meanings from the mediums (Politexts, Hypertexts..."). Hypertext combines some of the characteristics of text and performance into a new and unique experience. Like text, hypertext is a document that can be referenced and reviewed time and again. Like performance, it is dynamic and ephemeral, allowing the user to literally experience something anew each and every time. It is a remediation of writing that is flexible and interactive (**Bolter**, **Writing Space**, 26). This interactivity allows for stories to be told in which the reader is actually a character that can observe, explore, modify and change within the piece (**Meadows**, **Pause & Effect**, 62). And it also exists within its own limits. You are currently confined to experience a hypertextual web page while sitting in front of your computer. **Granted**, there are wireless applications and other exceptions, but for the time being, if you are reading this in it's primary interactive, hypertextual form, you are more than likely sitting at a computer.

So, I have chosen to create my primary work as an interactive hypertext. I also attempt to map the hypertext to a secondary, textual version (old standards cast long shadows). It is my belief that the text is a static artifact of the dynamic hypertext, a map of a motion. The secondary version lacks the active dynamics; therefore, ideas and web pages that are hypertextually linked and just a click away from each other become distanced from each other in the linear form of a discursive text. But it is important to note that both "versions" are actually a cross media work that strands across, and between, these two mediums. These two versions are intimately interconnected and exist in tension together as a whole, using both mediums to explore and express ideas. So, both the hypertext and the text enable different experiences to be had.

By employing different mediums together, a unique form of scholarship and documentation is created. It is a cross media hybrid, existing in two mediums together. This scholarly document examines and illustrates through various mediums in order for the narrative to be related and experienced in different ways.

For better and worse, the nature of **narrative** is changing on the computer. By analyzing and performing within old and new mediums, I hope to show how narrative is changing even if the story remains the same. This study exists in the tension between the old and the new as seen in the narrative structure and process of different mediums. I am analyzing and illustrating how we tell each other stories through new and old mediums, and the combinations of them. I believe a choreography of old narrative techniques along with new technologies allows for

amazingly positive, but also potentially regressive, realizations in the nature of what **a story is and can be**.

Like **text** and **performance**, I believe that hypertext is enabling new and unique modes of exploration and knowledge for academe to struggle within and benefit from. **Stuart Moulthrop and Nancy Kaplan** believe that the inherent interactivity can lead to some innovate pedogogies ("Something to Imagine..."). So, while the content of my study is important, I truly believe that the form of it is important as well. I am interested in my objects of study and my exploration of narratives and mediums and the computer's emerging role in our cross media storytelling. And in the end, hypermedia is here, and we are just beginning to explore its capabilities and constraints. This work is a descriptive **analysis** of my topic, and just as importantly, it is an **illustration** of what interactive hypertext may be able to add to our knowledge. The various objects of study help to focus my exploration of a cross media narrative that flows from books to comics to hypermedia.

the written word

Stories predate writing, but writing has long been the standard method of documenting stories. Of course, there are many other mediums through which stories have been related and experienced, but the written word still stands as a bastion of storytelling. In mapping the **story grand** of **Myst**, there are three novels completed; **Myst: the Book of Atrus**, **Myst: the Book of Ti'Ana**, and **Myst: the Book of D'Ni**, and a fourth one expected at some point in the near future, **Myst: The Book of Marrim**.

The narrating aspect of the Myst novels is that of an omniscient narrator who is privy to all the characters' thoughts. Throughout the trilogy, the reader is along for the ride, reading to see what happens next. The tense of the **Myst** novels is mostly present. Throughout the trilogy the story is unfolding as it is told. There is little foreshadowing and, instead, there are a lot of cliff-hangers and suspense, as both the characters and the reader discover what is happening together. The mood of the **Myst** books is of textual representation with a smattering of drawings placed here and there. The words evoke the images, but the **Millers** also include pictures to add to the reading experience. The aspect of voice has the reader as an implied and assumed audience of the narrator. As a reader, you are being told a tale by the narrator, and you just sit back and **listen** as you **read**.

myst story grand

The **story grand** of **Myst** goes through some time jumps with the **novels**. As noted earlier, the story grand actually starts in the second novel, the **Book of Ti'Ana**. It then moves to the first novel, the **Book of Atrus**, followed by the comic, the **Book of the Black Ships**, and then the two CD-ROMs, **Myst** and **Riven**, followed by the final novel, the **book of D'Ni**, and then the game **Myst III: Exile**. It then moved online (if only temporarily) with **Uru: Ages Beyond Myst**, which was followed by **Uru: To D'Ni** and **Uru: The Path of the Shell**. Finally, it moved to **Myst IV: Revelations** and then a webcomic, **Myst V Comic**, followed by **Myst V: End of Ages**. But these books and CD-ROMs were released in different timeframes. The **Myst** CD-ROM was released first, then the **Book of Atrus**, then the **Book of Ti'Ana**, then the comic **Book of Black Ships** (there was also and unofficial comic **Myst: Passages**) then the **Book of D'Ni**, then **Riven**, **Myst III**,
Uru: **Ages Beyond Myst**, **Uru: To D'Ni**, **Uru: The Path of the Shell**, **Myst IV**, "Myst V Comic," Myst V and the upcoming **Myst: Book of Marrim**.

In considering the four aspects of narrative, **plot**, **character**, **setting** and **theme**, the novels lean most heavily on character and plot, and then setting and, least of all, a pervasive but bare bones theme. Now, I need to say that of all of the mediums, the novel is the one that can most adroitly push any of the four characteristics of narrative. Depending on the skills and desires of an author, words can

be used to foreground character, plot, setting or theme. That said, I find that the Myst novels center around characters, particularly Atrus who is present across each incarnation of the story grand. These characters act within a cliff-hanging plot style perfected by Charles Dickens. The end of almost every chapter is a cliff-hanger and the point of view is switched among characters from chapter to chapter. We watch as Atrus and company (or Aitrus and Anna) move through these underground worlds that are manageably described, if not rivetingly so. Even though the plots are at most workman-like, there is a clever subtlety found in the third novel where the events of the first two games are revealed, but the plot (and the end of those games) are not revealed. All you are told is that Atrus succeeded in freeing himself from his sons and his father. So there aren't any spoilers for the games. You aren't given any **clues** or hints. All you know is that someone (presumably you if you have played the games) has successfully helped Atrus to this point of the story grand.

So, the perspective of a player of the CD-ROM games is treated as a character in passing reference within the third novel. The other characters find themselves in standard plights of danger and love, and they struggle and succeed as the story draws to a neat conclusion with each novel. These stories all revolve around the setting of D'Ni, a magical underground world, and the theme of the novels is one of exploring the wonders of the world (which harkens back to Verne's **Mysterious Island** - the inspiration for **Mys**t). Even though I believe the theme to be the narrative characteristic developed the least in the novel, it is worth noting that the theme has an intimate connection with the CD-ROMs. In the novels the theme is one of the virtue, joy and rewards of carefully exploring and enjoying the world around you. That way you are living a full life and seeing the whole.

This theme could very well be the best instruction for how to successfully play the CD-ROM games. You need to carefully explore the worlds in the games in order to successfully puzzle through and fully experience the story that only moves forward as long as you're exploring the **worlds**.

first myst novel

The first **Myst** novel, the **Book of Atrus**, focuses on the story of the mysterious father figure from the **Myst** CD-ROM. The **Millers** have said that while they were developing the **Myst** game, they kept documenting the backstory of the game in order to help them piece together the story presented in the CD-ROM (**Carroll**, "(D)Riven"). And when they completed the CD-ROM, they realized that they had enough **backstory** material to put together a novel.

So, this story served as a map from which they pieced together the story of **Myst**, and then they fleshed it out and made it a story in its own right that serves as a fictional history to the storyline experienced on the first CD-ROM. What follows is an overview and a summation of the story as related through the trilogy of novels.

In one aspect, the novel serves as a cultural rationale to the world of the CD-ROM. The method and mode of making and using the linking books found throughout the worlds in the **CD-ROM** is fully explained by the creation of an extinct culture and race, the D'Ni (pronounced, "dunny"), a people who lived underground in fabulous caverns and linked to millions of worlds. Whereas in the game all of this is barely mentioned, it is just assumed that opening a book and touching the page will take you to another world. Atrus, who leaves us clues in the **Myst** CD-ROM, is the character around which the first book builds it tale. We are introduced to Atrus and his life (which first consists of his grandmother, Anna, and

his experiments out in the desert on the side of a volcano and then of his adventures with his prodigal father, Gehn). We get to see him propelled into this amazing subterranean world, a place where there is a forgotten culture to be discovered and explored. A theme of exploration is derived from Atrus' character and the character of D'Ni culture.

In presenting this narrative, the **Miller** brothers have co-authored the novel with David Wingrove. The three of them shape the books around Atrus. The perspective of the writing is primarily from Atrus' point of view, although we do have glimpses from the other characters' perspectives, and the story mostly travels with Atrus. We watch as he is abandoned by Gehn and then grows up and is experientially educated by Anna. We see the central theme being established in Anna's questions to Atrus. She asks him what he sees, and encourages him to look at the "whole." In other words, Atrus should consider fully everything that he engages and everything in the world, to fully see the interconnected relationships around him. This inquisitive sense of the whole will serve Atrus well in his upcoming adventures, which begin with the return of Gehn, who sweeps Atrus away and down into the labyrinthian world of D'Ni. After establishing a theme of the Whole, Atrus is exposed to a grand old culture that had mastered the art and science of writing books that connected to, or created other, entire worlds. The power of the written word to whisk you away to another place is literally a power of the magical D'Ni language. They had normal books that roughly equate to the books in our world, but they also had these special books written on special paper and with special ink, that when fulfilled, allowed a person to link to that written world. So, the story revolves around Atrus' exploration and education into the D'Ni culture under the harsh tutelage of his father.

As Atrus experiences more of the D'Ni culture and history, he begins to master the writing of these special books, and to travel the many of the worlds that Gehn wrote. He comes to disagree with Gehn's ideas about the worlds and how they are connected to the books. Gehn believes that he is actually writing these worlds into existence, and they would not be if it were not for the books. And he believes that he is a god who holds total power over the worlds he has created. Atrus, on the other hand, comes to believe that the books merely serve as links to many possible worlds that could be in existence. Through their precise description, the books become the gateway into these possible worlds that would exist without the books, but one would not be able to visit them without the books as a link. This philosophical rift soon becomes a tension between father and son and serves to further illustrate the theme of the book. Gehn, while extremely gifted, only sees the bits and pieces of writing and what he makes, while Atrus sees the whole in his worlds and his written descriptions of them. The tension does lead to a father-son break, where Atrus is placed in the position of having to overcome Gehn. They become conflicted combatants, both struggling within themselves about their strained relationship, while concurrently fighting with each other, Gehn to rid himself of Atrus, and Atrus to stop Gehn from destroying worlds.

The book follows a classic style of cliff-hanging chapter endings that switch you from different points of potential catastrophe as it builds to a resolution. Again, these switches may entail a perspective switch between characters, but they mostly revolve around Atrus. Gehn, Anna, and Catherine (Atrus' love interest) play their parts in the story of Atrus. And the story follows a tried and true speculative fiction format with action, suspense, love and conflict with a resolution in the end.

Both the Island of Myst and the world of Riven are introduced in the storyline of this book. Riven, Gehn's thirty-seventh age is where Atrus first meets Catherine and it is the world in which Atrus and Gehn have their final showdown. Gehn ends up trapped in Riven at the conclusion of the novel. Myst is set up as a world that Catherine has written for Atrus and herself.

The final resolution of this first novel more fully sets up the beginning of the CD-ROM **Myst**. Like the deeper explanation of the linking books, this story gives us more of the details and a context in which to fit those ominous first lines of dialogue that we hear in the introduction of the CD-ROM. These same **lines** serve as the final words read in this book, so a direct connection is made in the storyline between these two pieces. This direct connection implicates the reader into the action about to take place as well as illustrating that in between the end of this novel and the beginning of the CD-ROM many events (seemingly tragic and partially revealed in the **comic book**) occur before the reader becomes an active part in the **sleuthing** in the **Myst** **CD-ROM**.

second myst novel

The second **Myst** novel, the **Book of Ti'Ana**, goes **deeper** into the mythological **story** of the D'Ni.

It goes back and relates the story of Anna and how she stumbles upon the ancient culture of D'Ni and meets Aitrus (the grandfather of Atrus). It starts off underground as we follow Aitrus, as he and others are digging their way up to the surface. We get to see a sliver of D'Ni culture as we are introduced to the idea of guilds. In D'Ni you develop a specialty and join that guild. Aitrus is a member of the surveyors guild. Aitrus is described as a hard worker who loves to constantly experiment and innovate. We also get introduced to Veovis, a member of the writers guild (they wrote all the linking books like those found in the game, Myst) and a person who becomes a friend of Aitrus. They reach the surface, but fear meeting violent, uncivilized monsters (us). After a debate, they make the decision to close of the tunnels and return to their underground kingdom. Veovis is adamantly for closing the tunnel, while Aitrus passionately wants to explore. After the decision there is an earthquake and Aitrus ends up saving Veovis' life.

We then switch to Anna and how she discovers the D'Ni tunnels. We are introduced to her with her father as they are exploring the rocks around a volcano (again, there is a big thematic emphasis on being naturally curious about the worlds we inhabit). They are looking for geological clues about the history of the area, and they come upon rocks that look constructed instead of natural. They find

a natural cave that is very close to the D'Ni tunnels that Aitrus and company sealed off. Together, Anna and her father explore the caves and the anomalies therein. Anna's father gets sick, recovers and works, but eventually dies, leaving her on her own. After awhile, Anna's curiosity about the anomalies causes her to go exploring on her own, so she descends down into the earth. She ends up discovering the D'Ni tunnels and sees their writing on the walls, leading her to believe that there is a civilization below. So she explores further.

At the same time as the above events, Aitrus and Veovis have become more politically involved in the renewed debate over whether to contact the surface. At a public forum on these issues, it is revealed that Anna has made contact with D'Ni. She is brought down into the grand cavern of D'Ni and she is kept under courteous watch and the D'Ni council slowly debates what to do about the situation. Aitrus becomes an ardent voice for letting her learn about them so they in turn can learn about her. Veovis is totally against her integrating at all. This disagreement strains their friendship. Anna helps her cause by learning their language. They hold a trial to determine what to do with her and she speaks for herself and wins over the council. She ends up staying in Aitrus' family home and starts learning more about D'Ni. Veovis is unhappy, but tolerant, as long as she is denied access to the great linking books that are the heart of their culture. Aitrus silently disagrees with Veovis and actually shows Anna a linking book and begins to help her learn how to write these amazing books. Soon, Veovis learns that Anna knows of the linking books and is learning how to write and he and Aitrus find their friendship dissolving.

Anna begins to learn to write with Aitrus, and they begin to fall in love with each other. He takes her to a world he wrote where she sees the thick glasses

the D'Ni wear to protect their eyes when not underground. It is here that Aitrus gives her a D'Ni name, Ti'Ana, meaning storyteller, and they also decide to try to get married and soon have a child, Ghen (Atrus' father from the first novel).

While this is occurring, there is another debate revolving around issues of class between the elite upper class of D'Ni and the lower class. So we see a theme of how all people, regardless of class, should have the same rights and freedoms. Veovis is enraged by these changes and looks for ways to foment rebellion in other ways, seeking out some one called the Philosopher.

Thefts of the linking books and destruction of guild houses occur as a rebellion begins. What follows is the end of D'Ni culture as it was. The Philosopher and Veovis release a biological gas within the great underground cavern, killing all who breathe it and contaminating all the worlds linked to through books. Aitrus becomes infected but manages to help save Ti'Ana and Gehn, but D'Ni of this story is now gone. The tale **ends** with Ti'Ana and Gehn returning to the surface to live where she lived with her father long **ago**.

third myst novel

The third **Myst** novel, the **Book of D'Ni**, jumps forward in the **story grand**, its events taking place after both **Myst** and **Riven**. In it Atrus and Catherine return to D'Ni to rebuild the old culture. They return to the grand cavern and begin searching for linking books to the old ages of D'Ni and searching for survivors. There are two oblique references to the stories in the games (enough to note them, but not give anything away). Atrus remembers his sons, but that is all that is mentioned, and he also remembers how he was captured by Gehn and held captive. These references allude to the fact that he has successfully moved through those portions of his life (meaning that you the reader have successfully won the games as it were, and that you're getting an abstract biographical reference within the narrative). We then follow Atrus as he finds some worlds inhabited by old D'ni and their offspring. Atrus meets with these people and asks them to return to D'Ni to help rebuild the old culture.

They discover a hidden chamber that was sealed beneath a floor and then sealed off in sections with ancient books in an ancient script. After much debate, Strus and company decide to explore the world.

They find they are in a world called Terahnee, and they are welcomed by its king. While they visit and slowly get in more and more formal circles, they are exposed to an unbelievably opulent and abundant culture. Everything is picture perfect and beautiful beyond description, the art and ideas are superlative, everyone seems intelligent and considerate.

With such a wonderful world, they prepare to return to the linking book and bring everyone here, but on their way back they finally discover the dirty secret of Terahnee, they keep a race of people as slaves. Atrus decides that instead of fleeing and trying to escape, he will stay and try to help change the Terahnee culture. Again, a theme of equality for all.

But a plague starts spreading across the land, brought by Atrus and company, and rebellion starts as well. Atrus tries to moderate the revolt and temper the angers so that they can have less killing and more constructive rebuilding of the culture.

He writes two new ages, one for the slaves to rebuild their lives, and one for the D'Ni to build theirs anew. They seal all the old books away again, severing the **links** between the worlds. And the two new cultures are set to begin their new growth. So the **storyline** found in the **Myst** novels ends with a new start in a new **world**.

sequential art

Moving from the singular medium of discursive text, to the hybrid medium of comics, the narratives of the **Myst comic** book, **Myst V** webcomic, and the **Sandman series** are obviously much more graphically oriented. In the comics, words, images and their orientation on the page carry the story forward. Like the **novels**, the **Myst** comic serves as a backstory to the **Myst** CD-ROM, giving us more of the history of the **story grand**.

The **Sandman** story sprawls across seventy-five and one-half monthly comic issues. There are several groupings of various storylines that take place across several issues, but the story grand is revealed over the entire **Sandman** collection. Looking at both, the representation of **Myst** is stock comic book format (panel, picture, dialogue, **repeat**) while the webcomic follows a vertical layout, and the **Sandman** series is much bolder. The medium of **sequential art** becomes a dance between words and images that are used to convey the story. As with the novels, the Myst comic and webcomic reveal more about the characters in the story grand. And in **Sandman**, Neil Gaiman introduces us to the **Endless**, a family of beings who have played a part in a myriad of our ancient myths.

myst comic

The **Myst** comic book, the **Book of the Black Ships**, falls in the **Myst story grand** in between the first **Myst** novel and the **Myst** CD-ROM. It was supposed to be a 4-part miniseries, but, in the end, due to lack of success, only the first comic was released. Possibly this could be due to the fact that this was the one part of this narrative venture in which the **Millers** did not have any direct involvement. Instead they agreed to let another team (Lovern Kindzierski, Chris Ulm and Doug Wheatley) work with their characters. This team also created an unofficial comic prequel, **Myst: Passages**, without the support or approval of the Millers. Their absence shows in the **comic**'s lower level of narrative quality when compared with the **CD-ROMs** and the **novels**. This is the narrative low point of the story grand of **Myst**. The **quality** and consideration found in the CD-ROMs and novels is sorely lacking here.

As I mentioned earlier, the line that is echoed at the end of the **Book of Atrus** and the beginning of the **Myst** CD-ROM illustrates that there are many events that occur in the story grand between these two points. It seems rather appropriate, that while this comic attempts to flesh out this part of the story grand, it ends up incomplete and therefore, leaves the Mysterious events unexplained and only to be discovered by a reader's sleuthing in the CD-ROM **Myst**. This comic is the beginning of the tale of Atrus, Catherine and their two sons Achenar and Sirrus. Mainly, it is an attempt to show how the sons end up evil but it does so in

such an unrealistic fashion that it pales in comparison to the rest of the story grand of **Myst**. In two fleeting pages, it summarizes three novels worth of narrative and then plunges headlong into the disgruntled sons' adventures. There is little explanation for why these two boys are so unhappy other than seemingly stern father. Sirrus and Achenar go off to rendezvous with the Black Ships (again, no explanation as to why or who these people are on the Black Ships. They're just evil, cause they are some alien form of pirates who steal and have slaves). Over the course of three pages we see the sons become evil like the pirates with whom they are traveling (no explanation yet again, they just start being amazingly cruel) and they hatch a plan to trap their father and become gods over all the ages (echoing Gehn's god-fixation and desire to rule all). Atrus and Catherine are basically nonentities, only appearing to reprimand the boys when they return. The boys then steal a book (unbeknownst to Atrus) and the last panel of the comic shows Achenar offering the book to the leader of the Black Ships: end of book one. Comic book two (which is never produced) is hinted at in the last words, "Next: Betrayal," so we can guess that the sons are going to betray their father soon.

The prequel comic, **Myst: Passages**, is an unofficial part of the **Myst** story grand as it was an unauthorized addition. It shows Atrus writing in his journal, recounting a legend of the creation of the Art of writing linking books. So while the story covered in this comic is not really a part of the story grand, and is actually inconsistent with it, it relates a legend from this world.

The **Myst V Comic** by **Penny Arcade** gives a brief two-page lead up to the **Myst V: End of Ages** game. This serves as a brief re-introduction in the overall themes of **Myst** as well as a little teaser for the next storyline.

Thus ends this thread in the **story grand** of **Myst**. While being the least utilized medium in the story grand, it is related through comics that give us some new narrative issues to discuss in relationship with the novels and CD-ROMs. With this **comic**, setting comes into play a little more, the theme from the story grand is almost totally lost (other than some odd reversals about strained father-son relationships) and the plot is such a rushed mishmash that the characters have little or no substance. The webcomic serves more as a poetic introduction to **Myst V: End of Ages**. As with the **Myst** novels, I believe that the narrative elements of these comics has less to **do** with the medium itself, and more to do with the authors' choices within this medium. A medium with hybrid potential much more fully realized in the **Sandman** series.

sandman

The **Sandman** is the realization of what **comics** can be: complex, beautiful art and literature combined together to create a story that could only happen with **words and images** sharing a page. Gaiman, along with a bevy of artists, uses the medium of comics to relate the story of Dream, an **anthropomorphic personification** of consciousness, in particular, of our **dreams**.

First, a summary of the **Sandman** collection. It exists across 75 issues that were released monthly (and one special edition released during this run) that were later collected together into 10 graphic novels that housed the various longer storylines as well as the other shorter individual stories. There also is a book collecting the art from all the covers that includes a short Sandman story, as well as a recent illustrated prose Sandman story published on the tenth anniversary of the launch of the original series (all told there are more than 2000 pages). Following this, there was the release of a collection of **seven new** Sandman stories. For sake of clarity, I am going to give a brief overview of the overarching **story grand** and also get into some **specific details** to illustrate the wondrous narrative evoked in the medium of comics.

preludes and nocturnes

To **begin**, not with the beginning of the story grand of **Dream**, but with the first issue which was re-released in graphic novel, **Preludes & Nocturnes**. In this issue we see a bit of horror and magic as an Englishman runs through some strange incantation in an attempt to summon and imprison **Death**. Instead he captures Death's younger brother, Dream (the Sandman) and strips him of his symbols of office and confines him in a magic sphere. Dream spends seventy-odd years (from the early 1930's to 1998) imprisoned in this sphere. During his stay, we see how the dreams and sleep of humanity are disturbed; many suffer from sleeping sickness and two world wars occur. Finally his captor accidentally breaks the circle and Dream escapes. Upon his escape he returns to the Dreaming, his realm, gaining sustenance and clothing from people's dreams. As he regains his strength, he vows to regain his lost possessions (his bag of sand, his helm and his amulet), thus he begins a quest, an adventure.

First, he returns to the waking world and with the help of John Constantine, he tracks down his pouch, which has fallen into the hands of a woman who has been barely subsisting on the sand, and is on death's door. Once he regains his pouch, he finds that a demon of hell has his helm, so he travels to hell and battles the demon, wins his helm, then stands down Lucifer and the hordes of hell with the promise of dreams of heaven (thus offending Lucifer). After this battle, the Sandman goes in search of his ruby, which has made its way to Dee, the former Doctor Destiny. Dream catches up with him and they battle over the ruby. Dee insures his defeat by destroying the Ruby (thinking that he is also destroying Dream) but instead releases all the power stored in the ruby back in Dream himself. Thus, ends Dream's quest (and the first storyline). He is free and has

regained his symbols and begins to set his kingdom back in order. In the very next scene we see Dream sulking in a park, feeding the pigeons. He is joined by his older sister, Death and their time together helps Dream feel a little better as he remembers the duties and responsibilities to which he has to **attend.**

the doll's house

In the following storyline, **Dream** takes more of a peripheral role as we watch stories that revolve around the dreaming and its inhabitants in **The Doll's House**. It begins with a story told by an old African tribesman to a younger nephew, a story that is only told once and heard once. In this story we see a beautiful, but bored, the princess who falls in love with Dream. She discovers that he is one of the **Endless**, an ancient, immortal and powerful group of entities, and it is forbidden for the Endless to traffic in love with mortals. Needless to say, Dream has fallen in love with the princess as well, but she runs in fear of what may come. Their illicit love topples her kingdom to ruin, and she commits suicide and spurns Dream in death as well, causing him to condemn her to hell. Thus ends the story told by this tribe's men.

The story then revolves around Rose, a young woman, who unbeknownst to herself, is the vortex, a person with the power to merge everyone's dreams into one big mess. There is a tangent involving serial killers and the Corinthian (a nightmare from the Dreaming), but the vortex Rose is forming needs to be stopped.

This is managed in the Dreaming on the Fiddler's Green (a lovely field in the Dreaming) with Rose's grandmother dying instead of Rose, and the Dreaming is returned to its regular state of flux. We then see how Desire is plotting against Dream in a little endless family feud. Thus ends the second storyline. A short story occurs in the middle of this arc, a tale about a man from 1389 who gets drunk and decides not to die. Dream and Death overhear this and decide to see what it would

be like to grant him immortality. With this, Dream approaches the man, Hob Gadling, and offers to meet him 100 years hence. The rest of this story continues with Dream and Hob meeting once every 100 years up to the present day and forming an odd friendship across the centuries as they sharing their **stories** across the **ages**.

dream country

This next collection has four individual stories that are sprinkled in between the two longer **storylines** in the preceding and following collections. These four stories are gathered together under the title, **Dream Country**, and each story deals with myths. In the first story, "Calliope," we see one author trading the actual muse, Calliope, to another. This author becomes a juggernaut of creative success, writing, books, plays and screenplays - poetry and prose. Calliope ends up calling to **Dream** for help. Dream frees Calliope and leaves the author with no creative ideas at all.

In the second story, "Dream of a Thousand Cats," we see a kitten gathering with other cats to go hear an infamous Siamese Cat who is traveling the world telling cats what they must do to change the world they live in. This old cat tells the story of going to **Dreamland** to find Dream (in the form of a cat) and he tells her a story of how cats were the size of people and people were just mice, but a thousand humans dreamed of a different world where they rule over cats and it happened. But if a thousand cats dream their dream then they can change the world back to how it once was. So, the kitten leaves with one other cat who says the story may or may not be true, but to get a thousand cats to do anything at the same time is impossible. The kitten, undeterred, naps that day, and her owners comment on how she must be chasing little mice in her dreams.

In the third installation, we get, "Facade," a story about a superheroine, Rainie, who was transformed by Ra and is now a being not even remotely human able to change her body into any element. She feels that she can no longer go out

in public because she looks so hideous. She can grow silicate faces that look normal, but they fall off soon thereafter. Faces are strewn all over the apartment and she is using one as an ashtray. Dream's sister, Death, tells Rainie to talk to Ra, and she does and is freed as she is petrified by the sun.

The last story in the collection is "A Midsummer Night's Dream," and it shows Shakespeare presenting his play for Dream and the Fairie out in Wendel's Mound in the English countryside. This story is the only monthly comic to win a literary award, the 1991 World Fantasy Award for Best Short Story. It is a lovely piece that shows the workings of theatre at the time, and interweaves the play with conversation from the Fairie (many of whom are in the play). As we go through, we see the Queen of the Fairie seduce Hament, Shakespeare's son, foreshadowing his death (or kidnapping to Fairie). And we see the real Puck abduct the actor playing him and then replace him on the stage, playing the final lines himself and escaping into our world, not returning with the other Fairie to their land. The **story ends** with the actors awakening in the field the next day. Their gold payment has turned to flowers.

season of mists

The next storyline, **Season of Mists**, involves Sandman returning to hell. It starts when Destiny calls a family reunion. This is when we truly get to meet the other members of the **Endless** family (they've been here and there throughout the previous stories). Desire goads, and Death supports, Dream returning to hell to free Nada (the princess with whom he fell in love in **The Doll's House**). When he gets to hell, he finds that not only is Nada no longer there, but no one is. Lucifer gleefully tells him that he has quit his job and is abandoning hell, closing it up and giving Dream the key.

Word gets out that Dream now has the key to hell and powers come to the Dreaming to bargain and try to obtain it from him (gods galore: Odin, Thor, Loki, Bast, Chaos, Order, Azazel, and others). But two angels, Duma and Remiel, come down from Heaven and take back the key. They have been designated the new keepers of hell. Needless to say, this turn of events upsets all those in attendance who were hoping for the key and the demon, Azazel, reveals that he has Nada and attempts to destroy Dream. Dream, being at the center of his realm and power, easily frees Nada. They have an awkward meeting where he finally and truly apologizes for what he has done, and she forgives him as best she can and they part on better terms. The story ends with the three angels. Lucifer is down in Australia looking at a sunset. Duma is silent, while Remiel decides that maybe it won't be so bad, maybe he can make hell a place where they torture out of love, and maybe it can end, "happily ever after, in hell."

a game of you

The next storyline, **A Game of You**, dips into one particular dreamer's dream. It is a **story about stories**, about how our stories have lives of their own that sometimes supersede our waking lives. In this storyline, we explore the dreamworld of Barbie, a character from the **Doll's House** arc, who now lives in an apartment building in New York City. The Land, from her childhood dreams, is in trouble and it is missing its princess, Barbie, so characters from her dream bring her back to help save the land from the **Cuckoo**.

The Cuckoo captures her and reveals itself as Barbie when she was a kid. The cuckoo then explains that she is like a real cuckoo left in the nest of another bird to kick out and kill the other chicks. And she's stuck in Barbie's dream and wants to escape now. She gets Barbie to summon the maker of this land, **Dream**. Barbie asks Dream to free the Cuckoo who flies away to other worlds. We end with Barbie's realization that "everybody has a **secret** world inside of **them**."

fables and reflections

Fables & Reflections is another collection of various, and connected, short stories. It starts with a small one about Todd, a young writer/director, who is on the verge of quitting his big production out of a fear of failure. That night, he dreams he meets **Dream** and discusses the two options of falling in your dreams, you wake up or you die. Dream offers him a third alternative and then Todd falls. We see him the next day, up and ready to go, he tells a cast member of his dream, that sometimes when you fall, you fly.

Then we move into four connected stories, "Distant Mirrors." The first is "August." We follow the Roman emperor, Augustus Ceasar as he masquerades as a beggar with a midget and tells his friend of his hopes and dreams. He tells of a dream in which he met Dream and sought his advice. Dream told him to do as he will as a beggar, that way the gods won't know. Augustus followed Dream's advice and followed his dreams that ruled the world.

Next we have "Thermidor," a tale in which lady Johanna Constantine, at Dream's request, rescues Orpheus' head from out of Paris during the 1794 French Revolution. She gets caught, and to free herself and Orpheus, Orpheus sings a song and is joined by all the severed heads from the guillotine, thus ending Robespierre's revolution.

Thirdly, we have "Three Septembers and a January," a tale about Joshua Abraham Norton, the first and only Emperor of the United States. We meet him while he is with **Despair** and she issues a challenge to Dream from her and **Delirium and Desire**, that he must keep Norton out of their realms for the rest of

his life. Dream accomplishes this by giving Norton the dream of being an emperor and Norton takes to it with gusto, meeting Mark Twain and living in San Francisco. Delirium notes that Norton is not hers because "his madness keeps him sane." Norton finally dies and Dream wins. And Death declares that Norton was a wise ruler, "the first and last Emperor of the United States of America."

Finally, we have "Ramadan," a story of the magical city of Baghdad. In it, we meet caliph Haroun Al Rachid, ruler of the finest city ever. The caliph becomes distressed that the city will one day fade, so to save all the magic and wonder he bargains with Dream to take the city into dreams and the caliph asks in return to live forever. The next panel shows us a young boy in contemporary war-torn Baghdad. He has been listening to this tale from a ragged storyteller who shoos him away. The boy wanders through the rubbles his eyes alight with the magic of stories and dreams.

We then come to another collection of short stories called "Convergence." We see an old story in "The Hunt," a story of werewolves in Eastern Europe, told by an old man to his granddaughter. The hero of the tale chases after and finds a princess, but in the end leaves his dream untouched to return to the woods he knows.

In "Soft Places," we follow Marco Polo as he gets lost in the desert and wanders in a soft place where the dreaming and the waking world ebb and flow within each other. So, Marco gets to meet Fiddler's Green. But then he wakes up, recalling his mother's tale that the Sandman throws sand into your eyes that sends you off to Dreamland, and "that's the sand you find in your eyes when you wake up."

The final tale in "Convergence," is "The Parliament of Rooks." We see Daniel (the baby from the **Doll's House**) as he wanders around in the Dreaming. He meets Cain and Abel and Eve and Matthew. They invite him in and tell him stories. Eve tells of Adam's three wives - Lilith, the unnamed one, and Eve. Abel tells the story of a young **Death** and Dream meeting Cain and Abel and that they lived happily ever after. Finally, Cain tells the story of a parliament of rooks, and how rooks gather in a field, one surrounded by all the rest. And the one caws to the silent group for hours on end, and at some mysterious point the group either all flies away or pecks the lone rook to death. As Daniel leaves (he's waking up), Abel reveals the secret, that the lone rook is telling a story and it finds out in the end if the others like it or not. Cain then murders Abel and says, "I keep telling you, it's the Mystery that endures, not the explanation... Nobody really cares who-done-it. They'll peck you to pieces if you tell them... [but] a good Mystery can last forever."

To end this collection of stores, we have the "Song of Orpheus." Orpheus marries Eurydice, and then she dies. He fights with Dream over how to deal with her death (Dream advises that he move on: in anger they renounce each other). Orpheus goes to get her (visiting Destruction and Death), makes the **Furies** cry, turns around, and loses Eurydice forever. He then gets attacked by the Furies and has his immortal head severed from his body. Dream, his father, comes and lets Orpheus know that he has arranged for him to be cared for, and that he has come to say **goodbye**. He then walks away, and unlike Orpheus, he never looks **back**.

brief lives

We then get another long storyline in **Brief Lives**, which follows **Delirium** and **Dream** as they look for their brother, Destruction (the Prodigal, the one who left his realm to run on its own). This storyline is pivotal in the **story grand**. It is about change and it's where we see the beginning of Dream's ultimate change. Throughout their search, we get glimpses of Destruction and his talking dog, Barnabas, as they come to realize someone is searching for them.

Dream and Delirium visit **Destiny**, who advises them to forget the search, but if they are to continue they need an oracle, one of the family, in other words, the oracle Orpheus. Together they go and visit Orpheus. Orpheus reveals where Destruction is and asks in return that Dream end Orpheus' life.

First, Dream and Delirium go and visit Destruction. They meet him and Barnabas for a meal and conversation. We learn that Destruction left his realm when he realized that humans were beginning to learn science and that would inevitably lead to the means of their own destruction (the bomb) and he realized that change happened without him, so he left changes to themselves. In the end, Destruction declines to return and leaves Barnabas with Delirium to help her through her next change. He then walks off to the other side of the sky. All that's left is for Dream to grant Orpheus his wish, which he does, killing a family member and ending this storyline.

world's end

World's End is another collection of short **stories** tied together within stories told in an inn during a reality storm. We have travelers from all times and worlds collected together in a cosmic inn that exists as a safe harbor during reality storms, which shake the fabric of **reality**. Two people from our world are driving late at night and are run off the road by some mythical creature. As they stumble from the wreck they get lost and end up at the Worlds' End inn. They gather with other guests, and stories are told to pass the time.

The first is a tale of two cites in which a man who loves the city he lives in one day gets on an other-worldy train, with **Dream**, and when he gets off, he is in a strange shadow of his former city, just ghosts of people, and nothing looks quite right. He runs into an old man who says they are trapped in the city's dreams, and then he sees a door he recognizes, runs through it and is back in the waking city. Since then, he has lived in the country for fear of cities that will one day wake up.

The second story is told by the Faerie, Cluracan. He recounts a swashbuckling adventure where he goes and brings down an evil religious leader (with a little help from Dream) and was returning when he ended up here.

We then hear a story from Jim. It is a story about a young girl who disguised herself as a boy in order to sail the seas on the tall ships. She runs into Hob Gadling and they take a voyage together. At sea she sees a huge Sea Serpent and then they crashed ashore, ending up here.

The fourth story we hear is of an alternative United States. In this United States, a boy named Prez Rickard grows up and becomes president at 18-years-old and basically lives up to the Dream of America as is should be. Then one day his wife is assassinated and he disappears and dies himself. In death, he meets Dream and moves on to other worlds that need him to fix them.

We then hear a story of the necropolis Litharge. A necropolis is a city where they are devoted to the ceremonies of the dead. And a student from this city tells of the underground cavern that houses the cerements for the Endless when they die.

The last story is told by the woman from our world, who says she doesn't have a story. She says she is just a lonely, unhappy woman, and she ends up deciding to stay in the inn. The stories close with the ending of the reality storm and we see a huge, solemn funeral procession across the night sky. We see the Endless and a host of gods and characters from the earlier stores, and Death. We end with the man from our world, telling a bartender this whole tale, his whole life having been **transformed by the tale related**. We see the magic and power that stories have in our **lives**.

kindly ones

The next storyline is the **Kindly Ones**. In it we see the death of this incarnation of **Dream**. The story starts with the Kindly Ones, the three women who weave the tale we are experiencing. Lyta Hall, who was pregnant with Daniel in the Dreaming (in **The Doll's House**) is searching for Daniel who has been kidnapped. She goes on a quest through the real and imaginary realms. She is after Dream (she remembers his promise to take her child) and in search of the Kindly Ones for revenge. Dream sends the Corinthian and Matthew off in search of Daniel.

They find Daniel and Dream returns to the Dreaming to find that the Kindly Ones have taken over and threaten to destroy it all. **Death** arrives and calls off the Kindly Ones and she and Dream talk. They touch hands and Dream dies, but **Death comes from life** and the story ends with Daniel transforming into the new incarnation of Dream in **white**.

the wake

The climatic storyline is **The Wake**. In it, we get to see the new **Dream** and watch as others mourn the passing of the old. The five remaining **Endless** create a messenger, a man named **Eblis O'Shaughnessy**, who walks down in the catacombs of Litharge and collects the cerements for Dream. Meanwhile, the new Dream is creating the Dreaming anew while his wake as it is attended by gods and characters from throughout the series and dreamers galore (of course this all occurs in a dream). Dream goes to meet his family as we read, "and then, fighting to stay asleep, wishing it would go on forever, sure that once the dream was over, it would never come back... you **woke** up."

We then get three epilogues. In the first, we again meet Hob Gadling, who is hanging out with his girlfriend and getting drunk. He meets with Death and they talk and Hob decides he still wants to live, and then he has a dream where he and the old Dream and Destruction walk and talk on the beach. Next, we have a tale of a Chinese wise man who is traveling across a desert and gets into a soft place and meets with both the old and new Dreams and the new Dream offers him a place in the Dreaming, but the man gracefully declines and goes on living his life. Finally, we end with Shakespeare, as he is writing the second play, the Tempest, for the old Dream. And we see Shakespeare ask Dream why he wanted this play, and Dream replies that he wanted a tale of graceful ends. And thus ends the **initial story** grand of the **Sandman**.

Subsequently, Gaiman has written three more Sandman stories. The first is a short one titled, "The last Sandman story." In it we hear Gaiman talk of **telling stories** and how the stories haunt the teller and how he and Dave McKean and others did meet some of the characters from the stories. And he relates that deep down he believes in the power of stories and in the idea of the Sandman.

We then get an **illustrated** prose piece that Gaiman wrote to **celebrate** the Sandman's tenth anniversary. It is essentially a retelling of an old Japanese myth, "The Fox, the Monk and the Mikado of All Night's Dreaming." In it, a fox and a monk slowly fall in love and a scared wizard wants to live in peace and learns of the serene monk. The wizard wants to steal his peace (thus killing him, but only without harming him so it is a death in dreams). The fox learns of this and visits Dream and pleads with him to help the monk. With his advice she decides to hunt down the monk's dreams and catch them unto herself, which she does (and dies in her dream). The monk then also visits Dream and wishes to free the fox. The monk frees her and dies himself (although they had time together in dreams). The fox then goes and seeks revenge on the wizard, destroying him and all that is his. Dream and a raven talk of these events and the lessons to be learned. In dreams there may be a fox and a monk together or there may not. Dreams are strange things and none but the Mikado of All Night's Dreaming can say whether they are true or not, nor what they can tell us of times to **come**.

With that, we almost come to the end of the **story grand** of the Sandman.

Gaiman released another collection of seven stories entitled, **Sandman: Endless Nights**. Each story focuses around a member of the **Endless**. Death visits a recursive party that never ends. Despair is shown in fifteen portraits. Desire lives in the heart of a woman. Destruction watches how dangerous humans have become. Delirium is rescued from herself. Dream falls in love once upon a time. And Destiny reads his book. Each story gives us a small glimpse into the realms of the Endless and how they intersect with our world.

The **preceding** discussion is a summary of the themes and occurrences throughout the story grand of the **Sandman** narrative. **Now** we will explore and explain how the medium enhanced the **story** and the story enhanced the **medium**.

More than the **Myst** comic and webcomic, the **Sandman** comics takes full advantage of the medium employed to orchestrate the telling, and the receiving, of the story. Again, the main characteristics of narrative are **plot**, **setting**, **character** and **theme**. Like the **novels**, the comics explore and illustrate all of these characteristics, but therein lies a main difference - comics literally illustrate them. The visuals in comics do a load of work. The words are also important but exist in collaborative tension with the graphics. So, it would be a gross misuse of the medium to put a lot of description in words, where a drawing can do it much more gracefully and succinctly, freeing up the words to dance with the images in exciting ways when the dance is well executed, as it is in the **Sandman**. The **Myst** comic is driven by character, the two sons to be exact, and they are whisked through scenery with such rapid pacing that the events and their setting seem rather unimportant. In the space of a couple of panels the brothers have gone from mischievous boys to evil young brats. Granted, speeding up time can be used in a variety of interesting and pointed ways, but when events are so willy-nilly and disjointed they lose any meaning, and there seems to be no development of an overall theme at all. Maybe this is due to the fact that this was the first comic of four, and the other three were never completed, so there is a sense of lacking in general that may have been solved with an entire run of the comic's storyline. Even so, this first comic is a stumbling beginning that does little to further the **Myst story grand**. The **Myst V** webcomic is much more evocative than the comic book, as it foregrounds the themes found in the **Myst** story grand;

That said, let's move to a discussion of the **Sandman** comics. These comics push the edges of the medium into a dance of words and images that is unbelievably wondrous and overflowing with subtle and deep meanings. It is a work that centers around themes, the theme of storytelling in particular. Gaiman deftly weaves this theme into his characters, settings and plots. As a medium, comics favor the visual, which in turn builds up the characters and settings more than the plot and themes (in general). Gaiman takes the theme of **storytelling** and makes it his palette from which he gives us an enigmatic character, Dream, the Sandman, and all of his siblings - **Death, Destiny, Desire, Destruction, Delirium (who was once Delight) and Despair**.

Each is an "anthropomorphic personification" of consciousness. Dream is the personification of our stories. So, this theme of the power and beauty of story is given a mercurial shape in the character of Dream (who often is not even present - or at most is in the background of other's stories - in the stories being related across the series). From this theme and character we get the wonderful setting of the Dreaming, Dream's realm that is the astral land of our dreams. And from Dream and our dreams we get the various storylines across Sandman that culminate in an intricate (and phoenix-like) suicide and rebirth of Dream and of storytelling itself.

Again, the narrative elements of these comics have less to do with the medium itself, and more to **do** with the authors' choices within this medium. Gaiman takes the **medium** of comics and pushes it to tell a unique story that needs the dance of images and words in order to be related. He plays with standard

conventions and goes beyond them. For instance, a strength of comics is the iconic quality of the images. This is often seen in our superheroes (we all know what Superman and Batman look like). So, across artists and writers, Superman is easily recognized as a character and with this recognition comes a framework that shapes the story for the reader. Gaiman bends this with the character of Dream. Outside of pale skin, black hair and black clothes, the visual representation of Dream is endlessly **varied**. He shifts and melds from panel to panel and from context to context. The one visual consistency is the bold, dark and wiggly textual style used to represent the words he speaks. Otherwise he is mercurial and ever changing in appearance, undermining the graphic iconography, but strengthening a thematic iconography. He is he Morpheus, king of our dreams and stories, the Mikado of All Night's Sleeping.

By allowing the strengths of images and words to combine together, Gaiman creates an intuitive reading experience that draws us into the visuals and places the words on the pages so that or eyes find the pacing of the story. Unlike most novels, **comics** rely heavily on the page layout in order to convey the story. The panels within the pages set out a grid for our eyes to follow and then the writer and artists have to place the images and words together in the panels in such a way as to suggest (or control) where the reader's attention goes from one spot on the page to the next. Slightly like novels, the flow generally goes from left to right and works its way down the page. And like novels, this convention can be subverted to push the medium and/or the reader. Gaiman is a writer who collaborates intensely with his artist on page layout. He uses the layout to help relate meaning within the story. The layout can often give a visual and temporal beat to the pacing of the story. When a character sits there across a couple of panels without saying

anything, we get a palpable sense of the silence and the moments passed within that silence (Gaiman, personal interview). It would be hard to so eloquently describe this silence in words, but it is seamlessly illustrated with images. This beat can be used in many other temporal ways. Panels can be close together and crammed on the page, giving a sense of claustrophobia and increased speed, or they can be stretched across the page, slowing time down, or you can turn the page and there is just a single, large image that spreads across two pages, making for an amazingly significant moment. And it is not just what happens in the panels. Like film, comics have the strength of what they do not show in between the panels. The gutter (the space between the panels on the page) can often be where the action occurs off screen as it were. In one panel, we can see that someone is about to die a horrible death, and the next panel can be a gravestone, opening up our imaginations to exactly how gruesome that death may have been. Concurrently, what does get illustrated can be graphically compelling to a story. The powerful imagery can haunt the words of the story, adding depth and resonance to the **dance**.

And Gaiman does a lot with what he and the various artists choose to show. They use the plastic, **elastic** medium of comics to wonderful effect. Dream may be the most perfect comic book character ever, living in the dreaming, the landscape of our collective unconscious where everything can blur and melt and shimmer and drift away into the dark corners of the panel and the story and our minds. And he uses these images and words to weave a meta-mythical framework that encompasses stories and storytelling. Dream and the rest of the Endless are manifestations of consciousness. As such, they have been around since there has been life in the universe.

And these perspectives span across myths and cultures; encompassing Greek, Roman, Norse, Asian, Egyptian, Faerie, Native-American and Western and Shakespearean mythologies and religions. In this speculative world, the gods walked the earth and the Endless were always already there as a perspective of our consciousness. So, we see a story that includes the truth of old myths while coloring these truths anew with associations and illustrations across cultures and eras. Gaiman is using the dance between words and images, the heart and soul of this hybrid medium, to explore the very nature of storytelling and our abilities to share meaning and experiences through our **dreams** and **stories**.

hyper media

Beyond comics, hypermedia appears to be the ultimate hybrid medium, able to incorporate all the other mediums. The immersive hypermedia environment of **Myst** came out in 1994 and was a smashing success in the computer game world. It currently is one of the all-time best-selling CD-ROM games. In addition, many people have noted that it opened up a **new type** of storytelling. As **Jon Carroll** states, **Myst** was the "first interactive artifact to suggest that a new art form may well be plausible, a kind of puzzle box inside a novel inside a painting -- only with music. Or **something**" ("Guerillas," 1). A **fun and frustrating** aspect of **Myst** is that it is the **intertwining** of a story and a game. To experience the story you have to play the game - the two go hand in hand. For those who want to treat **Myst** solely as a multimedia novel of sorts, the puzzle traits of the piece may get in the way and keep the reader from reading. And if you want to treat it as a game and only a game, the story can distract the player from the puzzles, keeping the player from zipping through and winning the **game**. For **Myst**, I believe both views are valid, but games in general do not necessarily **tell a story**.

The **Myst** story grand was originally inspired by Jules Verne's **Mysterious Island**. Like the protagonists in Verne's novel, the reader/player of **Myst** is stranded on an island that is full of haunting enchantments just waiting to be discovered. **Myst** does something in a very different and interesting way though. Ideally, while reading **Mysterious Island**, the reader is swept into this fantastic world of adventure, piggybacking on the shoulders of the protagonists as they discover the wonders of the island. Myst pays homage to the power of books to

suck you into their worlds by framing the worlds you explore within books themselves. In fact, the storyline reveals that the worlds you are walking around in have been created by someone through a special form of writing. The act of writing is treated as an act of creation in this story. You place your hand on the book page and you are literally in the world of the book, fully experiencing it.

This homage to another medium also shows a characteristic of Myst. It borrows heavily on the mediums of literature, graphic design and film. The creators of hypermedia are in the process of discovering how to use the medium to its best advantage. As **David Miles** notes, **Myst** is in accordance with Marshall McLuhan's fourth law of media: the initial development of a new medium will retrieve forms from prior mediums (4). So, the creators of **Myst** are retrieving conventions and forms from literature, film and graphic design, and combining them together within the newer hypermedia on a CD-ROM. Eventually, the medium's unique nature will be fully realized, but currently we are going to continue seeing media retrievals resonating through hypermedia. **Myst** emerges from this exciting (and possibly awkward) stage in the development of hypermedia.

This new medium of hypermedia does create **new possibilities for storytelling**. As **George Landow** notes, hypertext is composed of words, images and sounds linked by multiple paths in an open-ended perpetually unfinished form (3). The "reader" is allowed to explore the range of possibilities within the narrative of **Myst** (there are several endings to **Myst**). I believe this overt multiplicity brings a new aura to a piece of art. The "reader's" experience has a

presence in time and space. It is your reading that opens the meaning of the story. You puzzle it out as quickly or as carefully as you can or wish. While there may be millions of copies of **Myst**, your reading has a unique sense of time and space to it. You have to puzzle it out your way, which may be by buying a book that gives you clues to the puzzles, or talking to friends about how they are "**playing**" through the story, or going on-line for hints and cheats, or working it out solely by yourself. Granted this aura is not a fixed one as Benjamin originally intended. Instead, it is a performative one that occurs and resonates with the "reader's" experience and exploration of the story.

The term, "immersive environment," is how some people are presently describing the worlds of the CD-ROM medium of Myst (Carroll, "(D)Riven," 3). These immersive environments are being talked about as being beyond a game and a novel. They are worlds in which a reader can, and is supposed to, get lost. To enter into these worlds, you need a computer with the capabilities to run the color graphics, video and sound of the immersive environment. It is often recommended that you enter these immersive environments in a darkened room (so the graphics are at their best clarity) and to have a set of stereo speakers to take full advantage of the surround sound effects of the piece. So, if you hear a sound from your left speaker, it means there is something over to the left of the screen shot at which you are currently looking.

The **experience** of exploring these immersive environments can be described in a variety of ways. First, there are the two levels of experience. In meat space, you are more than likely sitting at your desk (in the dark remember) with your computer on. You are looking at the various "places" the three dimensional

graphics are representing for you while music and ambient noises are playing from your speakers. You are pointing and clicking with your mouse (which guides a little hand icon about the "scene" you are viewing) to go to adjoining "places", or to manipulate an object, or to look more closely at something else within the scene. One strategy is to point and click as much as possible all over the screen to see what does and/or does not happen (this is a trick of one who is starting to become frustrated by the lack of progress in the story, or just simply wants to solve the puzzles and win the game).

The above is a fairly accurate description of how you look while you're "in" this world. To be fair, the other level of the experience needs to be described; succinctly put, you actually feel like you are in the world. Oh sure, you can self-reflexively realize that you are just sitting at your desk, but you definitely respond to what you see and hear in this world. You dissolve from the level of pointing and clicking, looking at your screen and listening to your speakers. You begin to walk through the woods, listening to a gentle breeze rustle through the forest, and the distant sound of water lapping on a not too far off shore. You hear a noise off to your left. Startled, you quickly turn and see a slightly creepy looking brick building with stairs leading down into the dark. Bravely, you start down the stairs. There are a few stark lights above, but you walk from shadow to shadow. The pipes creak and groan around you. Water drips. Just the kind of place that a person might run into something you would rather not. You hastily beat a retreat back up and out into the woods. Freed from the claustrophobic dungeon you bask in the wind and sunshine.

That is what it can feel like in these immersive environments, even though

you've just been sitting at your desk in the dark. Granted, books whisk you away to the worlds they describe, but in these immersive environments, you are not only the reader, but the protagonist as well. The actions of the story are not just having an effect on the characters, they have an effect on you. You don't die in **Myst**, but you can get trapped forever (in a lot of games, you can die in a lot of ways). If you're a gamer, this just means you've lost; you start over from your last saving point (in these environments, there are no pages to place a bookmark, so you save your progress as you go). If you're into the story, you're stuck, so the story has had a rather unfortunate ending. You can try again for a more satisfying ending though. And you can get stumped by the puzzles, so that the story/game is no longer progressing. You have to figure the mysterious story out within the world itself (like Sherlock Holmes) or you get a little outside help (from a clue or hint book, or web pages with clues or cheats, or a friend who has already experienced the story of this environment). As in the playground game of tag, in this immersive environment, you are **it**.

The mysterious experience of the story of Myst illustrates the characteristics of **Deleuze's** paradox of pure becoming. The meaning is fixed, but it is open. You get a sense of the potentially "infinite identity of both directions and sense at the same time" (2). The audience gets "two much and not enough"(2). The medium allows for a multitude of possibilities, but it makes it hard to construct a narrative that can evoke responses. Instead, the "readers" develops the story as they go. But the various possibilities can leave some gaps in the narrative since it is hard for a creator to second-guess every possible action that audience may want to take.

So, you fill in the storyline as you figure out the mystery. **Hayden White** notes that a general characteristic of narrative is to fill in the gaps and

discontinuities of events (9). This is a weakness of hypertext - gaps abound, disrupting the story. Even the creators of **Myst** admit that its story does not make sense at times (Carroll, "(D)Riven," 2). Another characteristic of narrative is the desire for a conclusion. **Myst** has several endings, but as Landow points out, hypertext can be "perpetually unfinished" (3). Even so, for readers to follow the story, they are expecting an end point of some sort (110). There are several ways to deal with this. One, it can be left infinitely and rhizomatically open like the hypertextual experience of the web. Two, there can be several endings. Three, the narrative can be **multilinear** in that your actions from the beginning of interaction with the narrative to the end all have consequences on how the story will end.

The second option is the easy way out. The creators simply have a losing and winning ending to the game. The first option is the most pure realization of a post-structural theory of reading that grows (and regresses) infinitely. The third is the most interesting, and is the one attempted in **Myst**. With this option, the creator constructs a variety of narrative paths that are braided together, crossing, diverging and influencing all the other paths. Thus, the "reader's" choices are prescribed, but each choice helps to build the narrative towards a conclusion(s). In this way, the"player" is not hurt by missing a clue. The story still progresses, just in a different path. Through your choices, you can travel on a variety of the paths and puzzle out the story. So, in reality, one reading can be different than another, and you can get to an end without having "read" all of the story.

The potential for many varied "readings" of this hypertextual medium can be seen as performative in that each reading is different from any other. **Peggy Phelan** notes that a performance cannot be reproduced; it can be repeated, but then it is a different production (**Unmarked** 146). So, each reading of **Myst** is not a

reproduction of another reading. Instead, it is a re-experiencing of the storyline. The performative nature of this computer-bound medium has led Brenda Laurel to look at computers as theatre. For **Laurel**, computers have the "capacity to represent action in which humans [can] participate" (1). The "readers" are performers within the hypertextual narrative, shaping the actions and outcomes by the choices they make. You perform the story by participating in the narrative, puzzling and playing through the process. As **Johan Huizinga** notes in **Homo Ludens**, **playing** is one of our most significant functions (1). And it is playful in the **Derridean** sense that you are performing within a "'coded' or iterable" context (that of the creator's constraints on your choices) (**Margins** ..., 326). So, while you play, and may do something different from one time to the next within the story, it is also within an iterable context.

This context is the immersive environment of **Myst**. A **hypertextual** experience in which you point and click at various spots on the screen that may, or may not, take you to another screen shot in which you can point and click your way through onto the next one. What is interesting about the hypertextuality of **Myst** is the context helps to hide the links and smooth out your experience much more than in a web page. For the most part, when you are on the web you see a page of highlighted words and images and you click, and then you see another page with words and images. It has the feel of sifting through a card catalog; you are seeing a lot of information that is connected by the links.

In **Myst**, the graphics, music and ambient sound are there to help you suspend your disbelief and go into the world. You don't "see" the links. Instead, you see a stairway and you point and click on the stairway to start climbing up it.

The world of **Myst** holds together on a literal level, because the creators are trying to offer you the best opportunity to immerse yourself in this world. With hypertext, they could have made each link a visual and aural non sequitur, each click taking you somewhere that has no direct visual or aural relation to the preceding screen shot. This would be quite jarring and confusing, making it much harder to immerse yourself. So, the world of Myst behaves in a physical way: gravity works, you walk around, you do not jump off and fly away, you do not walk through walls, etc.

This illusion is sometimes broken apart by the urge to go somewhere on the screen and have your clicks garner no response. The creators have made a finite world, even with all of their attention to detail in this immersive environment, in which there are invisible walls. You may want to jump into the water, but since the storyline does not progress that way, you aren't able to do so. Nothing happens. You may want to be able to explore everywhere and everything you see, but there are borders and edges to this world. Obversely, the minute details can sometimes disable the illusion they are meant to uphold. You can look up and see a chandelier hanging from the ceiling, and you want to go up there and you can't. It really has nothing to do with the story, but it is a detail meant to flesh out the environment. Instead, it can lead you to think of your immersion abstractly. Why does the world have to be so literal? Why can't you walk through walls, or climb up the hill instead of the stairs? Why can't you go in any direction and have there be no visible end? Why can't you click anywhere on the screen and have something happen? The borders and details are what allow you to immerse yourself in this world and also get frustrated by it.

As a "reader" of **Myst**, you are constantly made aware of the hypertext

medium on another level as well. The story does not progress unless you can puzzle through it. Parts of the story do not make sense, and the only way to make full sense of them is to read the books. As Richard Shiff has written, "The meanings of the mediums evolve as a result of their interactions" with other mediums(8). Meaning in **Myst** comes out of the association and interaction of the three mediums. To experience the story grand of **Myst**, the audience needs to engage each medium.

The juxtaposition of the **mediums** (**hypertext**, **novel** and **comic**) through the story grand helps to show the strengths and weaknesses of a hypermedia CD-ROM. In **Myst**, the creators tried to use narrative to create the illusion of free will for the "reader" (Carroll, "(D)Riven," 2). But then it was hard to mix the story of the reader and the story of the narrative. In hypertext, it's hard to tell a story. The non-linearity makes it difficult for the creators to actually build a narrative that can evoke emotional responses (Carroll, "(D)Riven," 4). Too much of a structuring narrative would limit the possibilities. Instead, the novels serve as a way to structure the narrative that the interactive, hypermedia CD-ROMs do not allow. The strength of the CD-ROM is also its weakness. Having readers be such an integral part of the story makes it hard to dictate their interactions with the piece. So, the story has to be left open and fluid, instead of fixed and directed. It is a new way of "writing" and "reading" to be sure.

Indeed, the hypertextual form of **Myst makes manifest** a post-structural theory of reading in which the reader is just as active a creator in the meaning of the text as the author. As a reader of hypertext, you get to **choose** which way you want to go in the narrative, but those choices are constrained and determined by the author. So, it is not limitless interactivity with no structure whatsoever. But it

does reposition the point of view of the narration to the reader/player. If not the narrator, the reader/player is the driving force behind the story's progression.

A fair question to ask of this manifestation of a theory is this: Is it better or worse that we can now do and experience the reading process as described by post-structural theories? Or in other words, what's the point of realizing a theory? The point is less about whether it is better or worse, and more about how to better utilize the medium of hypermedia. It becomes an issue of the quality of the content. So, while **Myst** is no great masterpiece of literature or art, it is still one of the best representatives of this new medium. The goal should be to keep exploring how to improve the content of this new medium so that one day we will have a masterpiece of hypermedia comparable to those in literature and art.

It should be noted that this realization of a post-structural theory of reading is not the final nail in the coffin of the author. Instead, the role of the author has been repositioned. The author(s) are now a director, writer, choreographer, cartographer, curator, artist, musician, programmer and designer all together (and often a team of people). On top of the mixing of multiple mediums, the creator has to script for multiple and open possibilities that hypermedia allows so that the reader will have more choices and become more **implicated** in the narrative and more **immersed** in the environment.

So, to begin the game and start experiencing the story and environment, you boot up your CD-ROM and click on the **Myst** icon. You see the logos of the various companies who helped put this CD-ROM together (quite like the credits of a movie). You then see an animation of a man falling down towards you from the lip of a crevasse. The figure disappears, but a book continues falling down into the **darkness**. As it falls, credits continue to roll and a disembodied voice intones:

> "I realized the moment I fell into the fissure that the book would not be destroyed as I had planned. It continued falling into that starry expanse, of which I had only a fleeting glimpse. I have tried to speculate where it might have landed, but I must admit that such conjecture is futile. Still, questions about whose hands might one day hold my Myst book are unsettling to me. I know my apprehensions might never be allayed, and so I close, realizing that perhaps the ending has not yet been written."

As the voice-over ends the book lands and you can pick it up. You are at the beginning of this new chapter; the **Myst** book has fallen into your hands. You open the book and see a picture of an island. If you point and click with your mouse/hand on the picture in the book, the screen fades out with a zooming noise. The screen fades back in and you are standing in the picture. You are on the island. Standing on a dock by the waters' edge, the narrative has **begun anew**.

From this meager introduction the reader/player is left to **puzzle** through the story. Essentially, it is a mystery. You are trying to figure out what has happened to Atrus and Catherine and their two sons, Sirrus and Achenar. As the reader, you are the sleuth in and of the tale. You are an active participant, navigating the hypertextual links, or better yet, walking around the island, exploring. The **story** does not progress until you have figured out the next puzzle as you piece together the story. The story only comes from your pointing and clicking your way through the haunting worlds into which you have fallen.

The tense of this narrative is twofold. There is the immediate story of you, the reader/player, trying to solve the game, and there is Atrus' story that occurred in the recent past and that you are presently working your way through. You spend the vast majority of your time walking around empty, haunting rooms and landscapes. You see and hear atmospheric phenomena, but you spend most of your time alone, trying to "solve" the story. The point of view is quite interesting because, in a sense, narrator and audience collapse into one. Or to be more specific, you are the main character of the current discovery of the past story narrated by Atrus and sons. The storyline does not advance unless you figure things out. Unlike a book, where to get to the end you just keep reading, the "game" of **Myst** can only progress if you start solving the puzzle. You, the reader, are the impetus behind the narration.

After working your way through the story and "winning" the game (there are three or four possible endings depending on the player's decisions), the narrative experience shifts from the hypertextual interactivity of **Myst** to the linear experience of the three **Myst** novels and then the **Myst** comic book.

The **story grand** does return to hypermedia with the subsequent games. Readers become players again, participants in the narrative, puzzling through the story as they point and click around the new worlds. A new twist to the medium is added though. In Myst, you basically spent your whole time alone, searching for what has happened. In the later games, there are characters who you can talk to and ask questions, and they will answer you, some truthfully, some not. The puzzle aspect is even more integrated into the story. You decide whether to believe a character based on your knowledge of the story so far. So, puzzling through the story is even more a part of the immersive experience. Once again, you are an active part in the development of the story. The narrative is waiting for you to figure it out.

The experience of the story grand of **Myst** is a **hypertextual** one in itself. It consists of the immersive environments of the CD-ROMs and the linear story in the novels and comic book. As a reader of these mediums, you make the links between each of these storylines and narratives. Reading the novels and comic book and engaging with the gamess is how you experience the story grand of **Myst**. The narrative is associated between the mediums. What **hypermedia** lacks is made up for in the **novels**. A fair critique of this phenomenon is that a quality story should be able to exist on its own in whatever medium. Presently, no one working in hypertext and hypermedia has developed a masterpiece comparable to those in literature and art. But, the medium is still in its infancy and is still retrieving from older mediums. **Given time**, a masterpiece may be developed that fully utilizes the unique capabilities of hypertext and hypermedia and does not have to rely on supplementary novels and comics. The question is whether or not people will keep trying in this new medium, which realizes the audience's role in

creating a story, or will they find that to realize a theory of reading is too self-recursive to be of much use or interest. Time and experience will tell that story.

I still find it worthwhile to look at **how a narrative can develop across mediums**. The story grand that is related in **Myst** could not have occurred in one medium. You would lose the unique qualities of the combination of the mediums if you used only one. The novels give linear structure for storytelling. The **comic book** illustrated a world to be seen. The games put you in the story itself, puzzling through the narrative. Combining the narrative across these mediums gives you a story in which you are not only a reader, but a "co-author, theater goer, movie goer, museum visitor and player, all at the **same time**" (**Miles** 4).

ultima online

While the games of **Myst** were primarily solo adventures (outside of the brief foray online with **Uru**) **Ultima Online** (**UO**) is a massively multi-player online role-playing game that takes place in the fictional world of Britannia, an immersive environment found online. This narrative takes place not on a CD-ROM, but over the internet and it illustrates some dynamic facets of hyper-media not seen in CD-ROM. It is an immense fantasy world with monsters, animals, people and more. Nightly, thousands of players log on to inhabit this world and go on adventures and quests as mages, healers, fighters and rogues.

In terms of size, **UO** is one of the largest on-line gaming worlds. Britannia is a massive environment with cities, dungeons, shrines, and lots and lots of wilderness. Unlike **Myst**, which is a static CD-ROM world, Britannia is a persistent, evolving world. You develop your character over time and you can make yourself a home that stays within the world.

Britannia is not as graphically lush as Myst, but the 2-D isometric images are of high quality. As **Amy Jo Kim** notes:

> "The details are meaningful -- you can pick up and read that book on the library shelf, or play that game of checkers in the Tavern. The people and creatures are charmingly animated; you hear hoofbeats, and watch as three knights on horseback ride by, their capes flowing in the breeze, followed by a lumbering bear and a bedraggled-looking dog. Sound effects (such as approaching footsteps) and music cues (that accompany meaningful events)

are used sparingly yet effectively. A mind-boggling variety of clothing options allows each participating character to develop a truly unique look ("Ultima Online")."

And on top of all of this, Britannia is a very interactive place. You can build yourself a house, talk with other people, sell goods, train animals, steal, eat food, etc. "There are 27 different types of animals, and 30 types of monsters - and each of these automated creatures has an appropriate set of (beautifully animated) behaviors for reacting to events" (Kim, "Ultima Online"). But as Kim points out, "it's the power of '**interactivity** in context' that makes **UO** feel so alive" ("Ultima Online"). When you do something in Britannia, the environment responds within its conceptual framework. For instance, if you train a bear but you don't feed him, he might start ignoring you and go looking for food; but he may not be able to find food if the woods have been over hunted by other players (Kim, "Ultima Online").

Another interesting aspect of the **interactivity** within Britannia has to do with the persistence of the world itself. Repeated visits are rewarded because as you play and progress, your character gains more abilities and skills and new parts of the world open up for you with these new abilities. And you get to mark your progress through your clothes and accessories. You start off without any clothes, but as you go, you get to be more and more visually impressive and the variations are staggering - you really get to personally tailor your look. So, your progress is displayed for all to see and gives a graphic representation of seniority. Along with skills and clothing, you also gain cash. So, as you play, you learn how to make (or steal) money within Britannia, which allows you to buy things (supplies, houses, clothing). And as you play and get better and richer, you develop a reputation for

all to see in where you live and what you wear.

And this environment has inspired community behaviors. Many players care about the social and political climate of Britannia and they take action to try to improve the climate. “A nascent civil government is emerging, and some citizens are organizing themselves into groups that have goals, values and a clearly articulated moral stance” (Kim, “Ultima Online”). But not everybody gets involved on a virtual civic level. There are many players who just want an RPG (role playing game). Others just want to go on hunts, killing other players. Others just want to form online friendships within this environment. It is a testament to **UO**’s flexible and open-ended environment that all of these perspectives can find a home within Britannia.

This diverse nature makes Britannia an addictive and frustrating place. Kim notes that, “on the one hand, it’s a game -- with rules to learn, roles to play and status to track. On the other hand, it’s a virtual world -- with complex social, economic and ecological systems that affect the gaming experience of each and every player” (Kim, “Ultima Online”). So, when lots of different people enter this world, “they’ll inevitably find the stress fractures in the complex, interlocking systems -- which will force the game designers to patch the systems and rewrite the rules” (“Ultima Online”).

This is part and parcel of an ever-evolving online environment, but Garriot and the **UO** team made some mistakes. For example, in the interest of “realism,” the in-game communication facilities in **UO** are badly crippled” (Kim, “Ultima Online”). So, most of the players use ICQ (an application that enables instant messaging) to communicate with each other outside of the game environment (and this

allows them to talk while logged onto Britannia).

A particularly social issue that the Britannia community has had to address is player-killing (and violence in general). Interestingly, the community has dealt with player-killing by grouping together into Guilds. And Kim believes that the Guilds are what "Britannian culture, and perhaps on-line culture in general, is really all about" (Kim, "Ultima Online"). "**Ultima Online** offers many features that facilitate Guilds and Clans, such as being able to dress alike, develop synergistic team-oriented skills and pool resources to purchase and furnish a shared Guild House" ("Ultima Online"). In fact, players liked the Guilds so much, that **UO** added more features to the game to encourage and facilitate Guilds and their activities. And Kim notes that, "what's fascinating and important about these bottom-up, self-organizing, member-created groups is what people are learning about how to build and manage an effective distributed team. To form a Guild in **UO**, people who are geographically scattered must come together, organize themselves, define their shared values and goals and decide how to best move forward to achieve those goals" ("Ultima Online").

Kim illustrates how, "Ultima Online gives us a tantalizing glimpse of **how cyberspace could be**. It's the largest, most complex and most ambitious virtual world yet" ("Ultima Online"). She states that:

> "This highly responsive, ever evolving game is triggering that age-old impulse to bond together into groups. You could look at **UO**, and similar game worlds, as on-line training environments for team-building, places where small, synergistic, geographically-distant teams are learning how to

work together effectively and develop the leadership and role-playing skills that are necessary for surviving in an increasingly networked world. As more and more people inhabit cyberspace, multiplayer game worlds like **Ultima Online** will proliferate -- because they offer experiences that people are hungry for, and because their responsive and open-ended nature leverages the basic power and potential of the Internet as a **real-time interactive** medium ("Ultima Online")."

mitternachtspiel

MitterNachtSpiel is another CD-ROM based hypermedia experience, but unlike **Myst** and **Ultima Online**, it is a sensuous, free-associative work of interactive art. It is a wondrous experience that beckons you to explore the sights and sounds and play at midnight with the moon and a cast of bizarre characters created by Kveta Pacovksa in a children's book of the same name. But she takes off from the book and makes a hypermedia work of art. The story is given a framework on the packaging (there are no words spoken or written throughout the hypermedia experience): "The theater at night is dark and quiet. The actors are all sound asleep until midnight, when the moon rises above the theater. As if to say, 'Is anyone down there?' the moon looks down at the theater. As moonlight beams upon the stage, one by one, the actors awake to perform all kinds of fun music, movements and tricks." As J.C. Herz notes, "As in a ballet, namely "The Nutcracker," the story [of **MitterNachtSpiel**] is merely a premise for the visual and musical delight that follow" (**Herz**, "Making Art...").

Essentially, **MitterNachtSpiel** is a performative interactive hypermedia work. Nothing happens without your playing with the piece. Once you do, you dance through sights and sounds and romp with characters through and in a variety of interconnected and recursive scenes. Herz believes it illustrates the qualities of **drawing** and painting. She notes one scene where you pull colors

across the screen and:

> "because of the split-second delay, and the way the color overlays itself with a subtle shadow, it's more like drawing with oil pastels than with a computer paint program. The color doesn't feel as though it's made of pure light. It feels as though it's made of something soft, unctuous, thick and blendable. On this digital canvas, there is a pleasure in the gesture of painting, in the illusion of texture, that makes the experience into an abstract expressionist exercise whose fluid quality is enhanced by a trance-inducing drum-and-
> woodwind soundtrack ("Making Art...")."

The **tactile experience** builds as you click into other scenes. There is one where you shuffle through torn pieces of paper and hear the ruffle of paper as you slowly uncover a bell-ringing clown. Often you can change scenes from within a scene itself, as you expand or contract into the images and into another scene. And "as you move among these images, their relationships deepen" (Herz, "Making Art..."). You find out that you've just had a playful moment on the leg of a clown, who there in turn morphs into a world full of round colorful balls that melt into the body of a dragon. Throughout, thematic music connects with each character, so you come to recognize where (or who) you are by the music playing. In fact, there is one squiggly scene that plays all the music for you and you find yourself recalling all the connected images in the lines. There are several connecting scenes that take you to several places. One with six colored squares gives us more texture again. Each square has the "sound of a different art medium (charcoal, chalk or squeaky markers, paper being crumpled) and leads to another full-screen composition" ("Making Art...").

The recursive imagery and sounds are stitched together by the subtle transitions between scenes. You get to see the scenes become the leg of a clown. "By illustrating the links between paintings, they knit the work together into a visual riddle -- a fractal jigsaw where the pieces fit together in multiple ways, adjacent to one another but also inside one another. One painting suggests a path through several others" (Herz, "Making Art..."). So, once you've begun to see the connections, the next time you return to a familiar scene, it's virtually impossible not to view it anew because of the connections made. And as you begin to understand the connections, you get to play more knowledgeably within the scenes, taking paths you've been down before or looking for something new. "And the links are so multidimensional and nonlinear that understanding them becomes a delight in itself. Taken as a whole, the work is an exercise in nonsense logic worthy of Lewis Carroll" ("Making Art...").

As Herz notes, **MitterNachtSpiel**, "speaks to the **possibilities** of digital media" ("Making Art..."). These interwoven sounds and images unwind into diverse links and connections, rendering us an interactive universe in which to play and make a story as we go. And the sounds and images are connected in ways words cannot easily be. "Verbal stories dissipate as they branch because they are progressive - the only way to learn more is to go forward. Visual stories deepen as they branch because they are recursive - you can understand something new by going back" and looking anew ("Making Art..."). The world created is one that spins around with you as you return through it and spin **your own** midnight play.

hypermedia explained

In looking at the **narrative aspects** of the three different hypermedia examples we get to see how **diverse** **computer-mediated** experiences **can be**. Let me note that as in books and comics (and all media for that matter) the narrative elements of all of these hypermedia experiences have more to do with the creators' choices within this medium and less to **do** with the medium itself. These hypermedia games do not have to have a **story at all**.

In **Myst**, we are in a richly detailed world, alone for the most part, exploring and looking for clues and hints that reveal more of the story and allow us further into the game. **Myst** thrives in **setting**. The worlds and the atmosphere created within this experience is paramount. Next comes **theme**, an implicit need to carefully explore these worlds. And finally **character** and **plot** come into play on very low levels. You are the main character (an electronic **Sherlock Holmes**) and there are some other characters involved - Atrus, Catherine, Sirus and Achenar, etc. But mostly you are alone, wandering through these worlds trying to piece together the story. The plot suffers the most here. Outside of a magnificently persistent atmosphere and sense of exploration, there are very few ups and downs and points beyond just exploring more and unraveling more story as you solve more puzzles. The creators themselves complained that it was extremely hard for them to develop any variety of narrative tensions. They felt stuck with relying on the user to propel the story, and struggled to find ways to add more spice while still allowing as full a range of interactivity as possible (**Carroll**, "(D)Riven"). And so

the story is truly one where you are the driver. It does not proceed without you there unraveling it. You learn more about Myst as you make your way deeper into the **worlds**.

This reliance on **the user** being able to figure out the story (or win the game) has led to an interesting boon in guidebook and fan websites that offer you clues for completing the game successfully, and also in revealing all the little secrets tucked away in the worlds. So, while it is possible to play your way through the story and finish without having seen everything, these guides reveal all there is to **know** and see. They completely break down the puzzles and nooks and crannies and lay bare the entire experience. Once upon a time this would have been looked on as cheating, but now it has developed into part of the experience. For example, often the creators will put in secret little features that you can intentionally or accidentally stumble upon. They are called Easter eggs, because you have to look for them. People often share with each other the various eggs they have found and it becomes a part of the narrative experience (and opens the experience up to a community of people who have played the games). The story related in **Myst** is immensely rich in atmosphere and the spirit of exploration.

Whereas **Myst** has a community that has formed around the game to help each other play it fully, **Ultima Online** has a community within it. **Myst** is mainly a solo pursuit. You can play with several people sitting around one computer, but the perspective is solo. There is one "player" within the game with agency to propel the story forward. So you play alone with your CD in your computer and then you can talk about it with friends. **Ultima Online** is an internet-based game that allows thousands of people to play together, each from their own unique

perspective, interacting with each other within the world of Britannia. **Ultima Online** is strong on character. You assume one and it is your character that you grow with as you play. The world comes next. You develop yourself in this dungeons & dragons fantasy world. Then plots and themes come into play. There are storylines to pursue, mostly quests and such, and the themes are all over the map, all dependent on the community of players and their interests.

Now, one thing I should note is the technical difference between a CD-ROM and an internet-based experience. With a CD-ROM you have an experience that is delivered on a disc. This disc is a read-only copy, so once you get the game, that is the game you have. If you want another version of the game, the game company may release a patch, or you just have to buy another disc. While the experience is **dynamic and interactive**, the assets (graphics, programming, etc) are not; they stay the same. The internet is a completely different beast. The game is something in which you log on to another server (a computer that stays online constantly) to experience the game. The assets exist in a forum where they can be seamlessly (or not so seamlessly) updated as often as wanted or needed. So, the game could change radically; it could look different, have new features, new stories, new everything. **Ultima Online** exists in this **fluid** medium of the internet. You log on and interact with thousands of others, and Origin often places storylines within these worlds. There are quests to go on and things to do, but often the players themselves form communities that interact with each other and the stories are completely developed within the framework of this world. You assume a role (a character) and then you grow your character in this world by doing things with others. The stories all fit in this framework, but they

are as varied as the people who are playing. There have been tales of the 100 troll naked streak (each troll being a different player) and of the drunken bash thrown to complain to Lord Briton (Garriott) about the state of affairs.

And like **Myst**, a community has developed outside the game world. There are tons of fan websites and chat rooms where people get together and talk about **Ultima Online**. And in an interesting development, people have begun selling their characters and online possessions in the real world. For instance, someone who has taken a character and developed the character to expert levels and has a huge castle and lots of gold has sold all of the above on ebay. So, these people are making money on their work and there can be a financial reward for the reader/author of this **Ultima Online** world. The stories of **Ultima Online** while framed by Origin and Britannia are truly shaped and experienced **by the players** themselves.

MitterNachtSpiel is unlike the others in that it is a much more abstract and artistic experience. Like **Myst**, it is a CD-ROM, but that is where the similarity ends. It is heavy on theme and setting. You are playfully performing a theatrical piece with a moonlit cast of characters. These characters are iconic to the point of abstraction. You see them in a scene and then you see a scene in them. And the plot is fairly nonexistent. You play with them. You see them play. It is a magical movement of sights and sounds. It leaves you with a sense of wonder and joy. It is a story so simple (playing with the moon and friends) yet so surreal, seeing how recursive iterations of images and sounds associate and interweave as you perform an interactive **hypermedia artwork** with the moon.

All three examples amply illustrate how hypermedia opens up a complex variety of ways to relate and experience stories. Each incorporates multimedia and interactivity to enable readers/players agency in the narrative. Granted, readers have agency in books and comics, but it much more directly overt in hypermedia.

in conclusion

Looking at **narratives** and **mediums** has **opened up** how a medium affects the story told. It is one thing to say that we know it's **different** to watch a movie than to read a book, but it's another thing to **delve** into exactly **how** the differences and similarities emerge. After exploring the **stories** found in **Myst**, **Sandman**, **Ultima Online** and **MitterNachtSpie**l I believe the four building blocks of **narrative** do differ from medium to medium (for reasons that have little to do with the mediums themselves) and that computational hypermedia does indeed change what a story is and can be.

in between

In **discussing** the narratives of **Myst**, **Sandman**,**Ultima OnLine** and **MitterNachtSpiel** I used a **schema** of narrative composed of four characteristics: **setting**, **character**, **theme** and **plot**. These four characteristics are the building blocks of narrative. Together they combine to give us a story.

My contention is that these four building blocks of narrative differ in degree in relation to each other across mediums. Looking at my **objects** of study has shown that these blocks do differ across mediums, but not necessarily because of the mediums. Instead, it seems to have more to do with the authors of the texts, and less to do with the characteristics of the mediums themselves, that allows one block to foreground over the others. So, it becomes a matter of the authors' choices and how they approach the medium that causes a narrative element to be foregrounded.

The **Myst** **novels** may have foregrounded character, but the medium of print is more than capable of having any of the narrative elements highlighted. The same can be said for the **comics**. **Sandman** had theme as the strongest perspective because of **Gaiman** and company's choices in the story. Comics are also capable of having any element foregrounded. And similarly, the hypermedia **objects** of study may have foregrounded setting, but hypermedia is capable of having the other elements highlighted as well. And as I discuss **elsewhere**, hypermedia games often do not need story at all.

This is not a total **loss**. For while each medium is capable of having any of the elements foregrounded, the **experience** of these elements is different. So it is a transmedia experience, as the story is told across different media, taking advantage of what each medium does best (Jenkins, "Transmedia Storytelling"). Each medium demands a learned literacy in order to be fully engaged and together a form of ubiquitous entertainment develops across this distributed narrative (Walker, "Distributed Narrative..."). You learn to "**read**" each medium and each medium offers you more choices as to when and where you experience the narrative. It is a **performative** difference in the immersion into the story across mediums. And while books and comics are relatively affordable, you need a computer in order to experience hypermedia (which is still an expensive purchase). In **print**, readers deal with the power and skill of the authors' words. To immerse yourself into the story (into the plot, setting, charracters and themes) is to let the words describe the story for you. The story is filtered through words. With **comics**, readers now have words in conjunction with images. Immersion occurs as you see the elements illustrated before you. The story is refracted through the dance between words and images. And with **hypermedia**, readers are virtually placed within the experience itself. You are immersed within the world of the story. You have to act in this world, exploring within the story, in order to experience the narrative.

There is also a **temporal** difference for the **writers** of the mediums. Print is mostly a solitary pursuit in which authors complete and publish the work. This is where authors let go of their active part of the narrative, and the rest is in the hands of the readers. Comics have a similar ending point where the authors release the work to the readers, but there is usually a team working on the story, so there is a

narrative collaboration prior to the finished document. In the case of a CD-ROM, hypermedia also has an ending point, where the product is released to the public. But with the **internet**, the ending point blurs. The "final" story is more **ephemeral**. Authors can continue to change the work, even as readers are engaging the story. In fact, that is exactly what is happening with this study. Instead of handing in a final hard copy, printed version, I am continually making changes to the document and posting the new revisions up online. In fact, with the advent of a variety of technologies on the **web**, dynamic interactivity in webpages can be automatic and determined by the readers themselves. So, this study is automatically and dynamically (re)arranged anew every time someone "reads" it. This can be done both individually and collectively, as the website (and the arguments therein) respond to the readers. A hypermedia document on the internet is an organic and **rhizomatic** experience for both readers and writers. The story changes.

words

In **considering** the four aspects of **narrative**, plot, character, setting and theme, the **Myst** **novels** do lean most heavily on character and plot, and then on setting and least of all on a pervasive but bare bones theme. The novels center around characters, particularly Atrus who is present across the **story grand**. And in the plot of the third novel we see subtle hints of the events of both games, but the ends of the games are not given away.

So, the perspective of a player of the **CD-ROMs** is treated as a **character** in passing reference within the third novel. And even though I believe the theme to be the narrative characteristic developed the least in the novels, it is worth noting that the theme has an intimate connection with the hypermedia CD-ROMs. In the novels the theme is one of the virtue, joy and rewards of carefully and fully exploring and enjoying the world around you. That way you are living a full life and seeing the whole. This theme is good instruction for how to successfully play the games. You need to carefully explore the worlds of **Myst** in order to successfully puzzle through the game and fully experience the story that only moves forward as long as you're exploring the **worlds**.

And that is just an aspect of the **capabilities** of this medium. The **Myst** novels lean towards characters, but the medium of print is more than capable of having any of the narrative elements highlighted. In print, readers deal with the authors' words. To immerse yourself into the story (into the plot, setting, charracters and themes) is to have the words describe the story for you. The narrative filters through words.

comics

More than the **Myst** comic and **Myst V** webcomic, the **Sandman** comics take full advantage of the medium employed to orchestrate the telling, and the receiving, of the story.

Like books, comics explore and illustrate all four of the characteristics of **narrative**, with comics literally illustrating them. The visuals and words in comics exist in collaborative **tension** with each other. The **Sandman** comics push this medium with a dance of words and images filled with subtle meaning.

It is a work that centers around themes, the theme of storytelling in particular. And Gaiman weaves this theme into his characters, settings and plots. As a medium, comics favor the visual, which generally favors the build up of characters and settings more than the plot and themes. Gaiman uses his theme to give us a character, Dream. And with Dream we follow various storylines that culminate in an intricate rebirth of storytelling itself.

And these are just two illustrations of the **potential** of this medium. With **comics**, readers have words in conjunction with images. Immersion occurs as you see the elements before you. The narrative refracts through words and images together on the page.

hypermediums

In **Myst** we are in an immersive hypermedia environment, puzzling through the story to allow us **further** into the game. **Myst** thrives in **setting** in which you are alone, wandering through these worlds trying to piece together the story. So, **you** are the protagonist. You only learn more about **Myst** as you make your way deeper into the worlds.

Ultima Online shows another facet of setting. It has a persistent setting with a player-based community living within it. **Ultima Online** is a massively multi-player online role playing game that allows thousands of people to play together, each from their own unique perspectives, interacting with each other within the world of Brittannia. It is within this world that you develop your character.

MitterNachtSpiel is unlike the other two in that it is a much more abstract and artistic hypermedia experience. It is heavy on theme and setting. You are playfully **performing** a theatrical piece with a moonlit cast of characters. Its story is so simple and **surreal**, exploring recursive iterations of images and sounds that associate and **interweave**.

And these are only three examples of the **possibilities** of this new medium we are exploring. With **hypermedia**, readers are virtually placed within the experience of a story itself. You are immersed within the story. And when you are online, you are immersed with other people as well. You have to act and **play**, by yourself or with others, within the stories in order to experience the narratives.

ludic narrans

The focus of this study has been an over-arching examination of how we relate and experience **stories across mediums**, with an emphasis on exploring how computational hypermedia are changing what stories are and can be. Games are a vibrant form of hypermedia, and they are also becoming a **pop** cultural force. The hypermedia examples that I use for this study could all be considered games. So, while this study does not focus specifically on videogames, it does discuss them throughout.

I note the above because during my writings, an **academic** focus on game studies has come to prominence. One particularly relevant aspect of this movement is the discussion and debate around games and stories. This dialogue is most directly revealed in the **ludology** and **narratology** perspectives. In essence, there are those who say games tell stories (narratology) and there are those who say games, in and of themselves, do not tell stories and should be considered in their own light (ludology).

So, I am looking at narratives, but games, in general, **do not** necessarily **tell a story**. As **Gonzalo Frasca** notes, there should be an effort to look analyze games as games (Frasca, "Ludology Meets Narratology"). Concurrently, in "Game Design as Narrative Architecture," **Henry Jenkins** states that we should think of "game designers less as storytellers than as narrative architects" who set up

situations in which narratives can be experienced. The distinction of what makes games unique is starting to become better delineated. **Markku Eskelinen** polishes this distinction as he defines "the gaming situation as a combination of ends, means, rules, equipment, and manipulative action" ("The Gaming Situation"). So, games set up a situation in which players **act** to an end, or as **Greg Costikyan** puts it, games require decision-making and management of resources in pursuit of a goal ("I have no Words...").

I believe it is useful to consider games (and media in general) from a variety of perspectives. In doing so we can, as **Marie-Laure Ryan** notes, observe features that remain invisible from other perspectives (**Narrative as Virtual Reality**, 199). And I think that games do engage us in a unique way that requires us to formulate new methods of investigation. **Lev Manovich** offers the idea that when engaging hypermedia (or new media as he call its), we oscillate "between illusionary segments and interactive segments" that force the user to "switch between different mental sets" demanding from the user a "cognitive multitasking" that requires "intellectual problem solving, systematic experimentation, and the quick learning of new tasks" (The Language of New Media, 210). Engaging this medium of videogames, we tell our stories of the game as we relate the varied and visceral experience of the games we play. **Noah Falstein** discusses the "natural funativity" of games, how they are activities that help us live in the world ("Natural Funativity"). And stories are how we stitch together a continuity of our experiences. They are our "mystories," our stories that enable us to understand the world (**Ulmer**, Teletheory, 88). Narratives are how we convey the perspective of our experiences (**Meadows**, **Pause & Effect**, 2). So, we are both *homo ludens* and *homo narrans*, or as Greg Costikyan states, "Play is how we learn; stories are how we integrate what we've learned, and how we teach others the things we've

learned ourselves through **play**" ("Where Stories End and Games Begin").

Now, in following the idea that humans begin life in a pre-linguistic consciousness, it seems that we start solely as homo ludens. We literally learn everything through play as we interact with the world. And then we learn language, and a new phase of consciousness begins, one that dominates, shapes, and constrains our worldview for the rest of our lives. We are now homo narrans, we discursively talk about what we play, what we learn, what we feel, believe, think. etc. But being homo narrans does not erase our homo ludens character; we are always already homo ludens, it's just now we talk about it.

I believe that games and interactive hypermedia experiences are interesting mediums, because like performance, there are definite para-linguistic activities involved, meaning is conveyed through gesture, space, color, sound. I think this is one of the reason these experiences are so compelling is that they enable us to tap more directly into our pre-linguistic homo ludens consciousness as we play them. Of course, we then step back and talk about it, which engages our discursive homo narrans consciousness. Hence, ludic narrans, playful stories...

@ play

This hypertextual scholarly study attempts to create a playful **form** of knowledge. The **analytical** content of this study comes to a **conclusion** that delineates the new and unique distinctions that the computer brings to what a story is and can be. And the rhizomatic form of this study **illustrates** how hypertext can enable unique explorations and new modes of narrating, playing, communicating, teaching and learning. **Deleuze and Guattari** note the rhizome, "has multiple entryways and exits and its own lines of flight," and it, "connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states. The rhizome is reducible neither to the One nor the multiple... It is composed not of units but of dimensions, or rather directions in motion" (21).

As I have **said**, I created this study primarily for the web. I could burn this site to a CD-ROM, but the continual dynamics would be **lost**. The textual version is an artifact mapped from the hypertext. In looking at them together, I think the textual version is actually a part of the **hypertextual experience**, writ in another medium. I believe that this has to do with the fact I was engaging in a hypertextual cartography with the linear, textual discourse. The secondary version becomes a textual exquisite corpse, pieced together from a variety of perspectives and ins and outs from the rhizome of the web.

Below is a graphic approximation of this mapping process. The "pages" are

colored to illustrate how they change in relation to each other as they move from the web to the page. Step 1 is a representation of the initial hypertextual website. Step 2 takes this rhizome and lays it out in multilinear paths with associated content lined up accordingly. Step 3 threads it all together into one linear document. In this way, the website is hypertextually mapped into a discursive text. The hypertextual links become underlined artifacts within the text and the connected ideas will be separated from each other, presented in new ways. There is a color-coding of the links to enable certain sections in the text to continue to sharing discernible associations.

This study is a dynamic document with a lot of the meaning **arising** in between and around. The associative linkings from words, phrases and images move rhetorically and performatively between pages and out into the web at large. There are meaningful and relevant logics and strategies involved with the interface and the links. There is an associative and metonymic reasoning occurring between pages. Links are carefully chosen so the word or image is not only **relevant** to the page it is on, but also to the page to which it links.

There are a variety of layers and threads of linkings that weave the document together into a rich tapestry of multilinear, **lyrical** experiences. For instance, all of the **definitions** have images and these **images** are meaningfully sprinkled throughout the site, creating thematic connections between the various roots of the rhizome. Also, notice the color of the links. If your browser is set to its default settings, a link to a page that has been visited will be purple. A blue link

will take you to a new page (this assumes viewings in one browser on one computer). This gives you some sense of where you have been and where you are going. The rhizome and codex frames allow you to choose between a completely associative experience, or one with an index to help guide you.

Hypertext allows for a document that can be **played** with by reader and writer (even simultaneously) in new and exciting ways. It can be **exploratory and constructive** all at once. Meaning can be **interactively**, and performatively, created by all involved. To engage a hypertextual document is to play with the rhizome, to explore outside of normal standards and hierarchies. The web allows for a living document.

I like to think of this playful hypertextual process of knowledge as "**ludic narrans**." Hypertext has the capability to fundamentally expand and enhance our academic endeavers. I do not believe that this is the end of text. Instead, I see it as a process that will add its own unique stamp to what and how we know. As **David Kolb** notes, it is the connections between the links that form patterns of meaning, and it is hard to imagine exactly what "new activities or uses might develop" but it does enable a "new form of **cooperative writing**" ("Socrates in the Labyrinth"). It is a rigorous and **playful** academic process that rhizomatically problematizes the balance of authority and allows readers and writers together in the same space at once, even if they are in different places within the conversation. For I still believe readers and writers occupy different places. They are now just doing so in a new space and in different ways - ways that we are just beginning to explore and **use** and **play** with.

penultimate

The **internet** expands on the interactive hypermedia **possibilities** introduced with the **CD-ROM** . With a CD-ROM you have an experience that is delivered on a disc. This disc is a read-only copy, so once you get the game, that is the game you have. While the experience is dynamic and interactive, the assets (graphics, programming, etc) are not. They stay the same. The **internet** is a completely different world. The game is something in which you log on to another server (computers that stay online constantly) to experience the game simultaneously with thousands of others. The assets exist in a forum where they can be seamlessly (or not so seamlessly) updated as often as you want. So, the game could change radically; it could look different, have new features, new stories, new everything and the people can come and go as well. And people sell their characters and online possessions. These people are making money on their work, showing how there can be a financial reward for the reader/author in this interactive internet world. The stories are truly shaped and experienced by the players themselves.

Looking back over the **story grand** of **Myst**, it seems that the idea of a story being developed from the outset to take place in multiple mediums is theoretically more interesting than practically feasible. **Myst** happened across time as the success of the original game fueled a transmedia barrage to tie into the initial success. This story grand shows some of the potential problems for spreading a story across mediums. Just like it is different for the reader across each medium, it

is different for the author in, and of, each medium. Each **medium** makes its unique **demands** on the creator, and you need good form and content specific to that medium in order to tell a good story.

The **specialization** required of one medium is hard enough to come by, and in trying to combine, you lose the specialization as you spread across mediums. The **Miller** brothers and company made some amazing CD-ROM narrative games. They were groundbreaking in their time. Their novels, on the other hand, were just standard fantasy fare and the comic book was not the best in the world. So, their specialization shows in the area of expertise and the quality of the story grand ebbs and flows around their expertise. Currently, most companies and individuals are set up to focus around one medium, so when there is a stab into a new medium, it is a secondary enterprise and the quality shows.

That said, I can see how large corporations, like Time Warner, Disney, or Lucas Arts, could put together a story grand across mediums through the licensing of characters and situations within their own holdings (movies, publishing books, internet, etc.). This would allow them to get talented artists within each medium to create that part of the story grand. But the creative genesis of the story usually comes in one medium with an original author, and the subsequent mediums end up lesser in quality as the creative vision is splintered, or the licensing could go to a lesser talent in another medium.

One possibility comes from the creative design and development world in which you have a creative producer who works along with the experts of various mediums. This producer would be in charge of the overall creative **connectivity**

between mediums, helping stitch between the mediums. But to even make this worthwhile, the story grand would have to be good enough to stretch across media, and this seems quite rare.

A working example of this would be the continuity of the **Expanded Universe** (the story grand) found in the various Star Wars offerings. You can watch the movies, read a ton of novels and comics, play a variety of games, go online, and each offering is closely watched to insure that the Expanded Universe flows consistently from medium to medium, story to story. Another good example would be the Matrix. There are the **comics**, **animations**, **games** and **movies** all woven together for a **full experience** of the world of the Matrix.

Mostly you see adaptations. For instance, Disney's movie the Lion King, which was adapted and directed by Julie Taymor into an award-winning Broadway show, and had a couple of video games released as tie-ins. But all of these versions are telling the same essential story, just in a different medium. And often in these adaptations, you see the quality drop (How many times have you heard that the movie isn't as good as the book?). With transmedia experiences, where it is basically impossible for someone to have expertise in every medium, we may actually see a strengthening in the individual mediums as authors and artists focus on their expertise and return to specializing and mastering their medium of choice.

In turning this lens on myself, I have to **wonder**: readers can simply and solely read the secondary textual map of this study and completely skip the primary **hypertextual multimedia** territory. So, they will miss out on the associative linkings and logics as well as the dynamic and fluid connectivity of the

internet and the ability to see images and movies playing together with the text. But would they miss out on the kernel of my point? In this instance, I believe they **will**. Even though academe is still so focused on textual discourse, and an argument can be so well made with words, the medium of hypertext does allow for a new and different type of knowledge production and reception. The pervasive simulated worlds and ubiquitous entertainment that computer enhanced narratives allow us to partake in are opening up a cross media world where readers can be as **interactive** or as passive as they would like, exploring the worlds and **stories** as they wish. And the ability to argue, teach and learn within these stories is ours to **choose**.

the end: what for to begin

In the end, I believe that the computer **does radically alter what storytelling** is and can be by its ability to virtually immerse us so directly into a story. Books and comics are established mediums that are going to continue to exist and improve. And even after all these years, there will still be radical and innovative ways in which these mediums are employed.

In experiencing **Myst, Ultima Online and MitterNachtSpiel**, you are positioned within the **story**. You get to explore simulated worlds and be an (inter)active part of them. So, the creation and relation of these computational hypermedia narratives open up performative experiences where the author and readers are part of a theatrical scripting. The story is related in the **playing** and the reader's **interactivity** within the narrative experience and environment.

And with **approaching** technological advances, hypermedia narratives are moving out of the virtual simulation of environments and into the real, physical world we live and breathe in. With broadband, console game Trojan horses, convergence and pervasive computing, we see DVD (digital video discs) and WAP (wireless application protocols) applications including the real world with hypermedia experiences. For instance, a Masterpiece Edition of **Myst** was released. This edition had technological improvements and an active help agent/character you could work with to help you through the game. Also, a new version of **Myst**, called **realMyst**, was released. It is the exact same game and

story as the original except this version is not a series of lush still graphics that you point and click through. Instead, **realMyst** runs with real-time 3D graphics, so it is a lush simulated world in which you truly navigate around. You can walk around trees and rooms with close to infinite freedom, thereby being able to more fully immerse yourself in the world. **Myst III: Exile** is the next game which takes place ten years after the events in **Riven** and also uses 3D panning. And it's followed by **Myst IV: Revelations** which adds more to the story grand. And there are further possible **Myst** experiences. One is a four-hour **Myst** miniseries on the SciFi channel that was announced in 2002, but has yet to be realized and doesn't appear to be in production at this time. Then there is **Uru: Ages Beyond Myst**, meant to be a massively-multiplayer online game beyond **Myst** that would offer immersive, interactive and never-ending worlds for people to explore, it has been scaled back to a CD-ROM version with the expansion packs: **Uru: To D'Ni** and **Uru: The Path of the Shell**. And now we have a short webcomic by **Penny Arcade**, **Myst V Comic**, followed by **Myst V: End of Ages** and the upcoming book, **Myst: Book of Marrim**, possibly the grand finale for the **Myst** story grand.

And it looked to be the end of the story in more ways than one. At the time of final editing of this text, it was announced that Cyan Worlds was closing its doors due to financial necessity. Rand Miller (Founder) and Tony Fryman (President) remained to try and secure new funding. But a few weeks later, a follow-up announcement was made that Cyan Worlds was able to rehire most of the staff. While things seem a bit uncertain, it looks that the company that has overseen the creation of this wonderful story grand will be able to continue creating interactive stories in immersive worlds.

A fitting tribute to Cyan and the interactive experience of the **Myst** story

grand can be found in the several fan-created games that unofficially continue to relate stories of **Myst**. "**The Writer's of D'Ni**" is an online MOO (a text-based object-oriented multi-user domain) that enables players to write their own worlds. Plus there are three fan-created **Myst**-like games, **The Ages of Ilathid**, **Aveara**, and **D'Ni Legacy**. Also, due to the popularity of **Myst**, there were several games spoofs released; **Pyst**, **Mysty**, **Missed**, and **Mylk**. And Cyan has offered **Until Uru,** which enables fans to host **Uru** online themselves. All of these illustrate how fans have enjoyed the story grand of **Myst** so much that they're actively engaged to further the experience.

Meanwhile, technology is enabling audiences even more opportunities to engage in interactive cross media experiences, distributed narratives and ubiquitous entertainment. Broadband brings us bigger data pipes so we can have much more robust graphics and video streaming over the internet. And console games are becoming a technological Trojan horse. With the playstation2, xbox, and gamecube, you no longer have just a gaming console, you have the convergence of your entertainment systems (not to mention the advances with the next-generation consoles: playstation3, xbox360 and revolution). They can play your DVD movies, let you log onto the internet and surf the web and check your email, and it of course let you play games. The games themselves are becoming more cinematic and narrative driven, developing into FREE (fully reactive engaging entertainment) experiences. It's like watching a movie except **you are the main character** on the screen.

DVDs open up a new avenue of storytelling as well. Currently the adult

movie industry is taking the fullest advantage of the DVD's ability to click between screen angles and soundtracks (you don't like watching from that angle, try this one, or this one...). But imagine making a DVD mystery movie where you can be watching people at a murder scene and you can click to a different angle and hear what two characters are whispering to each other, or maybe from that angle you actually see the murder weapon under the table. It could be a multilinear narrative that threads together into one story and your choice of viewing position affects what story you experience. You become a virtual presence in the movie (or you could just passively watch the main thread from beginning to end). Either way, the story expands across the threads for those who choose to explore.

Similarly, WAPs are being used on cellular phones in Finland, Norway, Sweden and Japan to download roleplaying scenarios that a group can play together around town while keeping in touch on their digital phones (Silberman, "Just Say Nokia"). And remember, in Ultima Online, people are getting paid money for the characters and storylines they have developed. This could slowly turn into the ability for the reader as author to actually make a living, as Julian Dibbell documented in Play Money, in conjunction with a narrative environment and experience created by someone else. The act and reward of creation are shared.

These developments are leading to pervasive computing, with the computers out of their boxes and into our environments and experiences. A great example of this is the EMP (experience music project) museum in Seattle. Funded by Paul Allen and designed by architect, Frank Gehry, it is a museum where you can take a specialized PDA (personal digital assistant) around the museum with

you and it will respond to the displays you choose to view, keep tally of your questions and finally let you upload your visit to the internet where you can then visit it from home later (**Kirsner**, "Are You Experienced?"). And then there is an experience like **Majestic**. It was an alternate reality game by Electronic Arts that bled into real space. Computer characters called you on your phone, sent you faxes, instant messages and email. And participating web sites would contain clues to help you in the game. The story of the game existed outside of the computer itself. As a player in the game, you used all of your electronic devices to enable you to play the game and interact within the narrative from outside the box. Similarly, the movie A.I. had an alternate reality game that supported the movie, both as marketing and as part of it's narrative. A community of players evolved, called themselves **cloudmakers**, and helped each other discover and solve the game. Another example of this is the cancelled proposal for a Myst Island theme park where you would actually be in an environment where you walk through the island that once upon a time you could only experience virtually. And there would be objects and artifacts that you could pick up and move around with, and the environment would keep track of what you were doing and if you puzzled correctly, the environment would respond, opening a door or revealing a clue. And there could be people all over the island playing with different artifacts and experiencing different elements and aspects of the narrative environment that may or may not impact your experience of the environment (Kirsner).

Also, new hypermedic games like **Ico**, **The Longest ,Journey**, **Alice**, **Ceremony of Innocence**, **Knights of the Old Republic**, and **Shadow of the Colossus** (just to name a few) build on the promise of **Myst**, offering rich experiences with intricate narratives woven about. And the range of games is ever-expanding, with new and innovative experiences coming out regularly. There

is the **.hack** game that promises to interweave mediums more than ever. And the next generation of online games, like **Everquest**, **Anarchy Online**, **Neocron**, **The Sims Online**, **Star Wars Galaxies**, and **World of Warcraft**, promise to keep expanding the arenas in which we can play and tell stories.

The above examples are the tip of the iceberg of how stories are currently being told in new and exciting ways that lean on our narrative origins but leap forward beyond them into a world where we can relate and experience stories **as never before**. And we are struggling to fully comprehend the possibilities of cross media experiences. As Marshall McLuhan's fourth law of media states, "the initial development of a new medium will retrieve forms from prior mediums." Likewise, we are using prior forms of analysis to try and understand this new medium (**Miles**, 4). With this study, I have aspired to use a relatively new form of expression, **hypertext**, in order to analyze a topic in ways that were not possible before (**Landow**, **Hyper/Text/Theory**, 36).

The possibilities of computational hypermedia, transmedia experiences, distributed narratives and ubiquitous entertainment are allowing us to be placed virtually and physically within rich worlds where we **are** the protagonists and the story grand is there for us to explore, interact within and enact as we show, tell and experience stories with each other. These new ways of narrative and **play** are beginning to be explored and adapted pedagogically. **Kent Squire** notes that we are just beginning to understand how we could use these new technologies to enhance learning ("Cultural Framing of Computer/Video Games"). This does not mean out with the old in with the new. Instead **I** hope this study shows that by exploring how we have told stories in older mediums we can see how to better tell

stories in these new mediums, creating cross media experiences and expanding our notions of what **stories are and can be**.

cites

Aarseth, Espen J. **Cybertext : Perspectives on Ergodic Literature**.
Baltimore, Md: Johns Hopkins UP, 1997.

---. "Nonlinearity and Literary Theory." **Hyper/Text/Theory**. ed.
George P. Landow. Baltimore: Johns Hopkins UP, 1994.

---. "Play Research: Methodological approaches in game analysis." Digital Arts and Culture Conference, Melbourne, Australia, May 19-24, 2003.

Aldritch, Clark. **Simulations and the Future of Learning**.
New York: Jossey-Bass/Pfeiffer, 2003.

Atkins, Barry. **More than a Game: The Computer Game as Fictional Form**.
Manchester, Manchester UP, 2003.

Auslander, Philip. **Presence and Resistance: Postmodernism and Cultural Politics in Contemporary American Performance**.
Ann Arbor: U of Michigan P, 1992.

Bakhtin, M.M. **The Dialogic Imagination**. Austin: U of Texas P, 1981.

Barthes, Roland. **Roland Barthes**. Berkeley: U of California P, 1977.

---. **Image-Music-Text**. New York: Hill and Wang, 1977.

---. **The Pleasure of the Text**. New York: Hill and Wang, 1975.

---. **S/Z**. New York: Hill and Wang, 1974.

Baudrillard, Jean. **Simulations**. New York: Semiotext(e), 1983.

Bender, Hy. **The Sandman Companion**. Canada: DC Comics Vertigo, 1999.

Benjamin, Walter. **Illuminations**. New York: Schocken Books, 1968.

Bennahum, David S. **Extra Life**. New York: Basic Books, 1998.

Berk, Emily and Joseph Devlin. "A Hypertext Timeline." **Hypertext/Hypermedia Handbook**. eds. Emily Berk and Joseph Devlin. New York: Intertext Publications, 1991.

Berleant, Arnold. **The Aesthetic Field**. Springfield: Thomas, 1970.

---. **Art and Engagement**. Philadelphia: Temple UP, 1991.

Björk, Katarina. "Online Storytelling." **E-Content Report5: Anticipating Content Technology Needs (ACTeN)**. 2004.
http://www.acten.net/cgi-bin/WebGUI/www/index.pl/online_storytelling

Bloom, Harold. **The Anxiety of Influence: A Theory of Poetry**.
New York: Oxford UP, 1973.

---. "Poetry, Revisionism, Repression." **Critical Theory Since 1965**. Eds. Hazard Adams and Leroy Searle. Tallahassee: Florida State UP, 1986.

Bolter, Jay David. The Writing Space: **The Computer, Hypertext and the History of Writing**. Hillsdale, NJ : L. Erlbaum Associates, 2001.

Booth, Wayne. **The Rhetoric of Fiction**. Chicago: U of Chicago P, 1982.

Bukatman, Scott. **Terminal Identity**. Durham: Duke UP, 1997.

Burke, James. **Connections**. New York: Back Bay Books, 1978.

---. **The Pinball Effect**. New York: Back Bay Books, 1996.

Campbell, Joseph. **The Mythic Image**. Princeton: Princeton UP, 1974.

---. **The Power of Myth**. New York: Anchor, 1991.

---. **Transformations of Myth through Time**. New York: Perennial Library, 1990.

Carroll, Jon. "(D)Riven." **http://www.wired.com/wired/archive/5.09/riven.html**

---. "Guerillas in the Myst." **http://www.wired.com/wired/archive/2.08/myst.html**

Chartier, Roger. **Forms and Meanings: Texts, Performances, and Audiences from Codex to Computer**. Philadelphia: U of Pennsylvania P, 1995.

Colman, Andrew. **Game Theory and Experimental Games**. New York: Pergamon Press, 1982.

Coover, Robert. "Hyperfiction: Novels for the Computer." **New York Times Book Review**. August 29, 1993, p1, col 1.

Costello, Robert B, ed. **The American Heritage College Dictionary (Third Edition)**. New York: Houghton Mifflin Co., 1993.

Costikyan, Greg. "I Have No Words & I Must Design." **http://www.costik.com/nowords.html**

---. "Where Stories End and Games Begin." **http://www.costik.com/gamnstry.html**

Csikszentmihalyi, Mihaly. **Flow: The Psychology of Optimal Experience**. New York: HarperCollins, 1991.

Cyan, Inc. **http://www.cyanworlds.com/**

Delany, Paul and George P. Landow, eds. **Hypermedia and Literary Studies**. Cambridge: MIT P, 1991.

Deleuze, Gilles and Felix Guattari. **A Thousand Plateaus**.
Minneapolis: U of Minnesota P, 1987.

Derrida, Jacques. **Margins of Philosophy**. Chicago: U of Chicago P, 1882.

Dibbell, Julian. **My Tiny Life**. New York: Holt and Co., 1998.

---. "Play Money." **http://www.juliandibbell.com/playmoney/index.html**

---. "A Rape in Cyberspace; or How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database into a Society" **High Noon on the Electronic Frontier**. ed. Peter Ludlow. New York: MIT P, 1996.

Dodsworth, Clark, ed. **Digital Illusion**. New York: Addison-Wesley, 1997.

Douglas, J. Yellowlees. "'How Do I Stop This Thing?': Closure and Indeterminacy in Interactive Narratives." **Hyper/Text/Theory**. ed. George P. Landow. Baltimore: Johns Hopkins UP, 1994.

Eisner, Will. **Comics & Sequential Art**. Tamarac, FL: Poorhouse Press, 1985.
--. **Graphic Storytelling**. Tamarac, FL: Poorhouse Press, 1995.

Eskelinen, Markku. "The Gaming Situation." Game Studies, vol.1, issue 1, July 2001.
http://www.gamestudies.org/0101/eskelinen/

Falstein, Noah. "Natural Funativity."
http://www.gamasutra.com/features/20041110/falstein_01.shtml

Feal, Rosemary Geisdorfer and Carlos Feal. **Painting on the Page**.
New York: U of New York P, 1995.

Fish, Stanley. "Interpreting the Variorum." **Reader-Response Criticism: From Formalism to Post-Structuralism**. Ed. Jane P. Tompkins. Baltimore: Johns Hopkins UP, 1980.

Fisher, Walter R. **Human Communication as Narration**.
Columbia, SC: U of South Carolina P, 1987.

Foucault, Michel. **Madness and Civilization**. New York: Vintage Books, 1988.

---. **The Order of Things**. New York: Vintage Books, 1994.

Frasca, Gonzalo. "Ludology meets Narratology."
http://www.ludology.org/articles/ludology.htm

Freeman, David. **Creating Emotions in Games: The Art and Craft of Emotioneering**. New York: New Riders, 2003.

Gaiman, Neil. **American Gods**. New York: William Morrow, 2001.

Gaiman, Neil and Dave McKean, etal. **Sandman**. (comic series issued 1-75 1/2). Canada: DC Comics Vertigo, 1989-1997.

---. **Brief Lives**. Canada: DC Comics Vertigo, 1992.

---. **The Doll's House**. Canada: DC Comics Vertigo, 1990.

---. **Dream Country**. Canada: DC Comics Vertigo, 1991.

---. **The Dream Hunters**. Canada: DC Comics Vertigo, 1999.

---. **Dust Covers**. Canada: DC Comics Vertigo, 1997.

---. **Endless Nights**. Canada: DC Comics Vertigo, 2003.

---. **Fables & Reflections**. Canada: DC Comics Vertigo, 1993.

---. **A Game of You**. Canada: DC Comics Vertigo, 1991.

---. **The Kindly Ones**. Canada: DC Comics Vertigo, 1995.

---. **Preludes & Nocturnes**. Canada: DC Comics Vertigo, 1995.

---. **Season of Mists**. Canada: DC Comics Vertigo, 1990.

---. **The Tragical Comedy or Comical Tragedy of Mr. Punch**.
Canada: DC Comics Vertigo, 1995.

---. **The Wake**. Canada: DC Comics Vertigo, 1997.

---. **World's End**. Canada: DC Comics Vertigo, 1995.

---. **Personal Interview**. 19 August 2000.

Garriott, Richard and Origin, Inc. **Ultima OnLine** (**http://www.uo.com/**) 1997--.

Gass, William. **Finding a Form**. Ithaca: Cornell UP, 1996.

---. **On Being Blue**. Boston: David R. Godine, 1954.

Gee, James Paul. **What Video Games Have to Teach Us About Learning and Literacy**. New York: Palgrave MacMillan, 2003.

Genette, Gerard. **Narrative Discourse**. Cornell UP, New York, 1980.

Gilder, George F. **Life After Television**. New York: Norton, 1992.

Glassner, Andrew. **Interactive Storytelling**. Mass: AK Peters, 2004.

Goldstein, Harry. "The Changing Shape of Fiction." **Utne Reader**. 62, March-April 1994: 131-132.

Goodman, Nelson. **Languages of Art**. New York: Nobs-Merrill Co., Inc. 1968.

Graves, Robert. **The White Goddess: A Historical Grammar of Poetic Myth**. New York: Vintage Books, 1948.

Grusin, Richard and Jay David Bolter. **Remediation: Understanding New Media**. Cambridge: MIT P, 1999.

Haraway, Donna J. **Simians, Cyborgs and Women**. New York: Routledge, 1991.

Herriman, George. comic strips collected in **Krazy Kat: The Comic Art of George Herriman**. eds. McDonnell, Patrick, Karen O'Connell and Georgia Riley de Havenon. New York: Harry N. Abrams, Inc, 1986.

Herz, J.C. "Turning Making Art and Music into Child's Play."
http://www.nytimes.com/library/tech/99/05/circuits/articles/13game.html

Holland, Norman N. "Unity Identity Text Self." **Reader-Response Criticis: From Formalism to Post-Structuralism**. ed. Jane P. Tompkins.
Baltimore: John Hopkins UP, 1980.

Huizinga, Johan. **Homo Ludens**. Boston: Beacon Press, 1950.

Iser, Wolfgang. "The Reading Process: A Phenomenological Approach." **Reader-Response Criticism: From Formalism to Post-Structuralism**. ed. Jane P. Tompkins. Baltimore: Johns Hopkins UP, 1980.

Jenkins, Henry. "Game Design as Narrative Architecture."
http://web.mit.edu/21fms/www/faculty/henry3/games&narrative.html

---. "Transmedia Storytelling." Technology Review. January, 2003.

http://www.technologyreview.com/articles/03/01/wo_jenkins011503.asp?p=1

Johnson, Steven. **Interface Culture: How New Technology Transforms the Way we Create and Communicate**. San Francisco: HarperEdge, 1997.

Joyce, Michael. "Afternoon: a Story."
http://iberia.vassar.edu/~mijoyce/Afternoon.html

---. **Of Two Minds: Hypertext Pedagogy and Poetics**.
Ann Arbor: U of Michigan P, 1995.

Kadrey, Richard. **From Myst to Riven**. NY: Hyperion, 1997.

Kaplan, Nancy. "Politexts, Hypertexts, and Other Cultural Formations in the Late Age of Print."
http://www.ibiblio.org/cmc/mag/1995/mar/kaplan.html

Kellner, Douglas. **Media Culture**. NY: Routledge, 1995.

Kemp, Wolfgang. "Narrative." **Critical Terms for Art History**. Eds. Robert S. Nelson and Richard Shiff. Chicago: U of Chicago P, 1996.

Kim, Amy Jo. "**Ultima Online**: A Virtual World with Multiple Personalities."
http://www.siggraph.org/publications/newsletter/v32n2/columns/fraser.html

Kindzierski, Lovern, Chris Ulm and Doug Wheatley. **Myst: The Book of the Black Ships**. Canada: Dark Horse Comics, 1997.

Kirsner, Scott. "Are You Experienced?"
http://www.wired.com/wired/archive/8.07/themeparks.html

Kolb, David. **Socrates in the Labyrinth**. Boston: Eastgate, 1994.

Kristeva, Julia. **Desire in Language: A Semiotic Approach to Literature and Art**. New York: Columbia UP, 1980.

Kurzweil, Ray. **The Age of Intelligent Machines**. Cambridge: MIT P, 1990.

---. **The Age of Spiritual Machines**. New York: Viking, 1999.

Lancaster, Kurt. **Interacting with Babylon 5: Fan Performances in a Media Universe**. Austin: U of Texas P, 2001.

---. **Warlocks and Warpdrive: Contemporary Fantasy Entertainments With Interactive and Virtual Environments**. New York: McFarland & Co, 1999.

--- and Thomas J. Mikotowicz, eds. **Performing the Force: Essays on Immersion into Science-Fiction, Fantasy and Horror Environments**.
New York: McFarland & Co, 2001.

Landa, Manuel de. **War in the Age of Intelligent Machines**. New York: Swerve, 1991.

Landow, George P. Hypertext. **Johns Hopkins** UP, Baltimore, 1992.

---. **Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology.** Baltimore : Johns Hopkins UP, 1997.

---. "What's a Critic to Do? Critical Theory in the Age of Hypertext." **Hyper/Text/Theory**. ed. George P. Landow. Baltimore: Johns Hopkins UP, 1994.

Lanham, Richard A. **The Electronic Word**. Chicago: U of Chicago P, 1993.

Latour, Bruno. **Aramis, Or The Love of Technology**. Cambridge: Harvard UP, 1996.

Laurel, Brenda. **Computers as Theatre**.
New York: Addison-Wesley Publishing Co., 1993.
LeNoir, Nina Marie. **Theatre and Cyberspace: The Contribution of the Theatrical Past to Performance of the Future**. Dissertation. University of Texas at Austin, 1999.

Long, Beverly Whitaker and Mary Susan Strine. "Reading Intertextually: Multiple Mediations and Critical Practice." **Quarterly Journal of Speech**. 75, 1989: 467-475.

Manovich, Lev. **The Language of New Media**. Boston: MIT Press, 2001.

Mateas, Michael and Pheobe Sengers, eds. **Narrative Intelligence**.
Amsterdam: John Benjamins, 2003.

Mayer, Richard E. **Multimedia Learning**. Cambridge: Cambridge UP, 2001.

McCloud, Scott. **Understanding Comics: The Invisible Art**.
Northhampton, MA: Kitchen Sink Press, 1993.

---. **Reinventing Comics**. Northhampton, MA: Kitchen Sink Press, 2000.

McConnell, Frank. "Introduction." **The Kindly Ones**. Canada: DC Comics Vertigo, 1996.

McDonnell, Patrick, Karen O'Connell and Georgia de Havenon. **Krazy Kat: The Comic Art of George Herriman**. New York: Harry N. Abrams, Inc, 1986.

McLuhan, Marshall. **The Medium is The Massage**. New York: Bantam, 1967.

---. **The Medium is The Message**. London: Penguin Press, 1967.

---. **Understanding Media: the Extensions of Man**. Cambridge: MIT P, 1995.

Meadows, Mark S. **Pause & Effect: the art of interactive narrative**.
New York: New Riders, 2002.

---. "Pause & Effect." **http://www.pause-effect.com/**

Miles, David. "The CD-ROM Novel Myst and McLuhan's Fourth Law of Media:Myst and Its 'Retrievals.'" **Journal of Communication**, 46(2), Spring, 4-17.

Miller, J. Hillis. **Ariadne's Thread: Story Lines**. New Haven: Yale UP, 1992.

---. "Narrative." **Critical Terms for Literary Study**. Eds. Frank Lentricchia and Thomas McLaughlin. Chicago: U of Chicago P, 1987.

Miller, Rand and Robyn Miller, etal. **Myst**. CD-ROM game, Cyan, Broderbund. 1993.

---. **Riven**. CD-ROM game, Cyan, Red Orb, Broderbund. 1997.

Miller, Rand ,Robyn Miller and David Wingrove. **Myst: the Book of Atrus**.
New York: Hyperion, 1995.

Miller, Rand and David Wingrove. **Myst: the Book of D'Ni**.
New York: Hyperion, 1997.

---. **Myst: the Book of Ti'Ana**. New York: Hyperion, 1996.

Mitchell, W.J.T. "Representation." **Critical Terms for Literary Study**. Eds. Frank Lentricchia and Thomas McLaughlin. Chicago: U of Chicago P, 1987.

Montfort, Nick. **Twisty Little Passages**. Boston: MIT Press, 2003.

Moulthrop, Stuart and Nancy Kaplan. "Something to Imagine: Literature, Composition, and Interactive Fiction." Computers and Composition, 9(1), November 1991. **http://www.hu.mtu.edu/~candc/archives/v9/9_1_html/9_1_1_Moulthrop.html**

Murray, Janet H. **Hamlet on the Holodeck**. New York: Free P, 1997.

Myers, David. **The Nature of Computer Games: Play as Semiosis**.
New York: Peter Lang, 2003.

Negroponte, Nicholas. **Being Digital**. New York: Knopf, 1995.

Norman, Donald A. **The Design of Everyday Things**. New York: 1988.

O'Donnell, James Joseph. **Avatars of the Word: from Papyrus to Cyberspace**. Cambridge, MA: Harvard UP, 1998.

Packer, Randall and Ken Jordan, eds. **Multimedia: from Wagner to Virtual Reality**. New York: WW Norton and Co, 2001.

Pacovska, Kveta. **MitterNachtSpiel**. CD-ROM. Tivola. 1999.

Paulson, William R. **The Noise of Culture**. Ithaca: Cornell UP, 1988.

Pearce, Celia. **The Interactive Book: a Guide to the Interactive Revolution**. Indianapolis: Macmillan Technical Publishing, 1997.

Phelan, Peggy. **Unmarked: The Politics of Performance**. New York: Routledge, 1993.

Poole, Steven. **Trigger Hapy: Video Games and the Entertainment Revolution**. New York: Arcade, 2000.

Poulet, Georges. "Criticism and the Experience of Interiority." **Reader-Response Criticism: From Formalism to Post-Structuralism**. Ed. Jane P. Tompkins. Baltimore: Johns Hopkins UP, 1980.

Prince, Gerald. **A Dictionary of Narratology**. NE: U of Nebraska P, 2003.

Punday, Daniel. **Narrative After Deconstruction**. NY: SUNY Press, 2002.

---. **Narrative Bodies: Toward a Corporeal Narrative**. NY SUNY Press, 2003.

Rollings, Andrew and Ernest Adams. **Andrew Rollings and Ernest Adams on Game Design**. New York: New Riders, 2003.

Ryan, Marie-Laure, Ed. **Cyberspace Textuality: Computer Technology and Literary Theory**. Indiana: Indiana UP, 1999.

---, Ed . **Narrative Across Media: The Languages of Storytelling**.
NE: U of Nebraska P, 2004.

---. **Narrative as Virtual Reality**. Baltimore: Johns Hopkins UP, 2001.

Sayre, Henry. **The Object of Performance**. Chicago: U of Chicago P, 1989.

---. "Performance." **Critical Terms for Literary Study**. Eds. Frank Lentricchia and Thomas McLaughlin. Chicago: U of Chicago P, 1987.

Schank, Roger. **Tell Me a Story: Narrative and Intelligence**.
Chicago: Northwester UP, 1995.

Scholes, Robert. **Textual Power**. New Haven: Yale UP, 1985.

Seldes, Gilbert. **The Seven Lively Arts**. New York: Harper & Brothers, 1924.

Shattuck, Roger. "How to Rescue Literature." **NYRB**. April 17, 1980.

Shedroff, Nathan. **Experience Design**. New York: New Riders, 2001.

Shiff, Richard. "Realism of Low Resolution." Apollo. 144 (November 1996): 3-8.

Silberman, Steve. "Just Say Nokia."
http://www.wired.com/wired/archive/7.09/nokia.html
Smith, Barbara Herrnstein. **Contingencies of Value**. Cambridge: Harvard UP, 1988.

Snyder, Ilana and Michael Joyce, eds. **Page to Screen: Taking Literacy into the Electronic Era**. New York: Routledge, 1998.

Snyder, Ilana. **Hypertext: The Electronic Labyrinth.** New York: New York UP, 1997.

Squire, Kent. "Cultural framing of computer/video games." Game Studies, vol.2, issue 1, July 2002. **http://www.gamestudies.org/0102/squire/**

States, Bert O. "Performance as Metaphor." **Theatre Journal** : v48, n1 (March 1996): 1-26.

Stern, Carol Simpson and Bruce Henderson. **Performance: Texts and Contexts.** New York: Longman, 1993.

Stewart, Kathleen. **A Space on the Side of the Road**. Princeton: Princeton UP, 1996.

Stone, Allucquere Rosanne. **The War of Desire and Technology at the Close of the Mechanical Age**. Cambridge: MIT P, 1995.

Suleiman, Susan R. "Introduction: Varieties of Audience-Oriented Criticism." **The Reader in The Text: Essays on Audience and Interpretation**. eds. Susan R. Suleiman and Inge Crosman. Princeton: Princeton UP, 1980.

Summers, David. "Representation." **Critical Terms for Art History. Eds. Robert S. Nelson and Richard Shiff**. Chicago: U of Chicago P, 1996.

Sutton-Smith, Brian. **The Ambiguity of Play**. Cambridge, Harvard UP, 2001.

Thompson, Jane P. "An Introduction to Reader-Response Criticism." **Reader-Response Criticism: From Formalism to Post-Structuralism**. ed. Jane P. Tompkins. Baltimore: Johns Hopkins UP, 1980.

Todorov, Tzvetan. "Reading as Construction." **The Reader in The Text: Essays on Audience and Interpretation**. eds. Susan R. Suleiman and Inge Crosman. Princeton: Princeton UP, 1980.

Tosca, Susana Pajares. "A Pragmatics of Links." JoDI, vol.1, issue 6, June 2000. **http://jodi.ecs.soton.ac.uk/Articles/v01/i06/Pajares/**

Tufte, Edward R. **Envisioning Information**. Chesire: Graphics Press, 1990.

---. **Visual Display of Quantitative Information**. Chesire: Graphics Press, 1983.
---. **Visual Explanations**. Chesire: Graphics Press, 1997.

Turkle, Sherry. **Life on the Screen**. New York: Simon and Schuster, 1995.

Ulmer, Gregory L. **Applied Grammatology**. Balitmore: Johns Hopkins, 1985.
---. **Heuretics**. Baltimore: Johns Hopkins UP, 1994.

---. **Teletheory**. New York: Routledge, 1989.

---. "The Miranda Warnings: An Experiment in Hyperrhetoric." **Hyper/Text/Theory**. ed. George P. Landow. Baltimore: John Hopkins UP, 1994.

Valentine, Kristin B. and Eugene Valentine. **Interlocking Pieces: Twenty Questions for Understanding Literature**. Iowa: Kendall/Hunt, 1991.

Vandon Heuvel, Michael. **Performing Drama/Dramatizing Performance: Alternative Theater and the Dramatic Text**. Ann Arbor: U of Michigan P, 1993.

Verne, Jules. **The Mysterious Island**. New York: Heritage Press, 1959.

Walker, Jill. "Distributed Narrative: Telling Stories Across Networks." **http://huminf.uib.no/~jill/txt/AoIR-distributednarrative.pdf, 2004**.

Walker, John. "Hogarth's Painting 'The Beggar's Opera': Cast and Audience at the First Night." **Essays in Honor of Paul Mellon: Collector and Benefactor**. Ed. John Wilmerding. Wash. DC: National Gallery of Art, 1986.

Wardip-Fruin, Noah and Nick Montfort, eds. **The New Media Reader**.
Boston: MIT Press, 2003.

Warnick, Barbara. **Critical Literacy in a Digital Era: Technology, Rhetoric and the Public Interest**. Hillsdale, NJ : L. Erlbaum Associates, 2001.

Weitzmann, Kurt. **Illustrations in Roll and Codex, a Study of the Origin and Method of Text Illustration**. Princeton: Princeton UP, 1947.

Weschler, Lawrence. **Mr. Wilson's Cabinet of Wonder**.
New York: Vintage Books, 1995.

White, Hayden. **The Content of the Form**. Baltimore: Johns Hopkins UP, 1987.

Wolk, Anthony. "Challenge the Boundaries: an Overview of Science Fiction and Fantasy." **English Journal**. March 1990, v79, n3, 26-32.

Zimmer, Heinrich. **The King and The Corpse**. ed. Joseph Campbell. Princeton: Princeton UP, 1975.

sights

*See printed book

sites

*note: at the time of publication, all links in this text were checked and working. Any updates will occur on the website (**http://etc.cmu.edu/etcpress/)**

Internet Last Page. "The Last Page of the Internet." **http://www.internetlastpage.com/**

Adams, Douglas. "A Hitchhiker's Guide to the Galaxy."
http://www.douglasadams.com/creations/infocomjava.html

Adobe. "Adobe." **http://www.adobe.com/**

aeclectic. "aeclectic." **http://www.aeclectic.net/**

AFU. "Urban Legends Archive." **http://urbanlegends.com/**

"The Ages of Ilathid." **http://www.agesofilathid.com/**

Adventures in CyberSound. "Hypermedia Timeline: 1945-1994."
http://www.acmi.net.au/AIC/HIST_HYPERMEDIA.html

Amidi, Amid and Jerry Beck. "Cartoon Brew." **http://www.cartoonbrew.com/**

Anonymous. "Critique and Descent." **http://critiqueanddescent.freeservers.com/**

Anonymous. "superbad." **http://www.superbad.com/**

Apple. "Apple." **http://www.apple.com/**

Arnett, Bill. "Mars." **http://seds.lpl.arizona.edu/nineplanets/nineplanets/mars.html**

---. “The Moon.” **http://seds.lpl.arizona.edu/nineplanets/nineplanets/luna.html**

---. “The Ten Planets.”
http://seds.lpl.arizona.edu/nineplanets/nineplanets/nineplanets.html

ArtMuseum. “ArtMuseum.” **http://www.artmuseum.net/**

Ashmawy. Alaa K. “The Seven Wonders of the Ancient World.
http://ce.eng.usf.edu/pharos/wonders/

Asmussen, Joen. “Turtleshell.” **http://www.turtleshell.com/**

ASPin. “ASP Resource Index.” **http://www.aspin.com/**

“Aveara.” **http://www.aveara.com/**

Baio, Andy. “Waxy.” **http://www.waxy.org/**

Bandai. “.hack.” **http://www.dothack.com/**

Bantock, Nick. “Ceremony of Innocence.”
http://realworldmultimedia.com/legacy/ceremony/

Baron, Paul. “hypulp.” **http://www.hypulp.com/**

Barr, Brandon. “texturl.” **http://texturl.net/**

The Beat. “The Beat.” **http://209.198.111.165/thebeat/**

Becker, Lane. “monstro.” **http://www.monstro.com/**

Bellow, Saul and Keith Botsford, eds. “The Republic of Letters.”
http://www.bu.edu/trl/

Biggs, Simon. “simon biggs.” **http://www.littlepig.org.uk/**

Bittanti, Mateo. “mbf tod@y.” **http://mbf.blogs.com/mbf/**

Blair, David. “WAXweb. “
http://jefferson.village.virginia.edu/wax/slow/englishStart.html

Blizzard. “World of Warcraft.” **http://www.worldofwarcraft.com/**

Blogger, “Blogger.” **http://www.blogger.com/**

Bogost, Ian and Gonzalo Frasca. “Water Cooler Games.”
http://www.watercoolergames.org/

Boyle, Alan. “Measuring the web’s ‘Diameter.’”
http://www.msnbc.com/news/309085.asp?cp1=1

Brezny, Rob. “Free Will Astrology.” **http://www.freewillastrology.com/**

Brown, Sam. “explodingdog.” **http://www.explodingdog.com/**

Bush, Vannevar. “As We May Think.”
http://www.theatlantic.com/doc/194507/bush

Bushnell, Jeremy P. “raccoon.” **http://www.imaginaryyear.com/raccoon/index.html**

Cates, Jon. “criticalartware.” **http://www.criticalartware.net/**

Catts, Oron, Ionat Zurr and Guy Ben-Ary. “Tissue Culture and Art Project.” **http://www.tca.uwa.edu.au/index.html**

Cinema and New Media Complex of Montreal. “Ex-Centris.” **http://ex-centris.com/**

Clifford, Richard. “The Ages of Myst.” **http://www.ferrago.co.uk/story/460**

cloudmakers. “cloudmakers.” **http://www.cloudmakers.org/**

Comicon. “Comicon.com.” **http://www.comicon.com/**

Consalvo, Mia. “MemoryCard.” **http://memorycard.blogs.com/**

Costikyan, Greg. “Games*Design*Art*Culture.” **http://www.costik.com/weblog/**

---. “Greg Costikyan.” **http://www.costik.com/home.html**

Crawford, Chris. “The Art of Computer Game Design.”
http://www.vancouver.wsu.edu/fac/peabody/game-book/Coverpage.html

---. “Erasmatazz.” **http://www.erasmatazz.com/**

---. “Erasmatron.” **http://www.robotwisdom.com/ai/crawford.html**

Cyan. “Myst.” **http://www.cyan.com/games/myst.php**

---. “realMyst.” **http://www.cyanworlds.com/games/realmyst.php**

---. “Until Uru.” **http://plasma.cyanworlds.com/**

Cyan and Organic. “The Official Riven Web Site.”
http://www.cyanworlds.com/games/riven.php

Cyan and Presto. “Myst III: Exile” **http://www.myst3.com/**

Cyan and UbiSoft.. “Myst IV: Revelation” **http://www.mystrevelation.com/**

---. “Myst V: End of Ages” **http://www.mystvgame.com/**

---. “Uru.” **http://mystworlds.ubi.com/us/completechronicles/index.php**

D’Ni Legacy. “D’Ni Legacy.” **http://www.dnilegacy.com/**

Davidson, Drew. “drew davidson.” **http://www.waxebb.com/**

---. “moontide@waxebb.” **http://waxebb.com/moontide**

Davidson, Drew and Andrew Glikman. “Reading the Web: The Maze & The Landscape.” **http://waxebb.com/writings/hypertexts.html**

Davis, Joshus. “Joshua Davis.” **http://www.joshuadavis.com/**

---. “once upon a forest.” **http://www.once-upon-a-forest.com/**

daypop. “top 40.” **http://www.daypop.com/top/**

Deemer, Charles. “What is Hypertext?” **http://www.ibiblio.org/cdeemer/hypertxt.htm**

De Haas, Monique. “crossmedia.” **http://crossmediacommunication.blogspot.com/**

Della Rocca, Jason. “Reality Panic.” **http://www.igda.org/blogs/realitypanic/**

Dena, Christy. “Christy Dena.” **http://www.christydena.com/**

---. “cross-media entertainment.” **http://www.cross-mediaentertainment.com/**

---. “Universe Creation 101.” **http://www.universecreation101.com/**

The Dia Center for the Arts. “Projects for the Web.” **http://www.diacenter.org/webproj/index.html**

Dietz, Jason, Marc Doyle and Julie Roberts. “MetaCritic.” **http://www.metacritic.com/**

Digra. “Digra.” **http://www.digra.org/**

Downes, Stephen. “Stephen’s Web.” **http://www.downes.ca/**

dreamer. “23dreams.” **http://www.23dreams.com/**

Dunniway, Troy. “Using the Hero’s Journey in Games.”
http://www.gamasutra.com/features/20001127/dunniway_01.htm

Dyer, Jason. “Renga in blue.” **http://bluerenga.blogspot.com/**

e-2. “internet-art.” **http://www.e-2.org/**

Eastgate Publishing. “Hypertext Fiction.” **http://www.eastgate.com/catalog/Fiction.html**

---. “On the Web.” **http://www.eastgate.com/hypertext/WebHypertext.html**

---. “Tekkalogue.” **http://www.tekka.net/news/**

---. “Weblog Kitchen.” **http://www.weblogkitchen.com**

Electronic Arts. “The Sims Online.”
http://www.eagames.com/redesign/games/pccd/tso/home.jsp

Emery, David, etal. “Urban Legends and Folklore.” **http://urbanlegends.about.com/**

Engadget. “engadget.” **http://www.engadget.com/**

Etal. “365 tomorrows.” **http://www.365tomorrows.com/**

Etal. “Academic Gamers.” **http://www.academic-gamers.org/**

Etal. “AcidTrip.” **http://www.acidtrip.com/**

Etal. “allconsuming.” **http://allconsuming.net/**

Etal. “AntiRom.” **http://www.antirom.com/**

Etal. “BlogCritics.” **http://blogcritics.org/index.php**

Etal. “BoingBoing.” **http://boingboing.net/**

Etal. “Bookshelf Comics.” **http://www.bookshelfcomics.com/**

Etal. “coolstop.” **http://coolstop.com/root/**

Etal. “The Cultural Gutter.” **http://theculturalgutter.com/**

Etal. “del.icio.us.” **http://del.icio.us/**

Etal. “Drawn!” **http://www.drawn.ca/**

Etal. “erasing clouds.” **http://www.erasingclouds.com/**

Etal. “game brains.” **http://www.game-brains.com/index.htm**

Etal. “gamegirladvance.” **http://www.gamegirladvance.com/**

Etal. “Idle Thumbs.” **http://www.idlethumbs.net/index.php**

Etal. “insert credit.” **http://www.insertcredit.com/**

Etal. “Into Liquid Sky” **http://www.intoliquidsky.net/**

Etal. “Joystick101.” **http://www.joystick101.org/**

Etal. “kuro5hin.” **http://www.kuro5hin.org/**

Etal. “linkedup.” **http://www.linkdup.com/**

Etal. “Lost at Sea.” **http://lostatsea.net/**

Etal. “ludonauts.” **http://www.ludonauts.com/**

Etal. “memepool.” **http://memepool.com/**

Etal. “metafilter.” **http://www.metafilter.com/**

Etal. “misbehaving.” **http://www.misbehaving.net/**

Etal. “Narratives.” **http://www.kodersoftware.com/blogs/narratives/**

Etal. “networked_performance.” **http://www.turbulence.org/blog/**

Etal. “of by and for.” **http://www.ofbyandfor.org/**

Etal. “Open Letters.” **http://www.openletters.net/**

Etal. “plastic.” **http://www.plastic.com/**

Etal. “Revolution SF” **http://www.revolutionsf.com/**

Etal. “ScrappleFace.” **http://www.scrappleface.com/**

Etal. “Sequart.” **http://www.sequart.com/**

Etal. “Shaking Through.” **http://www.shakingthrough.net/**

Etal. “Slashdot.org.” **http://slashdot.org/**

Etal. “Terra Nova.” **http://terranova.blogs.com/**

Etal. “TinyShowcase.” **http://www.tinyshowcase.com/**

Etal. “Tokyopia.” **http://www.tokyopia.com/**

Etal. “Writer Response Theory.” **http://wrt.ucr.edu/wordpress/**

Experience Music Project. “EMP.” **http://www.emplive.org/**

Eyebeam Atelier. “Re:Play.” **http://www.eyebeam.org/replay**

Fantagraphics. “Flog.” **http://www.fantagraphics.com/blog/**

Federal Writers’ Project. “American Life Histories.” **http://lcweb2.loc.gov/ammem/wpaintro/wpahome.html**

Federoff, Melissa A. “Heuristics and Usability Guidelines for the Creation and Evaluation of Fun in Video Games.” **http://www.melissafederoff.com/thesis.html**

Feinberg, Xeth, etal. “Bulbo.” **http://www.bulbo.com/**

Feldman-Kiss, Nichola. “reliquarium.” **http://www.artengine.ca/reliquarium/reliquarium.html**

Flanagan, Mary and Michael Mateas, Nick Montfort, Stuart Moulthrop, Andrew Stern, Noah Wardrip-Fruin. “grandtextauto.” **http://www.grandtextauto.org**

FlashForward. “FlashForward” **http://www.flashforwardconference.com/**

Flynn, Bernadette. "Towards an Aesthetics of Navigation: Spatial Organization in the Cosmology of the Adventure Game."
http://journal.media-culture.org.au/0010/navigation.php

Frasca, Gonzalo. "ludology." **http://ludology.org**

Frey, Mark. "Slang." **http://www.voxcommunications.com/slang15.htm**

Fuller, Renee. "The Primacy of Story."
http://www.context.org/ICLIB/IC27/Fuller.htm

Fulton, Bill. "Beyond Psychological Theory: Getting Data that Improves Games."
http://www.gamasutra.com/gdc2002/features/fulton/fulton_01.htm

Funcom. "Anarchy Online." **http://www.anarchy-online.com/**

---. "The Longest Journey." **http://www.longestjourney.com/**

Fundacao Laramara, "LaraMara." **http://www.xururu.org/laramara/**

Gaiman, Neil. "Neil Gaiman." **http://www.neilgaiman.com/**

GamaSutra. "GamaSutra." **http://www.gamasutra.com/**

Game Rankings. "Game Rankings." **http://www.gamerankings.com/**

GameFaqs. "GameFaqs." **http://www.gamefaqs.com/**

GameSpot. "GameSpot." **http://www.gamespot.com/**

GameSpy. "GameSpy." **http://www.gamespy.com/**

GameStats. “GameStats.” **http://www.gamestats.com/**

Garg, Anu. “A Word A Day.” **http://www.wordsmith.org/**

Gibb, Susan. “spinning.” **http://smgct.typepad.com/spinning/**

Gizmodo. “Gizmodo.” **http://www.gizmodo.com/**

Guantlett, David. “Theory Trading Cards.” **http://www.theorycards.org.uk/**

Glikman, Andrew. “The Maze & The Landscape: A Rhetoric of Expectations, Warrants, and Links.” **https://webspace.utexas.edu/glikman/mz-land/start.html**

Google. “google.” **http://www.google.com/**

Greenfield, Stephen and Chris Huntley. “Dramatica.” **http://www.dramatica.com/**

hanada, kinya, eun-ha paek and akrl ackermann. “milky elephant.” **http://www.milkyelephant.com/**

Handspeak. “A Sign Language Dictionary.” **http://www.handspeak.com/**

Hansen, Kathy. “A Storied Career.” **http://www.astoriedcareer.com/**

Harris, Mike. “Sandman Timeline.” **http://www.holycow.com/dreaming/sandman_timeline.txt**

Harvey, Colin. “Play for Today.” **http://www.popmatters.com/columns/harvey/030702.shtml**

Holmquist, Lars Erik, etal. “playresearch.” **http://www.playresearch.com/**

Hourihan, Meg. “megnut.” **http://megnut.com/**

Hunicke, Robin. “gew gaw.” **http://www.cs.northwestern.edu/~hunicke/blog/**

IGN. “IGN.” **http://www.ign.com/**

IMDB. “The Internet Movie Database.” **http://www.imdb.com/**

In Passing. “In Passing.” **http://www.inpassing.org/**

Institute for the Future of the Book. “if:book.”
http://www.futureofthebook.org/blog/

Interactive Narratives. “Interactive Narratives.”
http://www.interactivenarratives.org/

io Research. “The Remedi Project.” **http://www.theremediproject.com/**

Jarvinen, Aki, Satu Helio & Frans Mayra. “Communication and Community in Digital Entertainment Services.” **http://tampub.uta.fi/tup/951-44-5432-4.pdf**

Jarvinen, Aki. “Games without Frontiers.” **http://www.gameswithoutfrontiers.net/**

---. “GameGame.” **http://gamegame.blogs.com/**

Jennings, Scott. “Broken Toys.” **http://www.brokentoys.org/**

Joyce, Michael. “Afternoon: a Story.” **http://www.eastgate.com/catalog/Afternoon.html**

Joystiq. “joystiq.” **http://joystiq.com/**

Juul, Jesper. “A Clash between Game and Narrative.”
http://www.jesperjuul.dk/thesis/

---. “Games telling Stories?” Game Studies, vol.1, issue 1, July 2001. **http://www.gamestudies.org/0101/juul-gts/**

---. “The Ludologist.” **http://www.jesperjuul.dk/ludologist/**

---. “Time to Play.” **http://www.jesperjuul.dk/text/timetoplay/**

Kahney, Leander. “Cult of Mac.” **http://wiredblogs.tripod.com/cultofmac/**

Kendall, Robert. “Writing for the New Millennium: The Birth of Electronic Literature.” **http://wordcircuits.com/kendall/essays/pw1.htm**

Kim, Amy Jo. “NAIMA.” **http://www.naima.com/**

Kissell, Joe. “Interesting Thing of the Day.” **http://www.itotd.com/**

Klastrup, Lisbeth. “Klastrup’s Cataclysms.” **http://www.klastrup.dk/**

Kottke, Jason. “kottke.org” **http://www.kottke.org/**

Kroker, Arthur and Marilouise. “CTHEORY.” **http://www.ctheory.net/**

Kucklich, Julian. “particle stream.” **http://particlestream.motime.com/**

Lacedaemio, Damian, etal. “This Spartan Life.” **http://www.thisspartanlife.com/**

Leishman, Donna. “6amhoover.” **http://6amhoover.com**

Leslie, Scott. “EdTechPost.” **http://edtechpost.ca/mt/**

The Library of Congress. “Library of Congress.” **http://www.loc.gov**

Lilly, John, etal. “The Leri Mythos.” **http://www.leri.org/mythos/mythos.html**

Lindley, Craig. “Game Taxonomies: A High Level Framework for Game Analysis and Design” **http://www.gamasutra.com/features/20031003/lindley_01.shtml**

---. “The Gameplay Gestalt, Narrative, and Interactive Storytelling”, Computer Games and Digital Cultures Conference, Tampere, Finland, June 6-8, 2002. **http://zerogame.interactiveinstitute.se/pdfs/CGDClindley.pdf**

---. “The Gameplay Gestalt: Operant Conditioning as Anti-Narrative Learning”, invited paper at Narrative and Interactive Learning Environments, Edinburgh, Scotland, 6th - 9th August 2002. **http://www.tii.se/zerogame/pdfs/NILE.pdf**

--- & Mirjam Eladhari. “Causal Normalisaton:A Methodology for Coherent Story Logic Design in Computer Role-Playing Games.”
http://www.tii.se/zerogame/pdfs/CausalNormalisation.pdf

Lodefink, Steve. “finkbuilt.” **http://www.finkbuilt.com/blog/**

Loyer, Erik. “Chroma.” **http://marrowmonkey.com/chroma/**

Lucas Arts. “Star Wars Expanded Universe.” **http://www.starwars.com/eu/**

---. “Star Wars: Knights of the Old Republic.”
http://www.lucasarts.com/products/swkotor/

Lynn, Pete. “Storysmith.” **http://www.arcadiacasting.co.uk/**

Malina, Frank, etal. “Leonardo.”
http://mitpress2.mit.edu/e-journals/Leonardo/home.html

Mann, Merlin. “43 folders.” **http://www.43folders.com/**

Macromedia. “Macromedia.” **http://www.macromedia.com/**

Marconette, Walter E., Jr. "The Nightmare Project." **http://www.nightmareproject.com/**

McCloud, Scott. "Scott McCloud." **http://www.scottmccloud.com/**

---. "I Can't Stop Thinking." **http://www.scottmccloud.com/comics/icst/index.html**

---. "The Story Machine." **http://scottmccloud.com/inventions/machine/machine.html**

McLellan Wyatt Design. "Information Design." **http://tech-head.com/info.htm**

McSweeney, Timothy. "McSweeney's." **http://www.mcsweeneys.net/**

Meadows, Mark Stephen. "Pause & Effect." **http://www.pause-effect.com/**

Microsoft. "Microsoft." **http://www.microsoft.com/**

Microsoft Game Studios. "User Centered Game Design." **http://www.microsoft.com/playtest/Publications/User%20Centered%20Game%20Design.doc**

Miles, Adrian. "Vog." **http://hypertext.rmit.edu.au/vog/**

Miller, Rand, Robyn etal. "Cyan" **http://www.cyan.com/**

Montfort, Nick. "Interfacing with Computer Narratives." **http://nickm.com/writing/bathesis/**

Mortensen, Torill. "thinking with my fingers." **http://torillsin.blogspot.com/**

mouchette. "mouchette." **http://www.mouchette.org/fly/**

Moulthrop, Stuart. "Victory Garden." **http://www.eastgate.com/catalog/VictoryGarden.html**

Myers, David. “Computer Game Semiotics.” Play & Culture, 4(4) 1991, 334-345. **http://www.loyno.edu/~dmyers/F99%20classes/Myers1991_ComputerGameSemiotics/Page1.htm**

NarrNet. “Narratology.” **http://www.narratology.net/**

Nemiroff, Robert, etal. “Astronomy Picture of the Day.” **http://antwrp.gsfc.nasa.gov/apod/astropix.html**

The New York Times. “Learning Network.” **http://www.nytimes.com/learning/**

Nichani, Maish R. “elearningpost.” **http://www.elearningpost.com/index.asp**

Nordengren, Fritz. “Digital Storyteller.” **http://www.digitalstoryteller.com/home.htm**

NosePilot. “nosepilot.” **http://www.nosepilot.com/**

O’Keefe Library. “Best Information on the Net.” **http://library.sau.edu/bestinfo/Librarians/new.htm**

The Onion AV Club. “avclub.” **http://avclub.com/content**/

Origin. “Ultima OnLine.” **http://www.uo.com**

Pell, Dave. “davenetics.” **http://www.davenetics.com/**

Penny Arcade and Ubisoft. “Myst V Comic.” **http://mystworlds.ubi.com/us/pennyarcade.php**

Phelps, Katherine. “Story Shapes for Digital Media.” **http://www.glasswings.com/Storytronics/Tronics/shapes/onshapes/shapeframe.htm**

---. “Storytronics: Poetics of Computer-Mediated Storytelling.”

http://www.glasswings.com/Storytronics/

Piquepaille, Roland. "Technology Trends." **http://www.primidi.com/**

Plumb Design. "Visual Thesaurus." **http://www.plumbdesign.com/thesaurus/**

Popdex. "popdex." **http://www.popdex.com/**

Powazek, Derek M., etal. "The Fray." **http://www.fray.com/**

Prensky, Marc. "Social Impact Games." **http://www.socialimpactgames.com/**

Puck. "The Dreaming: The Neil Gaiman Page." **http://www.holycow.com/dreaming/**

Reakktor. "Neocron." **http://www.neocron.com/**

Rein, Lisa. "On Lisa Rein's Radar." **http://www.onlisareinsradar.com/**

The Register. "The Register." **http://www.theregister.co.uk/**

Rettberg, Scott. "read the web." **http://retts.net/**

The Robot Co-op. "The Robot Co-op." **http://www.robotcoop.com/**

Rosenberg, Jim. "Poetics and other Prose." **http://www.well.com/user/jer/**

Ryan, Marie-Laure. "Marie-Laure Ryan."
http://lamar.colostate.edu/~pwryan/indml.htm

SatireWire. "Cubists launch unnavigable web site."
http://www.satirewire.com/news/0011/cubist_site.shtml

Schalken, Tobias Tycho and Stefan JH Van Dinther. "Toob & Steef op dreef."

http://www.eiland.cc

Schell, Jesse and Joe Shochet."Designing Interactive Theme Park Rides."
http://www.gamasutra.com/features/20010706/schell_01.htm

SciFi.com. "SciFiWire." **http://www.scifi.com/scifiwire/**

Scoville, Thomas. "Silicon Valley Tarot." **http://www.svtarot.com/**

Selby, Hubert, Jr. "Requiem for a Dream." **http://www.requiemforadream.com/**

SFMoMA. "espace." **http://www.sfmoma.org/espace/espace_overview.html**

Siebold, J. Otto. "BubbleSoap.'
http://www.jotto.com/bubblesoap/bubblesoap.html
---. "Jotto." **http://www.jotto.com/**

Shalizi, Cosma Rohilla. "Notebooks."
http://www.cscs.umich.edu/~crshalizi/notebooks/

Shedroff, Nathan. "Information Interaction Design."
http://www.nathan.com/thoughts/unified/index.html

shockwave.com. "shockwave.com." **http://www.shockwave.com/**

Shumate, Michael. "Precursors of Hypertext Fiction"
http://www.duke.edu/~mshumate/print.html#precursors

---. "Hyperizons: Hypertext Fiction." **http://www.duke.edu/~mshumate/hyperfic.html**

---. "Main Fiction Index." **http://www.duke.edu/~mshumate/list01.html**

---. "Theory and Technique." **http://www.duke.edu/~mshumate/theory.html**

Siemens, George. “Connectivism.” **http://www.connectivism.ca/**

snarg. “snarg.” **http://www.snarg.net/**

soda. “sodaplay.” **http://sodaplay.com/index.htm**

Sony. “Everquest.” **http://everquest.station.sony.com/**

---. “Ico.” **http://www.us.playstation.com/content/ogs/scus-97113/site/**

---. “Shadow of the Colossus.”
http://www.us.playstation.com/Content/OGS/SCUS-97472/Site/

---. “Star Wars Galaxies.” **http://starwarsgalaxies.station.sony.com/**

Southern, Matthew. “The Cultural Study of Games: More Than Just Games.” **http://www.igda.org/articles/msouthern_culture.php**

SP Productions. “iSketch.” **http://www.rita.nu/**

Spector, Warren. “Remodeling RPGs for the New Millenium.”
http://www.gamasutra.com/features/game_design/19990115/remodeling_01.htm

Squier, Joseph, etal. “The Place.” **http://theplace.walkerart.org/**

Squire, Kent. “Cultural framing of computer/video games.” Game Studies, vol.2, issue 1, July 2002. **http://www.gamestudies.org/0102/squire/**

Starbuck, Madelyn. “honoria in ciberspazio.” **http://www.cyberopera.org/**

---. “The Electronic Museum of Mail Art.” **http://home.actlab.utexas.edu/emma/**

Steadman, Carl. “Kid A In Alphabet Land: A Trading Card Set Dealing With Jacques Lacan.” **http://www.freedonia.com/~carl/kida/**

--- and Wendy Skratt. “placing.” **http://carlsteadman.com/placing/**

Sterling, Bruce. “beyond the beyond.” **http://wiredblogs.tripod.com/sterling/**

---, etal. “The Dead Media Project.” **http://www.deadmedia.org/**

Stone, Sandy. “Goddess of the Web.” **http://sandystone.com/newsandystone/**

Strohecker, Carol, etal. “Tired of Giving In.” **http://www.merl.com/projects/togi/**

Suber, Peter. “Nomic.” **http://www.earlham.edu/%7Epeters/nomic.htm**

Sun Microsystems. “Java.” **http://java.sun.com/**

Tanzcos, Mike etal. “Game Dictionary.” **http://www.gamedev.net/dict/**

Things Magazine. “Things.” **http://www.thingsmagazine.net/index.htm**

Thomas, David. “buzzcut.” **http://www.buzzcut.com/**

Tosca, Susana P. “Susana Tosca.” **http://www.it-c.dk/people/tosca**

Tribe, Mark, etal. “rhizome.org.” **http://www.rhizome.org/**

Trippi, Laura. “net.narrative environments.” **http://weblog.netvironments.org/**

TryGroup. “Willing to Try.” **http://willing-to-try.com/**

Universal Hint System. “Universal Hint System.” **http://www.uhs-hints.com/**

V2_Organisation. “Institute for the Unstable Media.” **http://www.v2.nl/**

W3C. “World Wide Web Consortium.” **http://www.w3.org/**

Wachowski, Larry and Andy. “The Animatrix.” **http://www.intothematrix.com/**

---. “Enter the Matrix.” **http://www.enterthematrixgame.com/**

---. “Matrix Comics.”
http://whatisthematrix.warnerbros.com/rl_cmp/rl_comic_series1.html

---. “The Matrix.” **http://www.thematrix.com**

Walker Arts Center. “Let’s Entertain.”
http://www.walkerart.org/archive/B/9E13C5FA142230B2616E.htm

Walker, Jill. “jill/txt.” **http://jilltxt.net/**

Weight, Jenny. “geniwate.” **http://hypertext.rmit.edu.au/~jenny/**

Winer, Dave. “Scripting News.” **http://www.scripting.com/**

Wired. “Wired News.” **http://www.wired.com/**

“Writer’s of D’Ni.” **http://www.erithan.net/wod.html**

XML.ORG. “XML.ORG” **http://www.xml.org**

Yara, etal. “scrytch d’antares.” **http://www.neuron.net/~antares/scrytch/**

yenz. “The Secret Garden of Mutabor.”
http://www.yenz.com/menue/garden/intro.html

Young, Bryan. "First-Person Shooters Are Not Like Movies and That is a Good Thing." **http://www.geocities.com/yllohwood/COMPLETECUTSCENES.html**

yugo. "monocrafts." **http://www.yugop.com/**

Zupko, Sarah, etal. "PopMatters." **http://www.popmatters.com/**