Identity Transformation and Agency in Digital Narratives and Story Based Games

by

Joshua Glen Tanenbaum

M.A. (Interactive Arts and Technology), Simon Fraser University, 2008
B.A., University of Redlands, 2002

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Name: Joshua Tanenbaum  
Degree: Doctor of Philosophy  
Title of Thesis: Identity Transformation and Agency in Digital Narratives and Story Based Games  
Examining Committee:  
Chair: Steve DiPaola, Associate Professor

<table>
<thead>
<tr>
<th>Name</th>
<th>Role and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alissa N. Antle</td>
<td>Senior Supervisor, Associate Professor</td>
</tr>
<tr>
<td>Jim Bizzocchi</td>
<td>Co-Supervisor, Associate Professor</td>
</tr>
<tr>
<td>Dene Grigar</td>
<td>Supervisor, Associate Professor, Digital Technology and Culture Program, Washington State University</td>
</tr>
<tr>
<td>Richard Smith</td>
<td>Internal Examiner, Professor, Communications, SFU</td>
</tr>
<tr>
<td>Margaret MacKey</td>
<td>External Examiner, Professor, School of Library and Information Studies, University of Alberta</td>
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Abstract

In this dissertation I propose a reimagining of two of the central pleasures of digital media: Agency and Transformation. The first of these pleasures – Agency – is a concept that has received significant attention in the discourse around games and storytelling. The second pleasure – Transformation – has received comparatively little deep investigation. In this work I will first undertake to map the territory of the discourse surrounding these two central concepts, returning first to the foundational work of Janet Murray (Murray, 1997), and then expanding my discussion to incorporate a wide range of theoretical perspectives from the different disciplines surrounding game studies. I argue that agency has been systematically misconstrued within the digital games and interactive digital storytelling communities in ways that overlook the core pleasure of agentic action within a narrative. To reframe agency, I draw on theories of communication and speech act theory to build a new understanding of how the pleasures of agency operate within a participatory narrative. This new approach to agency illuminates the ways in which the pleasures of enacting narratively meaningful moments in a game are equal to or greater than the pleasures of unrestricted action in a simulated world. I then turn my attention to transformation. I argue that understanding the pleasures of transformation can profoundly alter how we imagine, analyse, and design digital narratives. In order to build a robust theory of transformation, I turn to a field of study where identity transformation is a central concern: the dramatic arts. Drawing heavily on theories from Method acting, I identify a core poetics of transformation for digital stories. This new understanding of transformation highlights the importance of external frameworks of meaning (such as narrative scripts, rules, and goals) in guiding and supporting the enactments of a player in a story. I ground these two theoretical lenses in a close reading of the Mass Effect trilogy of story based games, from which I derive a framework of design poetics for digital narrative.

Keywords: Digital Narrative; Game Studies; Agency; Transformation; Hermeneutics; Dramatic Arts
Dedication

For Karen, (soon-to-be) mother of my child and companion and collaborator in all things.
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Glossary

Backleading A term from interactive drama used to describe a number of techniques that actors can use to feed a script to an untrained audience member who has been enlisted to participate in a piece of theatre. Includes techniques such as cueing, endowment, blind offers, steps, primers, and strokes.

Bleed A term popularized in Jeepform LARP. Bleed is the breakdown of boundaries between a role-player and his or her character. When a player's thoughts and emotions are influenced by those of her character (or vice versa), bleed is said to have occurred.

CRPG Computational Role Playing Game. CRPGs originated as digital Remediations of Tabletop RPGs, but they have evolved into a distinct genre with their own poetics. CRPGs often include elements of character progression and customization, extensive world exploration and dialogue, significant inventory management, and large casts of characters.

Diegesis Initially applied to narratology in Plato's Republic, and later expanded upon in Aristotle's Poetics, diegesis refers to “narrative” or “narration”, and is contrasted against mimesis. In contemporary narratology and film studies, diegesis has come to refer to both the recounting (telling) of a story, and to the contents of the storyworld experienced by the characters of a story. When I use the term diegetic in this dissertation, it is to refer to any aspect of media that fits within the narrative reality of that media.

Drama In classic narratology, Drama is a distinct form from Narrative, in that it relies primarily on mimesis. Dramas are enacted rather than narrated. In contemporary usage, Drama is more often used to refer to a particular genre of theatre, film, television, or novel, and may be used interchangeably with narrative in some situations.

Commitment to Meaning A phrase that I adapted from Winograd and Flores's (1986) work on “communicative competence” and speech act theory to describe the process of engaging in a communicatively meaningful act within a game. Committing to meaning entails the player in not only expressing intention within the communicative possibilities provided by the game system, but also in taking responsibility for the outcomes of those commitments within the web of understanding that arises from the working of the system and the interpretations of the player.

Fabula A term from Russian Formalist narratology, the fabula is the story of a narrative, as interpreted and understood within the mind of the reader or viewer. Contrasted against syuzhet, which is the emplotment of the narrative encoded in the media artifact.
Jeepform LARP

A subset of live action role-play developed in the Nordic LARP community by a group of Scandinavian role-players called Vi åker Jeep (translated as: We go by jeep). Jeepform is an emergent style of role play that encodes a series of pro-narrative, pro-constraint, pro-scripted principals. A central component of Jeepform LARP is the notion of Bleed.

JRPG

Japanese Role Playing Game. A sub-genre of CRPGs, these are exemplified by the Final Fantasy series. JRPGs share many of the same basic design elements as Western CRPGs, however they have a distinctive style to their visuals, gameplay, and storytelling elements that distinguishes them from other CRPGs.

LARP

Live Action Role Play. A form of RPG in which players dress as their characters and enact their actions in a theatrical manner. LARPs often use a simplified set of rules (compared to tabletop RPGs), relying on simple hand signals and games like "rock/paper/scissors" to resolve conflicts. Some LARPs are known for incorporating actual combat, usually with padded foam weapons and armor: these have significant overlap with re-enactment play such as that engaged in by the Society of Creative Anachronism.

Ludology

A term proposed for the study of structures of play, mechanics, and rules that are unique to games as a medium. In contemporary game studies research the term "ludologists" was used to signify scholars who were interested in studying games for the properties that were unique to them.

Mimesis

Initially applied to narratology in Plato’s Republic, mimesis refers to the reflection of nature, often through poetry. In Aristotle’s Poetics mimesis is contrasted against diegesis because it embodies a version of reality, rather than describing it. Contemporary narratology regards mimesis as a form of dramatic enactment in which a narrative is shown rather than told.

Narrative

A fairly flexible term, initially distinguished from Drama by the presence of a Narrator telling a story. In classic narratology, Narrative was distinguished by its reliance on diegesis. In contemporary uses, it is commonly defined as a series of causally connected events in time and space. In this work I lean towards Branigan’s definition of Narrative which frames it as “a perceptual activity that organizes data into a special pattern which represents and explains experience.”(Branigan, 1992)

Narratology

A blanket term used to describe the study of narrative structures and forms. The study of narrative can trace its roots to the Greek philosophers Socrates, Plato, and Aristotle. In contemporary game studies research, the term “narratologists” was used to signify scholars who were interested in studying games as a narrative form, and was the subject of some early debates in the field.
| **NPC** | Non-Player Character. A character in the game environment not under the direct control of the player. NPCs vary in importance in the narrative from background characters, to major villains, to player companions, to quest givers. |
| **PC** | Player Character. The PC is the primary vehicle for the player in the game, and is often the character the player is most encouraged to project her identity into. |
| **RPG** | Role Playing Game. A generic term for games that originated in role-playing traditions (such as Dungeons and Dragons). These might be of the digital variety (Computational RPGs or CRPGs), Tabletop variety (Pen and Paper RPGs or PnPRPGs), or even the live action variety (Live Action Role Play, or LARP). Each sub-variety of RPG has its own particular poetics. |
| **Story-Based Game** | A broader term than RPG, intended to encompass any game that revolves around the unfolding of a narrative. |
| **Syuzhet** | A term from Russian Formalist narratology, the syuzhet is the plot of a narrative as represented and encoded within a media artifact. Contrasted against fabula, which is the story experienced by the reader. |
| **Tabletop or PnP RPG** | Pen and Paper Role Playing Games. Best exemplified by Dungeons and Dragons, and its myriad descendants. Tabletop games commonly employ polyhedral dice to adjudicate rules and source-books with extensive storyworld, game-rule, and character creation details. Usually one player is responsible for “running” the game as the “Storyteller” or “Dungeon Master”, controlling the events in the world while the other players each are responsible for their own individual characters. |
| **Telegraphing** | A technique from Jeepform LARP by which players broadcast information to each-other in order to maintain and negotiate their shared understanding of the fictional world in which the game is located. Similar to Backleading in some interesting ways. |
1. Introduction

Storytelling is one of the oldest human activities. Its origins are shrouded in the darkness of pre-history, but the oldest material records of human society take the form of stories: stories of how our world came to be, stories of our family histories, stories of the hunt, stories of planting and the seasons. Psychologist Jerome Bruner describes story as one of the fundamental mechanisms humans use to make sense of their experiences and environments (Bruner, 1987, 1991), and it has been described as one of the most sophisticated information technologies available for communicating those experiences to others (Crawford, 2005).

Stories have been interactive and participatory for most of our history. The idea of stories as static structures, with a fixed author, encoded in a media artifact, is only a few thousand years old. Before novels, plays, poetry, and film, we told stories orally, person to person, and those stories could be interrupted, questioned, and acted out dynamically. I believe that there is a fundamental drive to want to participate in acts of storytelling, and that it is this drive that has inspired contemporary visions of interactive digital storytelling (IDS) and story based games.

There is substantial scholarly, artistic, and economic interest in the potential narrative power of digital games, but the more we learn about interactive digital storytelling, the more challenges and problems we encounter. Some of these problems are purely computational in nature, but many of these problems require us to re-imagine what we want from an “interactive story”.

Decades of research into interactive storytelling have taught us that narrative is exceptionally difficult to codify into procedural systems. Stories resist formal modeling, and reducing them to computationally tractable structures and patterns (such as those found in Vladimir Propp’s Morphology of the Folktale) (Propp, 1968) leeches away that magical quintessence at the heart of a good narrative. Narrative is messy, contingent, context dependent, and embodied. It is deeply implicated in both nonverbal and linguistic communication, visual rhetorics, and social scripts.
Designers, theorists, and engineers from a myriad of disciplines have spent decades trying to unlock the potential of interactive digital storytelling: to find a technique for telling interactive narratives that retains the richness of an authored, linear, narrative, while allowing an interactor to meaningfully participate in the unfolding of the plot. There have been a number of influential visions of the ideal interactive storytelling system within science fiction, but the design fiction\textsuperscript{1} that has had the most impact on how the field envisions this technology is the Holodeck, from *Star Trek: The Next Generation*. This futuristic vision of interactive narrative shows a simulated environment, populated with intelligent virtual characters, capable of transporting users into any fictional world imaginable. Many researchers in the field of interactive digital storytelling cite the Holodeck as the inspiration underlying their own storytelling systems: simulation oriented researchers consider the Holodeck and they see a perfect simulation system, capable of reacting believably to any unanticipated input from the player, and able to be programmed for infinite variability. The pleasure of using the Holodeck, they conclude, is one of unrestrained freedom to interact with a dynamic narrative world. Inspired by this vision, the IDS community has overwhelmingly embraced simulation as the dominant mechanism for creating the next generation of interactive narratives. This is a technology oriented approach to interactive storytelling which regards this nascent medium as one which will be revealed primarily through feats of engineering.

By focusing on the Holodeck as a technological system, this research often misses the ways in which it is represented as an experiential phenomenon. The Holodeck is compelling because of the experiences that the characters enact within it, and a closer look at the constraints surrounding those enactments reveals that “limitless freedom” is not the central pleasure that motivates participation within its stories. When characters on *Star Trek* enter the Holodeck in order to participate in a narrative, it is always with a desire to enact the specific tropes and fantasies of a given genre. In *Elementary, My Dear Data*

\textsuperscript{1} Bruce Sterling coined the term design fiction to describe the “deliberate use of diegetic prototypes to suspend disbelief about change” (Bosch & Sterling, 2012). The notion of diegetic prototypes in turn is taken from film scholar David Kirby, who uses it to “account for the ways in which cinematic depictions of future technologies demonstrate to large public audiences a technology’s need, viability and benevolence” (Kirby, 2010). A canonical example of design fiction comes from Julian Bleecker who describes how John Underkoffler’s work at MIT on gestural interfaces was used by Steven Spielberg to inspire the design of the interface in the film *Minority Report* (Bleecker, 2009). This depiction of gestural interaction in popular culture created a public narrative for a technology that had existed in research labs since the 1960s.
the characters seek to create conditions that parallel those of Arthur Conan Doyle’s *Sherlock Holmes* mysteries. In *The Big Good-Bye*, the genre of interest is classic noir detective fiction. Before participating in these Holodeck stories, the characters often spend significant time researching the stories and conventions that the simulation is drawing on, developing characters, and even creating elaborate costumes. During the Holodeck enactments, the virtual characters often become puzzled when the human players deviate from the standard narrative tropes. The pleasure of the Holodeck is not simply about interacting with a simulated narrative world; it is about enacting specific scripts and narrative performances within a narrative context. If anything, the Holodeck provides an argument in favor of understanding interactive narratives as holistic phenomena that are part simulation and part performance.

In this dissertation I contend that simulation is not sufficient to realize the dream of truly meaningful interactive narratives, unless we also understand the pleasures of performance and enactment. I choose to focus on two particular aspects of the player experience: Agency and Transformation. These terms are drawn from Janet Murray’s seminal work on digital narrative, *Hamlet on the Holodeck* (Murray, 1997).

The first of these pleasures, Agency, is a concept that has received significant attention in the discourse around games and storytelling. The second pleasure, Transformation, has received comparatively little deep investigation. In this work I will first undertake to map the territory of the discourse surrounding these two central concepts. I argue that agency has been systematically misconstrued within the digital games and interactive digital storytelling communities in ways that overlook the core pleasure of agentic action within a narrative. To reframe agency, I draw on theories of communication and speech act theory to build a new understanding of how the pleasures of agency operate within a participatory narrative. I explore the concept of agency as Commitment to Meaning – a term adapted from Winograd and Flores’s (1986) work on “communicative competence” and speech act theory to describe the process of engaging in a communicatively meaningful act within a game. Committing to meaning entails the player in not only expressing intention within the communicative possibilities provided by the game system, but also in taking responsibility for the outcomes of those commitments within the web of understanding that arises from the working of the system and the interpretations of the player. This new approach to agency illuminates the ways in which the pleasures of enacting narratively meaningful
moments in a game are equal to or greater than the pleasures of unrestricted action in a simulated world.

I then turn my attention to transformation, which has received far less attention within the field. I argue that understanding the pleasures of transformation can profoundly alter how we imagine, analyse, and design digital narratives. In order to build a robust theory of transformation, I turn to a field of study where identity transformation is a central concern: the dramatic arts. Drawing heavily on theories from Method acting, I identify a core poetics of transformation for digital stories. This new understanding of transformation highlights the importance of external frameworks of meaning (such as narrative scripts, rules, and goals) in guiding and supporting the enactments of a player in a story.

When we say an experience is transformative, what do we mean? In media, we often mean that the experience has temporarily allowed us to put our own identity on “pause” and instead experience the world from a new point-of-view: we are transformed into a character and allowed to experience the story as if we actually were that person. In film studies this is understood in terms of identification with a character, a process that involves both empathizing with a character (at a conscious and unconscious level) and sympathizing with a character (M. Smith, 1995). Transformation is part of why story has always played such a significant role in our society: it is the mechanism that allows narrative to communicate different perspectives and experiences, to transcend solipsism and empathize with each other. Transformation is also persuasive: it creates experiential rhetorics by allowing us to project ourselves into a set of contexts and circumstances that might be foreign to our day-to-day existence. Finally, transformation is pleasurable: experiencing a transformation into a character through fiction can be a profound and powerful experience. Sometimes that pleasure is simply about escaping from the ordinary and seeing the world through another’s eyes for a few hours. But it can also have real emotional impact: we can experience fear, love, anger, and catharsis through character transformation. In some cases, it can be deeply unsettling, resulting in glimpses into the minds and experiences of serial killers and psychopaths. When this happens, transformation serves to reinforce social norms, by allowing audiences to experience transgression without committing heinous acts themselves. In digital narratives and games, there is a potential for a more profound transformation than in other media forms, because we are no longer passive audiences, projecting ourselves into a character.
games, we become the driving force behind that character, enacting the events of the plot, and assuming the goals and objectives of that character for ourselves.

These two reformulated models of Agency and Transformation provide the basis for a pair of analytical lenses which I employ in a hermeneutic analysis of the three story based games that comprise the *Mass Effect* Trilogy (BioWare, 2007, 2010, 2012). These three close readings provide an opportunity to demonstrate and refine the analytical lenses, while engaging with concrete examples within digital games. Through this process, I develop a framework of design poetics that I contend has wide reaching implications for the design of games for entertainment, education, and social change.

### 1.1. Orienting Concepts and Research Questions

Interactive Narrative is a big research space spanning many fields and areas of study. I position this work as an inquiry into two of the fundamental pleasures that can be had when participating in a digital narrative: agency and transformation. There is no question that pleasure is a difficult concept to grapple with in scholarly work. Pleasure is slippery, subjective, and difficult to operationalize, instrument, or measure. One cannot quantify pleasure easily, nor can one reduce pleasure down to a simple list of qualities. And yet, we seek it out in our media experiences, we know it when we are feeling it, and most of us have developed personal heuristics that guide our preferences in order to increase the chances that we will experience pleasure when engaging with a media artifact.

In this dissertation I approach narrative pleasure as both a theoretical construct and a lived experience. The theoretical construct is built out of a deep exploration of existing writings on different aspects of narrative pleasure while the lived experience is grounded in accounts of my own participation in story based games.

As a starting point I first articulate a set of orienting concepts that frame my work. These claims are grounded in a review of the existing discourse around narrative and games, the evidence for which I provide in Chapter Two of this dissertation.

1. Current research into interactive digital narrative and story based games over-emphasizes one pleasure: that of unrestricted freedom to act. This is a reductive approach to the pleasures of agency.
2. Interactive digital narrative research has largely ignored the pleasures of transformation.
3. By drawing on theoretical spaces outside of the canon of digital narrative and games research, we can identify new pleasures for interactive narrative experiences.

4. Articulating new pleasures for interactive narrative can broaden the design space for digital games, and provide new insight into existing games.

These claims represent a set of starting assumptions that I bring to this work. As these claims are somewhat argumentative, I have taken the time to lay out my evidence for them in some detail in the first section of Chapter Two. Using these orienting concepts as a jumping-off point, I have identified two areas of literature that I believe speak to a new understanding of the pleasures agency and transformation. These areas are speech act theory, as framed for human computer interaction (HCI) by Winograd and Flores (Winograd & Flores, 1986) and the dramatic arts, as represented by the writings of Daw, Benedetti, and Krasner on Method acting (Benedetti, 1997; Daw, 2004; Krasner, 2000) and the works of Johnstone and Wirth on improvisational and interactive theatre (Johnstone, 1992; Wirth, 1994). The following set of research questions guide my exploration of these topics.

**RQ1:** How can speech act theory inform a new understanding of the pleasures of agency, and how can this understanding contribute to a new design poetics for digital narratives and story based games?

**RQ2:** How can theories from the dramatic arts inform a new understanding of the pleasures of transformation and how can this understanding contribute to a new design poetics for digital narratives and story based games?

Each of these questions is concerned with both the **analytical value** of a specific theoretical perspective, as derived from a study of the literature, and the **design implications** of that perspective, as derived from a close reading of several contemporary games.

**1.1.1. A Brief Note on Terminology**

I have been using several words here interchangeably, even though they are terms with highly contested histories within the various fields in which they originate. I do this in part due to an intellectual commitment to broader, informal interpretations of this terminology. I have used the terms interactive narrative, interactive storytelling, digital narrative, participatory narratives, and interactive digital storytelling throughout this introduction without clearly defining them or distinguishing them from each other. Within the field of narratology the words “narrative”, “drama”, and “storytelling” have very specific meanings
which I illuminate in some detail in section 2.1.1 of the dissertation. However, broadly speaking, I find these distinctions to cause problems when dealing with these phenomena from an informal position as a player, viewer, reader, or interactor. Telling a consumer of a media artifact that her novel is primarily a “diegetic narrative”, while her television show is (for the most part) a “mimetic drama” doesn’t meaningfully change the pleasures of those two experiences. As Margaret Mackey has argued in Narrative Pleasures in Young Adult Novels, Films, and Video Games the interpretive literacies that we are currently able to bring to bear on a range of media no longer conform to the formal separations once considered sacrosanct in the study of different media forms (Mackey, 2011). While the specialized terminology retains its utility for certain types of scholarly analysis, I have chosen a looser approach that reflects this more dynamic and holistic mode of experiencing narratives.

Likewise, I will be playing fast-and-loose with terminology around the interpreter of these media artifacts. Words like “player”, “reader”, “viewer” “interactor”, and “participant” denote specific types of actors or interpreters of a media form; however, as our mediated experiences become ever more hybridized, these distinctions become less meaningful. When is a “player” of a game not also an “interactor” or a “participant”? When is she not also a “viewer” and a “reader”? “Interpreter” seems like a relatively neutral term when considered alongside the others, but it has its own associations in narratology, and it seems over-formal when talking about experiences as playful as games.

1.2. Dissertation Outline

I have provided this guide here to help readers navigate the work.

Chapter 1: Introduction
The chapter you are currently reading. Here I establish the motivations, orienting concepts, and research questions that will guide this work.

Chapter 2: Literature Review
The second chapter is an extended look at the foundations of this research. It is broken into four subsections:

2.1: Digital Narrative, New Media, and Game Studies: This section provides a high-level exploration of the canonical work around digital narratives, games, new media, and interactive digital storytelling.
2.2: INTERLUDE: Two Design Cases: This section gives two examples of my related previous work. These examples help clarify my interest in agency and transformation, and lay the groundwork for a more in-depth investigation.

2.3: Agency, Meaning, and Speech Act Theory: This section deals with theories of agency in greater detail and introduces theories of communication and speech-act-theory.

2.4: Transformation, Drama, and Method Acting: This section explores the literature around actor training, method acting, and interactive theater to build a new model of the pleasures of transformation.

Chapter 3: Methodology

This chapter provides a high-level discussion of the hermeneutic techniques employed in this dissertation, and details the specifics of the close reading methods I undertook. It also revisits the analytical lenses from the second chapter.

Chapters 4-6: Close readings of the Mass Effect Trilogy

Each of these chapters provides an analysis of one of the Mass Effect games, drawing on the literature and analytical lenses described previously.

Chapter 7: Discussion and Conclusions

This chapter returns to the analytical lenses and research questions and re-examines them in the context of the analysis of the three Mass Effect games. It synthesizes this material into a set of design poetics for the pleasures of agency and transformation in digital narratives and story based games. It concludes with a discussion of the future of this research.

I have also included a significant collection of appendices that document my close reading process, and provide resources that I referred to throughout my playing of the Mass Effect trilogy.
2. Research Foundations and Literature

The study of games and digital narratives draws on an often bewildering array of different disciplines, areas of study, and theoretical perspectives. As media artifacts, games represent a potent intersection of computation, human behavior, visual rhetorics, narrative, and play. As objects of study they can be approached from a myriad of perspectives including media studies, psychology, art history, leisure studies, economics, education, ethics, law, performance studies, and human computer interaction (to name a few). Over the last two decades a “canon” of literature around digital game studies as its own specific area of research has begun to emerge. However, even within this growing discipline, the perspectives, methodologies, and approaches are diverse and not always in complete agreement over how to treat games. Are games to be the subject of research, as important media artifacts that merit study in-and-of-themselves? Are games a means to an end: a simulational tool that allows us to explore different facets of human behavior in constrained circumstances? Are games a social phenomenon to be studied in order to better understand their impact on learning and development? Is game studies in service of game design, with the goal of creating better games, or is it a field that is simply interested in the ways that games touch on the world?

In this dissertation I take two specific positions on game studies, which I believe work in conjunction with each other to frame a comprehensive approach to games. The first position is that games, as a media form, merit study for their own sake and that there is a value to understanding the poetics of games that can lead to a deeper understanding of the pleasures of play. Understanding the relationship between the designed mechanics of a game and the emergent experiences of play that these support is an essential step to developing cultural literacies that can both enhance our enjoyment of games and also improve how we design games.

The second position that I take is that games merit study because they can be employed in pursuit of broader social goals. They can serve a role in building new modes of educating and persuading, and they can act as mediators for change in the real world. This argument derives from extensive work on games for learning and persuasion, and while neither of these phenomena are the primary interest of this work, I would argue that they themselves grow out of the central concerns of the dissertation: agency and
transformation.

It is traditional to open the dissertation with a discussion of the theoretical perspectives and literature that will inform the writing. I draw on a number of my own previous projects – both applied and theoretical – to articulate the foundations of this research, and to situate it within a broader project of inquiry into agency and transformation in digital narratives and games. These projects provide windows into literature and writing outside of the core discipline of digital games and narrative, bringing in interdisciplinary perspectives that make an important contribution. In presenting this material I also seek to shed light on my rationale for investigating these two poetics.

This chapter is divided into four categories. The first deals with digital narratives in a very broad sense, and with the relevant aspects of digital game studies. The second is a brief interlude to consider two of my previous design projects that have framed my perspective on this research. The third is a more in-depth consideration of the theories around meaning and agency in games in general, and speech act theory in particular. The fourth introduces theories of transformation from the performing arts and method acting as a new area of literature that I believe has much to add to field of games research. I close with a discussion of these areas of inquiry as analytical lenses which I will used to guide the rest of my investigations in this work.

2.1. Digital Narrative, New Media, and Games

This first section of the literature review deals with the broad conceptual foundations that my research is based upon. As such it is the longest and most wide ranging of the three sections. In addition to the literature contained in this section, I also provide rough overviews of two previous research projects that I have undertaken in the time leading up to this dissertation. Both projects form small case studies that have helped to shape my perspective and my agenda as a scholar. More importantly, this section provides an extended analysis of how a wide range of research has explored questions of narrative pleasure in digital narratives, including an in depth consideration of the subfield of interactive digital storytelling.
2.1.1. Narrative and New Media Studies

2.1.1.1. Narratology, Formalism, and Interpretation

Narratology, the formal study of narrative, has its roots in Ancient Greece. In his *Poetics*, Aristotle established and articulated a number of fundamental truths about narrative. He was one of the first writers to establish the formal conventions around the progression of a story from beginning to middle to end (Aristotle, 1951).

This notion of story progression is one which is deeply embedded in our understanding of narratives as a linear mode. Aristotle's complete formulation of the sequence of events in a plot over time is known as the dramatic arc. Even as dramatists and storytellers in the Western world have developed new, more sophisticated frameworks to structure narrative, it is difficult to find a narrative work that is not built on the foundations laid by Aristotle. The other narrative formalism that can be traced to his *Poetics* is the notion of genre: Aristotle divided works into comic, tragic and epic forms, each with their own distinct poetic form.

Prior to the advent of digital media and games, film and television were two of the youngest narrative forms, inspiring a new wave of narratology and formalist analysis. Film, in particular, has provided a venue for much of the most interesting modern work on narratology. David Bordwell's *Narration in the Fiction Film* is the canonical film studies text of the modern era, drawing on Russian formalism, psychology, and theories of cognition to build a multilayered theory of filmic poetics (Bordwell, 1985). In it Bordwell explicates a number of crucial concepts including diegesis and mimesis and fabula and syuzhet.

2.1.1.1.1. Mimesis and Diegesis

Mimetic theories of narration describe narratives that are performed or enacted. The term was first applied to narratology in Plato’s *Republic*, where it refers to the reflection of nature, often through poetry. In Aristotle’s *Poetics*, mimesis is contrasted against diegesis because it *embodies* a version of reality, rather than describing it. Contemporary narratology regards mimesis as a form of dramatic enactment in which a narrative is *shown* rather than *told*.

Diegetic theories of narration deal with narratives that are recounted or “narrated”. Diegesis was also initially applied to narratology by Plato and later expanded upon in Aristotle’s *Poetics*. In contemporary narratology and film studies diegesis has come to refer to both the recounting (telling) of a story, and to the contents of the storyworld experienced by the characters of a story.
2.1.1.1.2. Fabula and Syuzhet

Fabula and syuzhet are terms taken from Russian formalism, and can loosely be translated as “story” and “plot” respectively. The syuzhet is the plot of a narrative as represented and encoded within a media artifact. It operates in relationship with filmic style to produce the fabula or story of a narrative, as interpreted and understood within the mind of the reader or viewer. Narratologist Marie Laure Ryan makes a distinction between story and discourse that has its roots in this formalist perspective. “Story,” she writes, “is a mental image, a cognitive construct that concerns certain types of entities and relations between those entities” (M.-L. Ryan, 2006, p. 7). Narrative discourse as she describes it is distinguished from other types of text by its ability to evoke these stories in the minds of readers. Writing with Bordwell, film scholar Kristin Thompson also highlights the distinction between the formal elements of the plot and the cognitive elements of the story (Bordwell & Thompson, 1997).

2.1.1.1.3. Narrative Perception, Comprehension, and Cognition

Bordwell also provides an interesting account of the cognitive processes of the spectator of film, drawing on constructivism to identify three factors that impact the process of viewing a film. The first is the perceptual capacities of the viewer – the limits of the eye and the mind – which are exploited by film to create the illusion of motion on the screen. Second is the prior knowledge and experience of the viewer – the familiar schemas and experiences that a viewer brings to the film – which is leveraged to create the illusion of a coherent world. Finally, the material structure of the film itself is used to aid the viewer in constructing the story by adhering to formal, structural, and stylistic languages of cinema (Bordwell, 1985). On narrative comprehension, he writes that the viewer must take the construction of an intelligible story as a central goal while viewing.

Following Bordwell’s foundational book, Thompson formulates a “neoformalist” approach to film analysis (Thompson, 1988). Her analysis seeks to account for the role of the viewer or spectator who she conceives as an active creator of meaning, located within a specific social, cultural, and historical context. She identifies four processes at work in a given spectator: physiological processes (basic sensory experiences, autonomic nervous system, etc.), preconscious activities (object recognition, understanding of physical reality, etc.), conscious processes (understanding and interpretation of film content), and unconscious processes (universal psychological traits, as per Freud or Lacan).
argues against the application of psychoanalytic theory to the analysis of film, and instead advocates for criticism rooted in the conscious, situated experience of the film as an aesthetic object.

She draws heavily on the work of Bordwell in her discussion of narrative structure, beginning with a discussion *syuzhet*, and *fabula*. Within the concept of Syuzhet she locates two additional concepts, drawn from Barthes’ codes in *S/Z* (Barthes, 1970). These are the *proairetic* aspect of the narrative, which deals with the chain of narrative causality that allows the viewer to make sense of the links between actions and events, and the *hermeneutic* aspect of the film, which is comprised of the set of “enigmas” that are posed by the narrative, which keep the viewer engaged in the story. Narration occurs in the interplay between these concepts. Once again drawing on Bordwell, Thompson characterizes narration in terms of its knowledgeability, its self-consciousness, and its communicativeness.

Together, Bordwell and Thompson propose a definition of narrative that has formed the basis for much contemporary work on digital narrative, writing that a narrative is “a chain of events, linked by cause and effect, occurring in time and space” (Bordwell & Thompson, 1997). The notion of *causality* is often located at the heart of narrative. Philosopher Ismay Barwell discusses the nature of causality in the creation of narrative coherence, writing that the most basic social functions fulfilled by stories are to explain *what happened*, *how it happened* and *why it is significant* (Barwell, 2009). Barwell makes a distinction between “stories” and “narratives”, a distinction which allows her to judge many different types of stories as “non-narrative”. *Narratives*, she argues, fulfil the previously discussed epistemological functions to a high degree due to their reliance on *conclusions* (Barwell, 2009). For Barwell, narratives are characterised by their tripartite structure of beginning, middle, and end, and by their reliance on coherent connections between their events to explain the how and the why of their conclusions. “Narratives,” she writes, “are functionally coherent representations of sequences of events” (Barwell, 2009, p. 49). In this sense, Barwell’s narratology is deeply rooted in Aristotle.

Other approaches to narrative draw inspiration from modern forms of knowledge representation and database structures. Film scholar Edward Branigan defines narratives as “a perceptual activity that organizes data into a special pattern which represents and explains experience” (Branigan, 1992, p. 3). His definition also attends to the importance
of causality, but he adds that the end of a chain of cause-and-effect must contain a judgement about the nature of the events in the narrative, as well as a demonstration of how it is possible to know and thus narrate those events (Branigan, 1992). A narrative, from this perspective, is a particularly structured form of database.

The poetics of the database are at the core of many canonical theories of digital media, most notably Lev Manovich’s *The Language of New Media* (Manovich, 2001). In contrast to Branigan’s definition, Manovich regards database and narrative as being naturally in opposition to each other. He argues that a database “represents the world as a list of items, and it refuses to order this list” (Manovich, 2001, p. 225). From Manovich’s perspective the absence of a guiding logic or order puts the logics of the database directly in conflict with the logics of narrative, which he sees as a competing paradigm of meaning. Narrative, in this sense is defined by the ways in which it selectively excludes information from the database set, in order to force a certain ordering, and elicit a specific meaning. To reconcile the logics of narrative and database, Manovich turns to the semiological notions of *syntagm* and *paradigm*, which may be loosely understood as the *explicit* elements from which a work is constructed (*syntagm*) and the *implicit* set of related elements from which the set might have been sourced (Manovich, 2001). A parallel may be drawn between the notions of *fabula* and *syuzhet* in this situation, and thus, the database becomes the *paradigm* (*fabula* or plot) from which the *syntagm* (*syuzhet* or story) narrative is drawn.

Definitions of narrative that emphasize a string of causally connected events are what we might call “formalist” models of narrative. Aristotle, Manovich, Bordwell and Thompson, and Barwell all focus on the *elements* and *structure* of the media artifacts as the crux of “narrativity”. This is in contrast to Thompson’s independent *neoformalist* work, which draws on interpretivist theories such as those of Roland Barthes to account for narrative as a *received* phenomenon. Branigan’s perspective on narrative falls into this second category.

Branigan does not see narrative as being specifically contained within a text, so much as arising from the interpreted relationships between different formal elements considered within the totality of the text: a “global interpretation of changing data measured through sets of relationships.” (Branigan, 1992, p. 4) In order to describe how we make sense of this shifting collection of data, he introduces the notion of *cognitive schemas*: the systems...
of classification that we use to encode, comprehend, store, and retrieve the features of a narrative. He describes schemas as “an arrangement of knowledge already possessed by a perceiver that is used to predict and classify new sensory data” (Branigan, 1992, p. 13). “Meaning” in narrative is achieved when the schemas of the viewer align with the pattern of data represented in the narrative database.

Branigan devotes the rest of his book to unpacking the functions of narrative schemas in film. His approach takes a traditional definition of narrative as a sequence of causally related events, and augments it by framing it through a lens of a viewer making sense of those events as a set of data. This highlights the idea that the “meaning” of a narrative is one which is made through an act of interpreting the components of the text: meaning is not a “message” contained by the text but instead a conclusion reached by the reader about a text. The application of schema theory provides a useful vocabulary for considering the cognitive load involved in reaching this conclusion. Branigan discusses how it is possible to imagine a scene in a film from angles other than the ones shown by the camera: the scene becomes “known” or “understood” beyond the content presented. The cognitive effort of filling in the blanks here is not dissimilar to what comic-book theorist Scott McCloud would call “closure” (McCloud, 1993). Closure is what happens when a reader of a comic “connects-the-dots” in order to experience a character in motion from one panel to a next. It is the brain of the viewer imagining complete three-dimensional objects in the diegetic world of the comic even when presented with incomplete two-dimensional representations of those objects.

Other theorists have made even stronger claims about the capacity of the human brain for narrative. In a paper on The Case for the Narrative Brain, Ken Newman argues that there is a “species-wide predisposition and capability for narrative” (Newman, 2005, p. 145). He argues that individuals develop differing levels of “narrative tendencies”, and that these tendencies impact the individual’s response to interactive narrative systems. He then contends that there is a case for a set of species-wide archetypal narrative scripts embedded in the human psyche. The idea that the human brain is evolutionarily predisposed to narrativise phenomena in the world is an interesting one that is shared by other narrative theorists. In his book The Storytelling Animal, Jonathan Gottschall argues that stories have served important evolutionary functions for humans, while also fulfilling many important social functions. He describes our relationship to stories as a form of “craving”: we actively see the pleasures, instructions, simulated worlds, and social
structures communicated through stories, which he regards as the basis for many of our communal impulses as a species (Gottschall, 2013).

Chris Crawford describes stories in terms of informational structures that the brain uses to make sense of the world, and to shortcut the transmission of complicated ideas (Crawford, 2005). It is not exaggerating to say that narrative and story are fundamental elements of what it means to be human, and that they do a significant amount of work to help us understand the world, and communicate that understanding amongst ourselves.

2.1.1.4. Theories of Interpretation and Reception

In 1935 Russian literary theorist Mikhail Bakhtin laid the groundwork for many modern and post-modern understandings of narrative as a phenomenon that arose from both the form of a text and the interpretation of the reader (Bakhtin, 1981). *Discourse in the Novel* came at a time when novelistic prose was just beginning to be taken seriously as a stylistic and literary medium, rather than a neutral and purely utilitarian medium. In it, Bakhtin critiques previous work in “stylistics” for having too narrow a focus, writing that “all attempts at concrete stylistic analysis of novelistic prose either strayed into linguistic descriptions of the language of a given novelist, or else limited themselves to those separate, isolated stylistic elements of the novel that were includable...in the traditional categories of stylistics.” (Bakhtin, 1981, p. 261) To counter this reductionist approach to the novel Bakhtin introduced the concept of *heteroglossia* (“multiple voices”) for evaluating the many different social perspectives and conventions of language use that are evident in the experience of reading a novel. His concept of heteroglossia sought to locate meaning within a novelistic text by considering the many different possible readings, interpretations, and points-of-view as a form of literary and linguistic *dialogue*. Bakhtin conceptualized language as socially stratified, framing the novel as the intersection of multiple social voices both centripetal (seeking a unified or common center) and centrifugal (diversifying and spreading outward). In order to evaluate the novel as a multi-linguistic phenomenon, Bakhtin introduced the idea of *active understanding*. Bakhtin described active understanding as a dialogical phenomenon that grows out of everyday conversation. He used this metaphor to illuminate his ideas about the emergence of linguistic meaning, writing that between any word and its object “there exists an elastic environment of other alien words about the same object” (Bakhtin, 1981, p. 276). It is only in negotiating this relationship that a word’s meaning takes shape. By treating the meaning of words as
context dependent, Bakhtin laid the foundation for an understanding of narrative meaning as an interpreted or decoded phenomenon, rather than a static, encoded one.

Following in Bakhtin’s footsteps, Umberto Eco’s 1962 book *The Open Work* makes an explicit argument for the role of the reader as *interpreter* in assigning meaning to artistic works (Eco, 1989). Inspired by the emergence of experimental and indeterminate musical compositions, Eco argued that all artistic experiences are fundamentally “open” – which is to say that they rely upon the interpretation of a viewer or reader before they are complete. Eco begins his argument by citing a number of explicitly open works, such as Henri Pousseur’s recombinant musical composition *Scambi*. The pieces Eco uses as his examples are explicitly “open” works because they are rules based: they rely upon explicit compositional choices by either their performer or their audience (or both) in order to be experienced and “closed”. Eco takes this as a starting point for making an argument about the “openness” of all mediated experiences. He writes that a reader’s “comprehension of the original artifact is always modified by his particular and individual perspective” (Eco, 1989, p. 3) and argues that the aesthetic validity of a work of art is directly proportional to its openness to interpretation. He contrasts this against other “texts” such as the common traffic sign, which ceases to perform its function the moment that it is opened up to alternative interpretations. Art, from this perspective, is partially defined by the absence of a fixed meaning intrinsic to the text itself.

I like to imagine the concept of the open work in terms of quantum uncertainty: a text is superpositioned between all possible states until it is read, at which point the “waveform” collapses and it becomes a fixed set of meanings for the reader for a brief moment. This concept is perhaps best encapsulated in Schrödinger’s infamous “Cat Paradox” which used the example of a cat, locked out sight in a box, whose survival or death hinged upon the atomic decay of a radioactive isotope (Trimmer, 1980). So long as the cat remains unobserved it is conceivably alive or dead, and from a quantum perspective it inhabits both states simultaneously. Thus with texts, the story that arises from a formal textual artifact inhabits its complete possibility space until read and interpreted.

Eco’s concept of the Open Work is in keeping with Bakhtin’s framing of the novel as being fundamentally dialogic. More importantly, it moves the frame of narratological analysis away from an emphasis on form and towards an understanding of interpretation. His work was followed by the writings of Roland Barthes, whose 1967 essay *Death of the Author*
moves even further away from looking to the formal properties of a text for its meaning (Barthes, 1977).

Barthes attempts to overthrow what he regards as the tyranny of the ever-present author, by framing writing as a “tissue of signs” (Barthes, 1977, p. 147), assembled out of language by “scriptors”, and free from any encoded meaning, context, or communicative intent. He writes of texts as a “multi-dimensional space” inhabited by a multitude of meanings – a “tissue of quotations” – drawn from culture rather than the intent of the author (Barthes, 1977, p. 146). Instead of seeking to find meaning in what he regards as an unknowable and ultimately irrelevant author, Barthes instead argues for a focus on the reader, writing that “a text’s unity lies not in its origin but in its destination” (Barthes, 1977, p. 148).

For this reason, it is appropriate to place *The Death of the Author* alongside Bakhtin’s *Discourse in the Novel*, and Eco’s *The Poetics of the Open Work*. The view expressed in this piece is perhaps the most extreme “interpretivist” approach to writing expressed in this group by conceptualizing texts as webs of intersecting citations rather than webs of discourse (as in Bakhtin) or open loops waiting to be closed (as in Eco). Writers, in Barthes’ view, do not encode meanings in text: they select words from the “ready-formed dictionaries of language” which are embedded in the culture around them. He views even this act of assembly as inconsequential to any “meaning” that the text may evoke: the assembly of a text is in the past—a momentary act which ceases to have relevance to the artifact of the writing which it produces. Instead, any possible meanings that the text might support are in the domain of the reader, who he views as able to see the multiplicity of different potential meanings within a text simultaneously. This is especially relevant from a methodological standpoint, because in the absence of authorial intent, the role of the critic is no longer to decode or decipher a text. In this respect, Barthes’ work is connected to a tradition of literary theory that started with the New Critics, and which led to the initial formulation of *close reading* as an approach to literature. As close reading is my primary methodology for this dissertation, I will explore its intellectual commitments and origins in much greater depth in the methodology chapter of this work.

*The Death of the Author* must, ironically, be considered within its historical context (a cardinal sin to the New Critics). In the essay, Barthes rejects what he perceives as the entrenched critical hegemonies surrounding the “Author” at the time of writing. He
attempts to free texts from the constraints of authored meaning, and to instead locate them solely in the realm of the reader. I contend that in doing so he leaves no room to consider and appreciate the stylistic and aesthetic work that distinguishes any one author’s work from another’s. One need not discard the author entirely in order to account for the role of the reader in making meaning within a literary work. A specific creator or artist brings a specific worldview, voice, perspective, and style to a work that is unique to that creator. Even should that author merely be assembling a tapestry of citations from the available linguistic options surrounding him, the choice of how to assemble these citations is an idiosyncratic one that inescapably inflects the final text. These unique elements of authorial voice are central to the pleasures of the reader: they are why different readers prefer different authors, and why one author might be more successful than another. The unique authorial voice and contexts of a work are likewise paralleled by the unique readerly perspective and context brought to the text during the act of reading. A holistic approach to literature, and to narrative, must incorporate both of these elements.

*The Death of the Author* was written as a provocation, and as such exaggerated aspects of Barthes’ literary theory. In his later work, he takes a more even handed approach to literary meaning, regarding it as a combination of denotational meaning (meaning that is encoded in the form of a text) and connotational meaning (meaning interpreted by a reader) (Barthes, 1970).

This then brings us to a position on narrative that I will return to throughout this work: narrative cannot simply be defined by the formal properties of its content, nor can it fully be explained by the interpretive act that happens in the moment of its reception. Narrative exists at the intersection of these two perspectives, and it is from this position that I will be addressing my own theoretical work.

### 2.1.1.2. Core Poetics of New Media

There are few books more fundamental to the study of digital media and narrative than Janet Murray’s *Hamlet on the Holodeck* (Murray, 1997). It is the ur-text in many ways, and
is foundational to much of my own work. Perhaps the most important thing that Murray does in this book is introduce and define a vocabulary for the discussion of digital media: a series of definitions that have yet to be surpassed in the field. While there has been significant work done to complicate and deepen many of the book’s central concepts in the almost two decades since its publication, there are very few active conversations in the field that don’t owe some debt to Murray’s initial formulations. Chief among these are her four essential properties of digital environments. Murray contends that digital environments are all Procedural, Participatory, Spatial and Encyclopedic.

1. **Procedural:** Computational systems are “process engines”: they are not static repositories of information, but dynamic systems of interlocking algorithms.

2. **Participatory:** Computational systems support a dialectical process of input and output with human interactors.

3. **Spatial:** Computers are capable of representing “navigable space”, either literally, as is the case in a simulated environment, or conceptually, as is the case in a web of hyperlinked documents.

4. **Encyclopedic:** Computers are able to index and access much greater quantities of information and data than any previous medium.

These four properties can be understood as providing the basis for two other significant qualities of digital media: *interactivity* (which Murray views as a combination of the procedural and participatory properties) and *immersion* (which she views as a combination of their spatial and encyclopedic qualities).

Interactivity is a long contested term. Chris Crawford frames it in terms of a conversation between participants in which both actors alternately “listen, think, and speak” (Crawford, 2003). He contends that each of these elements is equally important to any other, and both participants in the conversation must be successful listeners, thinkers, and speakers in order for the conversation to be enjoyable. In contrast, Eric Zimmerman describes interactivity in terms of different modes of engagement with a media artifact (Zimmerman, 2004). His “four modes of interactivity” include:

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2 Murray has since returned to these poetics in her recent work, Inventing the Medium (2011). She adopts JJ Gibson’s language of affordances (Gibson, 1977) to reframe these concepts from the broader perspective of Human Computer Interaction (HCI), which she supports with many more recent examples. I choose to rely on her language from Hamlet and the Holodeck throughout this work in deference to its role within the canon of digital media studies as a landmark text, and as part of the historical narrative of the field that I seek to present.
1. **“Cognitive Interactivity; or Interpretive Participation with a Text”**: This mode of interactivity invokes many interpretivist frameworks of reading including Umberto Eco’s notion of the Poetics of the Open Work (Eco, 1989), Roland Barthes’ work on The Death of the Author (Barthes, 1977), and Mikhail Bakhtin’s work on Heteroglossia in Discourse in the Novel (Bakhtin, 1981). This mode of interactivity is essentially a hermeneutic process by which a reader brings a perspective, or set of horizons to a media artifact, which create a lens for interpreting the contents of that artifact (Føllesdal, 2001; Gadamer, 2006).

2. **“Functional Interactivity; or Utilitarian Participation with a Text”**: This mode of interactivity deals primarily with the mechanistic aspects physically manipulating things in the world: pushing buttons, turning pages, flipping switches, moving our arms and limbs, giving voice commands, etc.

3. **“Explicit Interactivity; or Participation with Designed Choices and Procedures in a Text”**: This is the mode of interaction that is most similar to what Crawford and Murray refer to when discussing interactivity. This is the interactivity of choices, decisions, expressions of intent, and meaningful responses to those expressions.

4. **“Meta-Interactivity; or Cultural Participation with a Text”**: This mode of interactivity encompasses all of the broad cultural ways in which people produce additional meanings around a text beyond their active engagement with it in the moment. The best example of this mode at work can be found in practices of “fandom” including cosplay, fanfic, and the multitude of other forms of cultural production that Henry Jenkins has called attention to over the years (Jenkins, 1992, 2006a, 2006b).

Murray’s approach to interactivity makes a distinction between “agency” which closely corresponds to Zimmerman’s third mode, and “activity” or “participation” that corresponds more closely to his second mode. Interactivity is not the same thing as agency. Murray argues that the vagueness with which “interactivity” has been used has led to the confusion between simple activity (such as moving a joystick or clicking a mouse) and “true agency” which requires a linkage between the intentions of a player, her actions, and the outcomes that occur within a system (Murray, 1997, p. 128).

Much of my own work has been to explore the distinctions between terms like “participation”, “interaction” and “agency” and I will return to these ideas throughout this chapter.

The final perspective on interactivity I’d like to consider here comes from Marie Laure Ryan, who proposes four types of interactivity, based loosely on Espen Aarseth’s typology
of user functions and perspectives in cybertexts. She divides these four types into two binary pairs (M. L. Ryan, 2001). The first pair, “Internal/External” considers the point-of-view of the user as either internally situated within the virtual world (a perspective that I connect to transformation throughout this work) or externally supervising the events of that world. The second pair, “Exploratory/Ontological”, considers the extent to which a players actions are considered to constitute meaningful contribution to the reality of the virtual world. Exploratory interactions allow the player to traverse the world, but do not alter the underlying state of the system, while Ontological interactions directly impact the functioning of the simulation.

Ryan then considers the different types of interactive systems that result from the four possible combinations of these pairs. Briefly summarized these are: external-exploratory interactivity (most hypertext), internal-exploratory interactivity (interactive mysteries, travelogues, and spatial narratives), external-ontological interactivity (simulation games, and choose your own adventure stories), and internal-ontological interactivity (action and adventure computer games; and the Holodeck).

2.1.1.2.1. Immersion

Murray identifies Immersion as one of three fundamental aesthetics of the digital medium, alongside Agency and Transformation. Immersion has been used to describe a number of interrelated phenomena. Ermi and Mäyrä argue that the term immersion actually refers to three distinct types of experience (Ermi & Mäyrä, 2005). Taking a grounded theory approach to the subject, they performed a thematic analysis of interview responses from about 10 Finnish children to build a model of the pleasures of videogame play. This was followed by a second study, in which a survey was administered to several hundred gamers to validate the model. The three types of immersion they derive are sensory, imaginative, and challenge-based. The first – sensory immersion – is commonly associated with virtual reality in which a piece of media overwhelms the senses to transport the viewer or interactor to a new reality. The second is the immersion of make-believe, or the imagination, in which a viewer, reader, or interactor, gets swept up in the imaginary world of a fiction or narrative. The third is the pleasure of performing successfully in a context in which one is challenged: the immersion that comes from a feeling of mastery that is often associated with the notion of “flow” (Csikszentmihalyi, 1990). Flow is a concept from psychology that is used to describe a type of highly
pleasurable absorption in a task. It is commonly used in game studies as a measure of immersion, because the conditions that support flow require the same balance of task difficulty and participant skill as a good gameplay experience. If a game is too easy, relative to the skill of the player then it becomes boring, and if it is too difficult than it becomes frustrating. When the challenge level of a game and the ability of the player are aligned, then a game is capable of eliciting a state of flow.

Douglas and Hargadon use “schema theory” as a starting point for analyzing the pleasures of media in general, and immersion in particular (Douglas & Hargadon, 2000). They define schemas as “data structures that enable us to perceive, understand, and, eventually, act. “ (Douglas & Hargadon, 2000, p. 153) Schemas shape both the expectations we bring to an experience, and the types of pleasure we derive from it. They divide this pleasure into two categories: immersion and engagement. The pleasures of immersion arise from “being completely absorbed within the ebb and flow of a familiar narrative schema” (Douglas & Hargadon, 2000, p. 154). The pleasures of engagement are experienced when a reader or viewer is given an opportunity to grapple with a range of conjoining or conflicting schemas from an external perspective. These are the pleasures of analysis, problem solving, and critique. The schemas that can be brought to bear on a text include things like knowledge of a particular author’s style, knowledge of genre conventions, knowledge of character tropes, and knowledge of the context in which a work was written (to name a few). The pleasures of immersion in a known set of schemas include experiencing deviations from expected outcomes (when done within a broader familiar framework) in that they “prompt us to recognize overturned schemas from a perspective that consciously draws off a variety of schemas, encouraging us to guess and second guess at embedded meanings.” (Douglas & Hargadon, 2000, p. 155)

Douglas and Hargadon believe that it is possible to experience both types of pleasure in interactive narrative experiences, and argue that hypertext fictions are unique in that they force an oscillation between the states of immersion and engagement that often corresponds with Csikszentmihalyi’s “flow” state.

Game designer and scholar Ernest Adams also breaks immersion into several categories. He presents three different types of immersion: tactical, strategic, and narrative. Tactical immersion is the experience of being caught up in the moment-to-moment experience of a game. It is similar to the immersion of Flow discussed above in that it is connected to
the experience of “being in the zone”. Strategic immersion is the analytical experience of orchestrating a solution to a problem or optimising an experience. It is similar to Douglas and Hargadon’s notion of engagement. Taken together, strategic and tactical immersion fit under Ermi and Mäyrä’s heading of challenge-based immersion. Adams’ third form of immersion, narrative immersion, is the pleasure of being absorbed in a story and to desire a satisfying conclusion for the plot and characters. It is congruent with Ermi and Mäyrä’s imaginative immersion, and with Douglas and Hargadon’s formulation of immersion as the pleasure of experiencing a familiar schema.

Murray’s formulation of immersion best fits with the notion of imaginative immersion or narrative immersion. She uses Coleridge’s notion of the “suspension of disbelief” (Coleridge, 1952) to characterize immersion, but argues that immersion requires that the reader both suspend a critical faculty (disbelief) while also exercising a human faculty (active creation of belief) to create imaginatively immersive experiences. Interestingly, she characterizes immersion as potentially anxiety producing and paralyzing, and argues for a need to establish boundary conventions to support safe entrance into imaginary environments. Her concern over becoming too immersed in a digital text is particularly interesting, given that the sensory and graphical fidelity of digital media works was quite limited at the time of writing: this speaks to the importance that she placed on the imagination of the interactor to create a compelling fictional reality.

### 2.1.1.2.2. Agency

Murray’s second fundamental aesthetic – agency – is defined as “the satisfying power to take meaningful action and see the results of our decisions and choices” (Murray, 1997, p. 126). This is a pleasure beyond mere mechanical interactivity, but it is not (as some would have it) an authorial pleasure. Instead, Murray is careful to assert that the authorship remains in the hands of the designer of the digital processes with which the user interacts. She argues that an author of a procedural text is like the choreographer of a performance, providing a “repertoire of possible steps and rhythms” which an interactor may use to “improvise a particular dance among the many, many possible dances the author has enabled” (Murray, 1997, p. 153). The actions of the interactor represent what Murray describes as a “derivative authorship”, rather than first-order authorship in a procedural work (Murray, 1997, p. 153).

A re-framing of common attitudes about agency lies at the heart of one of my analytical
lenses, and so I will return to these ideas in much greater depth in section 2.2 of this chapter, rather than digging into them here.

2.1.1.2.3. Transformation

The third – and least clearly understood – aesthetic of digital media is transformation. Unlike Immersion and Agency, both of which have received significant attention within the design and research communities, the aesthetics of Transformation remains misunderstood. I think this is in part because Murray’s initial formulation of it lacks the same immediate utility that characterizes the other two.

Murray discusses how digital environments support a transformative make-believe roleplay: a player becomes a bird, a soldier, an elf. However, she quickly diverges from this notion of identity transformation to instead focus on the mutability of forms and environments within digital environments. In this sense, it seems that Murray has conflated “instability” with “transformation”: she discusses the notion of “kaleidoscopic narrative”, in which many potential actions and outcomes are presented simultaneously, and argues that it is necessary to create conventions for making sense of stories in such fragmented and fractal spaces.

The other aspect of transformation she discusses has to do with the power that comes from enacting events in a narrative. She argues that enacting stories within a digital narrative has more transformative power than witnessing “conventionally dramatized events because we assimilate them as personal experiences” (Murray, 1997, p. 170). Here she lays the groundwork my own interest in enactment as a unique poetic of participatory media.

Green et al. discuss the notion of transportation into narrative worlds as one of the primary sources of media enjoyment (Green, Brock, & Kaufman, 2004). They compare the experience of being transported to a narrative world with both the concepts of immersion and flow; however, they also argue that much of the enjoyment of transportation comes from both “escaping the self” and “enduring transformation”. Being transported into a fictional world gives a media viewer an opportunity to vicariously experience new identities, other possible selves, and alternative life choices that support a process of self-expansion. Transformation also often has the benefit of providing the viewer with an experience that teaches them new knowledge or provides insight into a historical event or philosophical problem.
Transformation, here, is seen as something that is both temporary – the opportunity to experiment with different identities – and lasting – transformation results in a changed perspective or worldview. This latter notion of lasting transformations is borne out in the psychology literature around emotional engagement with a narrative text. Mar et al. suggest that one of the outcomes of deep emotional experiences of fiction is a transformed sense of self, citing research that readers who became deeply engaged in a fiction experienced both short term alterations of mood and long-term transformations to their self-perception and personality (Mar, Oatley, Djikic, & Mullin, 2011).

2.1.2. Game Studies
Although a comparatively young field, Game Studies has generated a significant body of scholarship over the last 20 years. Rather than attempt to encompass all of it in this section I have selected a subset of relevant theory that speaks directly to my work here.

2.1.2.1. Games and Narrative
Although not all games are (or should be) seen as a form of narrative expression, many games aspire to tell stories, and to incorporate narrative poetics at both the formal and experiential levels. As a field, game studies has moved past the curious historical moment when “ludology” and “narratology” squared off over the soul of games scholarship – a moment whose impact is over-exaggerated, perhaps because the conflict itself made for an engaging story about the field3. One valuable outcome of this early theoretical dust-up is that it generated a significant body of theory around the relationship between play and story.

I see Noah Wardrip-Fruin and Pat Harrigan’s book First Person as a perfect microcosm of this debate: a theoretical time capsule that not only incorporates essays by some of the major participants in the debate, but also a running dialectical commentary on those essays in which the contributors engage each other in a less formal discussion of their theoretical differences (Wardrip-Fruin & Harrigan, 2004). Briefly summarized, ludology was the position that game studies should be engaged into explorations of the aspects of games that were unique to the medium, whereas narratology took the position that existing

3 I discuss this debate primarily to provide the context from which much of the contemporary work on games and narrative has emerged, rather than from any desire to re-engage in the arguments themselves.
theories of media and narrative could provide leverage on games as a media form within a tradition of media forms. In retrospect, one wonders at how these two perspectives could be seen as mutually exclusive, when in fact both provide leverage on understanding games as a complex and multifaceted new medium.

Writing at the height of the narratology and ludology debate in game studies, Celia Pearce attempts to theorize a “middle-ground” perspective on the issue of games vs. narrative in her article *Towards a Game Theory of Game* (Pearce, 2004). Pearce argues for a theory of games that focuses on play as the central poetic, but which allows for a broad treatment of narrative in the ways that it manifests within games. She proposes six narrative operators that she identifies as existing in various combinations (or not-at-all) within games:

*Experiential:* The emergent narrative that develops out of the inherent ‘conflict’ of the game as it is played, as experienced by the players themselves.

*Performative:* The emergent narrative as seen by spectators watching and/or interpreting the game underway.

*Augmentary:* Layers of information, interpretation, backstory, and contextual frameworks around the game that enhance other narrative operators.

*Descriptive:* The retelling of description of game events to third parties, and the culture that emerges out of that.

*Metastory:* A specific narrative “overlay” that creates a context or framework for the game conflict.

*Story System:* A rule-based story system or kit of generic narrative parts that allows the player to create their own narrative content; story systems can exist independent of or in conjunction with a metastory. (Pearce, 2004, p. 145)

Pearce’s narrative operators represent a reasonable starting point for a discussion of narrative in games; however, they have some significant limitations. Her perspective on narrative views it as essentially *epiphenomenal* to play: narrative might co-occur with play, or emerge from play, or even be used to describe play after-the-fact, but the primary activity of games for Pearce is very clearly play. She describes two game genres that exemplify her vision of “play-centric” game narratives. The first is the broad category of games known as Massively Multiplayer Online Role Playing Games (MMORPGs): a genre that was still very much in its infancy in 2004. Pearce argues that narratives in MMORPGs emerge from the social interaction of the players in the virtual world – that play provides a
context for *descriptive* and *performative* narratives. The second genre she discusses is the “virtual dollhouse” of *The Sims*, which allows players to tell their own stories about families within its simulation engine. Both examples emphasize the player as the author of her own stories using the game as a “kit of parts” to tell and share those stories.

Pearce’s work exemplifies an approach to game narrative that emerged from the ludology/narratology debates that I see as reconciliatory but incomplete. By focusing on the player as the author of narrative meanings, this school of theory abdicates responsibility for any understanding of games as narrative texts. From a narratological standpoint this is an extreme of anti-formalism: it emphasizes reception and interpretation while disregarding the form and contents of the media artifact. This is, in a sense, the postmodern equivalent of Barthes’ *Death of the Author*, and as such suffers from the same weaknesses. This desire to emphasize either *form* or *reception* is a thread the runs deeply through all sides of the scholarship and research around digital narratives. It often seems to be the case that one cannot advocate for an understanding of one without disregarding the other.

Eric Zimmerman describes his own version of this supposed dichotomy in an article entitled *Against Hypertext* (Zimmerman, 2001). He argues that hypertext is distinguished from other traditional media forms because it partakes of his third mode of interactivity: interaction with explicitly designed choices. He proposes two different models that interactive systems tend to take: *embedded* (or content-based) structures, and *emergent* (or system-based) structures. *Embedded* structures involve interaction with pre-generated content, while *emergent* structures involve interaction with a set of rules and procedures that give rise to unexpected content. Zimmerman asserts that hypertext “is one of the poorest examples of designed interactivity around,” in part because it relies upon *embedded* structures (Zimmerman, 2001, p. 3).

He is careful to point out that most systems exist on a continuum between these two extremes, and gives examples of a more embedded system with emergent elements (*Myst*), a more emergent system with embedded elements (*Sim City*) and a balanced system (*Magnetic Poetry Kits*). It is evident that Zimmerman's terminology is not limited to digital systems. Two of the examples he gives, Choose-Your-Own-Adventure Books, and the surrealist art game *Exquisite Corpse*, are both systems that do not require a computer to experience. This is important because it locates these techniques within a historical
context of dynamic textual systems that includes such examples as the algorithmic writing techniques of the *Oulipo* group and the proto-hypertext of the *Tao Te Ching*. So, when Zimmerman argues that hypertext is one of the “poorest examples of designed interactivity around”, he is comparing it, as a highly embedded system, to a wide range of emergent systems, both analog and digital. He argues that hypertext exhibits only “token interactivity”, and that the lack of “meaningful choice” in hypertext “reinforces the rigid authority of the author” by reducing all sense of play to mere acquiescence with the system (Zimmerman, 2001, pp. 3–4).

What Zimmerman labels *embedded* systems is roughly congruent with approaches that emphasize the authored form and content of a narrative text, whereas the narratives of *emergent* systems emphasize the procedural indeterminacy of works that elicit unanticipated reader experiences. This is an imperfect analogy, because Zimmerman’s terminology is concerned more with the system that generates the content that a reader encounters, rather than on the experience of reception; however, it speaks to a broader tendency to assign the final responsibility for the *meaning* of a work to either the author OR the reader, rather than to both. I have used the term “formal narrative” to describe approaches that emphasize the poetics of a text, and I would suggest the term “informal narrative” to describe approaches that emphasise the poetics of interpretation, reception, and emergent meaning. These terms can encompass Zimmerman’s notions of emergent and embedded narrative, alongside the theories of narratology discussed above.

Informal Narratives are what Newman is talking about in *the Case for the Narrative Brain* (Newman, 2005) and, as we will see in later sections of this chapter, they are what Aylett et al. are discussing when they talk about emergent narrative (Aylett, Louchart, Dias, Paiva, & Vala, 2005). They are the mechanism that we use as humans to make sense of our surroundings, by telling stories to explain our experiences to ourselves and others.

Formal Narratives are what we encounter in books, films, plays, and other forms of media. They are the encoded, embedded, content-driven narratives that rely on the work of an author to provide a text with style and meaning. Formal narratives often require effortful production by an author or creator, while informal narratives arise from our own basic strategies for making sense of the world.

Games complicate these categories by foregrounding the ways in which both types of narrative meaning play out. Theorists who rely on our inclination to narrativise the world
to “explain” game narrative without engaging with the narrative forms encoded in games are using a cognitive-experiential loophole to avoid the effortful work that is needed to understand the formal operations of narrative within games. Similarly, theorists of game narrative who are unwilling to engage with the processes of play and emergence do the medium a disservice by failing to incorporate the core experiential factor into their model.

Henry Jenkins stakes out a middle ground, not just between representation and play, but between narratology and ludology (Jenkins, 2004). Critiquing the ways in which the ludologists had characterized narrative, he argues that their approach “operates with too narrow a model of narrative, one preoccupied with the rules and conventions of classical linear storytelling at the expense of consideration of other kinds of narratives” (Jenkins, 2004, pp. 120–121).

He also argues that the discussion around narrative in games is too focused on the role of the narrator/storyteller, and does not take into consideration the process of narrative comprehension. He proposes a shift away from the notion that whole games must tell stories and instead proposes an understanding of games as artifacts within an ecology of “transmedia storytelling”. Jenkins proposes that games operate within a “narrative architecture” wherein narrative elements suffuse a space with narrative meaning. He describes four ways in which “environmental storytelling” in games could impact narrative immersion:

1. Spatial Stories evoke preexisting narrative associations.
2. Spatial Stories provide a staging ground where narrative events are enacted.
3. Spatial Stories embed narrative information within their mise-en-scene.
4. Spatial Stories provide resources for emergent narratives.

paraphrased from (Jenkins, 2004, p. 123)

He explores the “narratological consequences” of designed spaces including the importance of spatial design to evoke a sense of immersion in a fictional world, and the ways in which traversal of a fictional geography can structure or parallel the trajectory of a plot or character arc (Jenkins, 2004, p. 129). He also describes the ways in which designed game spaces and simulations can be “designed to be rich with potential, enabling the story-constructing activity of players” (Jenkins, 2004, p. 129).

Jenkins compares games to the design of theme-park attractions, like Disney’s Pirates of
the Caribbean. Jenkins is neither overly concerned with form, nor is he blindly enamored with interpretation and reception. Narrativity, from this perspective, is more about the interplay of meaning between the game as a designed text and the play as a performance that is situated within that text.

Jim Bizzocchi proposes a preliminary set of narrative parameters that bridge the gap between narrative definitions that are concerned solely with form and definitions that are concerned solely with reception. These include:

1. Storyworld: the environment within which the game unfolds
2. Characters: the beings that populate this game world
3. Emotions: both the emotions shown by the games characters and those elicited in the player
4. Narrativized Interface: how the narrative sensibilities are instantiated in the appearance and the functionality of the interface design
5. Micro-Narratives: the smaller moments of narrative flow and coherence that occur within a broader context of game play (Bizzocchi, 2007)

Unlike many of the other approaches to games and narrative, Bizzocchi’s framework seeks to incorporate an understanding of the poetics of interface and interaction: a crucial element that is frequently missing from the other literature. Bizzocchi also includes both formal and informal aspects of narrative in his framework. I take Bizzocchi’s narrative parameters as a set of foundational poetics for my own consideration of games, providing an essential set of descriptive and analytical tools for exploring games as from the perspective of both story and play. The work of Bizzocchi, alongside the work of Jenkins, shows how it is possible to take games seriously as a ludic form, while still engaging with the narratological potential of the medium.

2.1.2.2. Game Player Types

When designing a new game or digital narrative experience, it is important to understand the motivations, interests, and expectations of one’s players. Ernest Adams writes “Unfortunately, not all players are motivated by a desire to win for its own sake. Some play in order to find out how the story comes out...Different players prefer different kinds of immersion.” (Adams, 2004) A number of different taxonomies and categorization schemes have been proposed to help understand player preferences, and these have in turn influenced game design practice.
One of the earliest and best known player typologies was articulated by Richard Bartle in his paper *Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs* (R. A. Bartle, 1996). As one of the original creators of the Multi-User Dungeon, or MUD, Bartle derived his player types from many hours of his own personal experience within text-based virtual worlds in general, and from an extended bulletin board discussion between Bartle and about 30 of the highest ranked players of a commercial MUD in the UK. Bartle summarized hundreds of posts, ultimately identifying four things that people claimed they enjoyed in MUDs. His first type, *achievers*, takes pleasure from the completion of game-related goals and the acquisition of virtual wealth and power. The second player type, *explorers*, find pleasure through the acquisition of knowledge about the virtual world, both by exploring the environment and exploring the limits of the simulation. The third type, *socializers*, primarily seek pleasure in positive human interactions, role playing, and companionship online. Finally, Bartle’s fourth player type, *killers*, enjoy imposing their will on others, to cause distress and harm (R. A. Bartle, 1996, p. 3). Bartle’s four play types provide a useful starting point for categorizing players both in online play and, to a lesser extent, single player games. Although he admits that players may enjoy aspects of each of these four types of play, he claims that most players identified predominantly as only one of these types.

Bartle’s initial typology assumes that play styles are *intrinsic* to the player, rather than performative or contextual, and that they are stable within a given player. This plays out as a series of recommendations of how to balance the ecology of player types in MUDs, by considering how different ratios of player types will affect the world’s equilibrium. For instance, he assumes that a world which emphasizes combat will attract only achievers and killers, while driving socialisers away. Thus, these preferences dictate whether a player type will bother with a given game. This doesn’t consider the ways that players change their play styles to suit the design of the game they are playing. For example, there are players that love Skyrim who also love the Halo games, even though these games reward very different play styles. Similarly, there are many people that spend a lot of time in Second Life, who also play World of Warcraft very seriously, in spite of the vastly different pleasures of each of these virtual worlds. By assuming that player preference overcomes other elements of a game’s design, Bartle creates a model that doesn’t seem able to account for how people *actually play* these games. I think because he is drawing on experiences from text-based games, he overlooks the impact of things like world
aesthetic, narrative setting, genre, avatar design, and game mechanics and style to dictate how players select a virtual world to inhabit, and to determine the relationship they create to that world and to the other players in it.

In later work, Bartle complicates his model of player preferences, in part because his initial model could not account for behavior that he observed in graphical virtual worlds (R. Bartle, 2007). Citing Nick Yee’s survey of Everquest players, as well as his own four player types, Bartle writes that, in addition to the four pleasures that motivate Achievers, Socialisers, Explorers, and Killers, a fifth “orthogonal” pleasure of immersion is central to the experience of virtual worlds. In order to understand the pleasure of immersion, he argues that it is necessary to perform “internal research” of virtual worlds, and claims that the commonly used terms presence and flow are artifacts of “external research”; that is, research performed by people who are not themselves immersed players and/or designers of virtual worlds.

He defines presence as “the perceptual illusion that a mediated experience is not mediated” (R. Bartle, 2007, p. 42); however, he claims that there is something more than presence alone which holds players in an immersed state within virtual worlds. He similarly dismisses flow, citing several examples of studies in which players remained immersed in play, in spite of flow-disrupting elements in their gameplay. Instead, he argues that to understand immersion, one must understand the Hero’s Journey, as theorized by Joseph Campbell (Campbell, 1949). To make this point, he returns to his player typology, and extends it.

As it was initially formulated, Bartle’s system of player types was interesting but imperfect. It was unable to explain certain phenomena that he observed in online play, such as why players would change types over time, or why certain groups broke down into clear subgroups (such as griefers and politicians). In order to address these questions he introduced an additional dimension to his model: implicit vs. explicit. Implicit play means to “act without forethought, either because the player doesn’t know enough about the virtual world or its players to get a grip on it, or because the player has internalized it to an extent that they don’t need to think before acting (R. Bartle, 2007, p. 46). Explicit play, in contrast involves intentional and premeditated action.

This extension of the original play types allowed for a more complex treatment of player’s behaviors and motivations. It also provided the means to begin tracking the way that player
behavior and identity could change over time. Bartle identified several sequences that players commonly went through as their relationship to the game and the other players evolved, such as the transition from an *implicit socializer* (griefer) who is unskilled in the norms of an online world to an *explicit explorer* (scientist) who is actively learning about the world through trial-and-error to an *explicit achiever* (planner) who is employing that knowledge to advance in the game to an *implicit socializer* (friend) who has built bonds of friendship and camaraderie with other players along this journey (R. Bartle, 2007, p. 46).

Bartle argues that these sequences represent each individual player’s traversing of the archetypal Hero Journey (Campbell, 1949). Bartle’s re-framing of player types diversifies the model of the generic “player” into a number of subtypes and acknowledges a number of distinctive gameplay pleasures. It is also an important step toward an understanding of players as multifaceted entities, rather than monolithic “types”.

Bateman and Boon’s book *21st Century Game Design* takes a different approach to player types, borrowing the Meyers-Briggs personality typing system and applying it to games by reducing it from 16 personality types down to four game playing archetypes (Bateman & Boon, 2006). The Meyers-Briggs typology is comprised of four sets of “dichotomies”, which may be recombined into 16 possible permutations. These include Extroversion vs. Introversion; Sensing vs. Intuition; Thinking vs. Feeling; and Judging vs. Perceiving.

Bateman and Boon draw on the last two dichotomies to structure their typology of player preferences. Thinking and judging combine to form the *conqueror* archetype, who takes pleasure from winning, beating the game and overcoming challenges in pursuit of systematically established goals. Thinking and perceiving combine to form the *manager* archetype, who takes pleasure in the process of working through strategic and tactical challenges. Feeling and perceiving combine to form the *wanderer* archetype, who takes pleasure from new aesthetic and emotional experiences. Finally feeling and judging combine to form the *participant* archetype, who takes pleasure primarily from engagement in narrative or social play and who wants to feel connected to the game or to others in the game in some way (Bateman & Boon, 2006).

They further subdivide these categories into “hardcore” and “casual” versions of each play style, which are also associated with a specific Meyers-Briggs type. Bateman and Boon’s schema operates on the assumption that core personality traits can be used to understand player preferences in games. The implication of this is that play preferences grow out of something intrinsic to a player’s identity.
Craig Lindley performs a survey of player preferences in the course of his analysis of the relationship between narrative structures and computer games (Lindley, 2005). He examines “folk” typologies that have arisen from players of tabletop role playing games (RPGs) and live action role playing games (LARPs). One typology that stands out is the “Threefold Model” from John Kim which parses player preferences into three “contracts”, or shared play styles, in which players have roughly agreed on the same core values and pleasures in their play (Kim, 1998). Kim’s threefold model is interesting because it incorporates the role of the Game Master (or GM) into the mix, matching up different game design and operation strategies alongside different player preferences. The first category in Kim’s model is the dramatist which looks at how some players prioritize the relationship between the in-game action orchestrated by a GM to a satisfying story. The second category is the gamist which looks considers the importance of setting up fair and interesting challenges and problems for players to overcome. Kim’s third category is simulationist, and it is concerned with the exclusion of “meta-game” material from the game, such that game events are resolved primarily by “in-world” and “in-character” considerations (Kim, 1998).

Kim’s categories are grounded in pen-and-paper-RPG play, but they describe player preferences that are equally applicable to digital games. Lindley describes how these three categories – “Drama, Game, and Simulation” – can be seen to underlie the formal systems of computer games, and argues that even though different games may emphasize different elements of each of these players are free to play either “in tune or at odds” with this design emphasis according to their individual preference (Lindley, 2005, p. 4). He proposes that the preferences of the individual player will determine the extent to which she engages or subverts the structures of the game experience. Lindley goes on to discuss three different modes of behavior that describe how players engage with the dramatic and narrative aspects of games. The first of these modes is that of the audience member who is a passive recipient of the narrative. Lindley connects this mode with the experience of watching a cut scene in a game. The next mode is that of a performer who is actively playing a character role within an unfolding story that has either been pre-defined for the player by the designer, or is emerging from the actions of the player herself.

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4 It is possible – if one were so inclined – to connect the first two styles of Kim’s threefold model (the “dramatists” and the “gamist”) to the Narratologists and Ludologists of early game studies. This of course raises the question of who the “simulationist” represents.
The third mode described by Lindley is the *immersionist*, which occurs when the distinction between player and character is dissolved, resulting in a unified persona that is active in the game world (Lindley, 2005, p. 5).

These modes represent a continuum of activity that a player may engage in, while still remaining attentive to the narrative demands of the game. Unlike the ludological arguments about narrative that attempt to frame story as a passive mode of experience that is isolated from the dynamics of the play activity, these three player roles identify ways in which gamers actively engage in game narratives.

I would argue that even this typological approach to players is an oversimplification of what happens during play. Assigning a player a particular “type”, such as Richard Bartle’s explorers, achievers, socializers, and killers, implies that a player is predominantly motivated by a *single type* of play. Player typologies assume that a player in a game is acting based on a singular preference: “Right now I am exploring the map” or “Right now I am trying to get the most points”. Bateman and Boon’s Meyers-Briggs inspired schema is likewise committed to the idea that preferences emerge primarily from the personality of the player. And yet, player preferences and play styles are much more fluid and nuanced than these models would have us think.

When players are questioned about their play preferences this complexity becomes apparent. Nick Yee describes a survey-based study he administered to examine the factors that motivate players of Massively Multiplayer Online Games (MMOGs) (Yee, 2006). Yee argues that Richard Bartle’s classic player typology lacks empirical validation. He argues that Bartle’s models are based primarily in anecdotal evidence about play, and that there is no evidence for any one play preference (such as achievement) overriding any other play preference (such as socializing or exploring) (Yee, 2006, p. 772).

Yee generated a list of 40 questions about gameplay motivations, derived from Bartle’s four player types, and surveyed 3000 players of several popular MMOGs at the time: *EverQuest, Dark Age of Camelot, Ultima Online*, and *Star Wars Galaxies*. His analysis of the results allowed him to identify ten factors that influenced a player’s gameplay preferences, which could be classified into three categories: Achievement, Social, and Immersion.
An important finding of this study was that these different preferences did not suppress each other, as Bartle had suggested. This indicates that player preferences in games are not categorical, but instead idiosyncratic collections of factors. Yee saw the most distinct differences between demographic factors such as age and gender. He contends that the impulse in media studies to “collapse all video gamers into a simplistic archetype” leads to sweeping generalizations about the consequences of play that ignore the fact that “different people choose to play games for very different reasons” (Yee, 2006, p. 774).

Yee argues against simplistic models of player type, grounding his claims in a large collection of data. However, it is important to recognize the limitations of this type of study. Yee’s questionnaire started with Bartle’s typology, so it excluded any potential motivations that fell outside the rubric of Bartle’s four play types, which are by no means all inclusive. Many players spend time in MMOGs for monetary gain, for sexual gratification, for professional networking, for maintaining contact with family abroad, or for purposes of artistic expression. Yee’s questionnaire is able to speak to the importance of his known set of factors, but cannot uncover any unknown or unconsidered motivations.

However, a more important limitation of this study is its reliance on self-reporting about preference from players thinking about their play, rather than on any measure of what players actually do when playing. This means that the study can speak (semi)authoritatively about what players think they like, but not about what they actually do when they play. It represents, in some ways, the idealized models that players build about themselves as players. For example, very few players would claim that they play...
games for the grinding repetitive tasks that make up the bulk of play in MMOs (Bojin, 2008), but something about the game motivates players to engage in these sorts of activities for the majority of their time in-game (and, I would argue, most players enjoy this type of play as a form of pastime, similar to playing solitaire, even if they would never regard it as a motivating factor). This also means that while this study can broadly represent a set of preferred and generalized play activities, it cannot account for the situated preferences or motivations that guide a player at any given moment in-game. In this sense, Yee’s paper is a pointer toward a more sophisticated player model, but not a sufficient model in and of itself. I will revisit this work in the analysis and conclusions of the dissertation.

The final approach to player identity that I want to consider is James Paul Gee’s work on player and character identity in games (Gee, 2007). He proposes three different identities for players of games: a virtual identity, a real identity, and a projective identity. The example he gives is of a player controlling a character in an RPG. Gee describes the virtual identity as the “player as CHARACTER”: this is the idea that the character has a distinct identity and its own particular set of characteristics and capabilities that govern what it can and does do in the virtual world of the game. He describes the real identity as the “PLAYER as character”: this is the idea that behind the actions and choices of the character is a player with her own unique set of experiences, assumptions, and capabilities, which impact how the character performs. Finally the projective identity is the notion of the “player AS character”. This notion of projective identity invokes two different meanings for the word “project”. Gee first considers projective identity in terms of the player projecting her values and desires onto a virtual character: the character becomes a vehicle for the desires of the player. He then considers projective identity by exploring how virtual characters become projects for their players to develop, embodying the goals and aspirations of the player for the character over time.

By parsing identity into these three categories, Gee is implicitly (if perhaps inadvertently) arguing against the idea that any single typological system can be used to describe how and why players play. Player typologies typically make no distinction between the identity of the player and the identity of the character, which consequentially means that they do not provide a coherent account of players acting against their categorical play type in different play contexts, or of players who transform from introverts to extroverts or from nurturers to killers when controlling their characters in-game. Gee’s model of identity in
games also provides useful insight into how role-playing occurs even outside of the commonly accepted channels of fictional role-play that are dominant in the discourse surrounding RPGs. For example, a player in World of Warcraft might have a rich projective identity for her different characters, without engaging in any of the role-play tropes of in-character vs. out-of-character communication, or without even identifying the character’s identity as anything other than a variation of her own identity during play. We might call this type of identity play “non-fictional-role-play”: the player is adopting a projective identity, but is not actively seeking to create a fictional character that is distinct from herself.

2.1.2.3. Narrativised and Embodied Game Interfaces
As the point of contact between the activities of the player and the game as media artifact, the interface occupies a uniquely important position for theorists of games and narrative. More so than in any other media form, the design of the interface has profound experiential implications on how the player makes meaning from the media text. There has been a recent move in the human computer interaction community to acknowledge the importance of embodied knowledge in understanding user experiences (Clark, 1996; Dourish, 2001; Winograd & Flores, 1986). In this section I discuss some related work from the study of nonverbal communication and some of my own work on embodied game interfaces.

2.1.2.3.1. Gesture as External Cognition
It’s important, when considering the role of embodiment in a games interface, to understand the cognitive processes at work when a player is using her body. Game systems like the Nintendo Wii, and the Xbox Kinect are explicitly gestural in nature; however, all gaming controllers involve the body at some level. David McNeill’s work on gesture (McNeill, 1992) challenges conventional understandings of the workings of gesture in NonVerbal Communication (NVC) research, such as the coding schema of Ekman and Friesen (Ekman & Friesen, 1981). They classify NVC into five categories: emblems, illustrators, regulators, affect displays, and adaptors. Each of these categories of behavior operates under a Cartesian assumption about mind-body hierarchies in which the brain designates a need or goal and the body enacts it. For example, gestures, as we most commonly understand them, fall into the categories of emblems and illustrators: these are nonverbal acts which either express a linguistic concept directly or illustrate a companion concept (respectively). In this view, gestures are subservient to language,
reflecting internal processes into the external world via the body.

McNeill challenges this perspective on gesture, arguing that not only do gestures serve to illustrate cognitive processes; they also constitute acts of embodied cognition. In particular, he argues that gestures are used by interlocutors to attempt to concretize abstract concepts. He regards gestures as part of a "speaker's ongoing thought process" that are necessary for that process to be complete (McNeill, 1992, p. 245). Writing with Susan Duncan, McNeil invokes Vygotsky and Heidegger, arguing that gestures are material carriers of thinking (McNeill & Duncan, 2000). This puts McNeill’s theory directly in the domain of embodied cognition: he argues that gestures can provide insight into the cognitive processes that they enact externally. He also argues for a connection between gestures and Lakoff and Johnson’s (Lakoff & Johnson, 1980) work on conceptual metaphors and image schema. “Metaphoric gestures,” he argues “permit thinking in terms of concrete objects and space when meaning is abstract” (McNeill, 1992, p. 263). McNeill’s perspective is especially interesting in a context of embodied interaction, not just because it explicitly moves cognition into the body, but because it identifies modes of thinking that naturally prompt bodily cognition (such as abstract thought, and metaphorical thinking). I will return to these ideas in the conclusion in greater detail.

2.1.2.3.2. Transparency, Immediacy, and Hypermediacy

Hypertext theorist Jay David Bolter and his collaborator Richard Grusin are perhaps best known for their notion of remediation, which is discussed at length in their book Remediation (Bolter & Grusin, 1999). They define remediation as “the representation of one medium in another” (Bolter & Grusin, 1999, p. 45). Remediation may be done intentionally, as when a novel is adapted to the screen, or it may happen implicitly, as when a website remediates the written textual page into a hypertextual one. Of greater interest to this work, however, are the paired notions of hypermediacy and transparent immediacy. Hypermediacy is rooted in an awareness of the mediated nature of any given media artifact. Artists can actively employ the logics of hypermediacy in order to “make the viewer acknowledge the medium as a medium and to delight in that acknowledgement” (Bolter & Grusin, 1999, p. 41).

Transparent immediacy is the opposite of hypermediacy; it occurs when the viewer looks through a mediated experience rather than at it. One example given by Bolter and Grusin is the notion of virtual reality, in which the goal is to create an experience of being
immediately present in a virtual space. It is also possible to connect these paired notions with Heidegger’s concepts of Ready-to-Hand (which maps to transparent immediacy), and Present-at-Hand (which maps to hypermediacy) (Heidegger, 1978).

Understanding the poetics of remediation is especially relevant to any study of interface in games and interactive narrative. In particular, it is important to understand how and why an interface might be either transparently immediate, or hypermediating for the user, in order to better understand how the interaction is mediating the process of meaning making. Interfaces, after all, are tools at their core, and they shift through the same cycles of into and out of transparency.

Bardram and Bertelsen argue that “HCI research based on information processing psychology is unable to comprehend the conditions for the widely accepted desire to design for transparency.” (Bardram & Bertelsen, 1995, p. 89) To address this problem they draw on the conceptual framework of activity theory, as well as Vygotsky’s concept of the “zone of proximal development”. They write that firstly “transparent interaction is not a property of the interface by itself, but a quality of the use activity; and secondly, that transparent interaction is developed by the user during interaction.” (Bardram & Bertelsen, 1995, p. 85)

Activity theory, as they discuss it, breaks human activity into three nested (and shifting) categories: activities, which are realized through chains of actions, which are in turn carried out by operations which are “performed without thinking consciously but are oriented in the world by a non-conscious orienting basis”. (Bardram & Bertelsen, 1995, p. 81) One might distinguish these three levels by the amount of attention/intention that they require. Operations, for example, exist within a user’s experiential repertoire, while actions may become operations by taking on the qualities of generality, abbreviation, and mastery. This is to say that as an action become for familiar, and as a user learns more general purpose uses of it, as well as more efficient ways of performing that action, it shifts from action to operation.

The zone of proximal development “describes how the mediated activity develops dialectically through contradiction between what users can do with the tool today, their actual competence, and what they want to be able to do in a near future, their potential competence.” (Bardram & Bertelsen, 1995, p. 84) Transparent interfaces, they argue, support the development from actual competence into mastery of competences within the
zone of proximal development. Bardram and Bertelsen propose three different activities that must occur in order for an interface to support this development, emphasizing that it is impossible to identify “transparent features” which might be included in any interaction, but making several recommendations about how to design for transparency. One is the notion of supporting development in use, which is to say designing interactions so that the activity of using the system teaches the interactor about the activities that the system is meant to be used for. Another is the notion of initial familiarity, which draws on metaphors from the users’ prior experience in order to initiate deeper exploration and learning of the system. This exploration should lead the interactor to “look into a zone of proximal development.” (Bardram & Bertelsen, 1995, p. 87) Finally, they propose that transparent systems should support the formation of new operations. This means they should provide mechanisms for helping users make their actions more general and brief.

2.1.2.3.3. Narrativised Game Interfaces

The term narrativised interface was coined by Jim Bizzocchi in his analysis of the CD Rom experience Ceremony of Innocence (Bizzocchi, 2001, 2003). He argues that there is a gap between the experience of agency in games and the experience of immersion – that we oscillate between transparent immediacy and hypermediacy while playing. He argues for “suturing” the gap between these two modes of experience at the user interface level, by “infusing the interface” with narrative meaning. There are two kinds of narrativised interface in Bizzocchi’s model: iconic transformation and functional transformation (Bizzocchi, 2003).

To illustrate the notion of iconic transformation, Bizzocchi describes how cursor transformation can be used as a narrative device by using iconic images to “identify with the character”, invoking narrative associations at the interface level. One example he provides comes from Ceremony of Innocence, in which the reader must puzzle her way through a series of postcards and letters exchanged by the two main characters. In a number of the cards the cursor is transformed; into a bird, a bug, an angel, a paintbrush, an airplane. Bizzocchi describes how the traits of the characters are reflected in the choice of cursor aesthetics, providing the interface with what he describes as “narrative texture”.

The second kind of narrativised interface is functional transformation. This type of interface is rarer in games, but it is becoming more and more prevalent. Bizzocchi describes the occurrence of this phenomenon in Ceremony of Innocence, which “subverts” the function
of the cursor in narratively salient ways. Cursors are swatted, flicked, and tumbled around the screen by puzzle elements on the cards, or cursor operation is limited to very specific axis or paradigms of movement. These restrictions of normal cursor behavior mirror emotional states of the characters, or are symbolically linked to the conditions in which the character is entrenched, serving to connect the player to the character at an explicit, performative level. A player struggling with a trapped cursor mirrors a character struggling with being trapped in the story.

Game interfaces have significant expressive power in their own right. Stephen Griffin discusses the ways in which the gameplay button affords and constrains play experiences in games (Griffin, 2005). He describes buttons as a type of symbolic input that restricts the design of meaningful game play choices to the software side of the interaction, but argues that in the history of games and play, there are a wide variety of activities which rely on the abilities and idiosyncrasies of the human body. He writes that “there is no apparent reason why video game interaction should be restricted to an approach or to an input device defined by symbolic input.” (Griffin, 2005, p. 1) He considers the ways in which buttons attain a “fictive potency”, by sitting at the border of Salen and Zimmerman’s approach to Huizinga’s Magic Circle (Huizinga, 1949; Salen & Zimmerman, 2004). He argues that the ability of a button to serve as a general purpose interface, combined with the lack of ambiguity and clarity of a button’s use combine to allow the button to recede from the player’s awareness, instead becoming an invisible conduit for expressing intent within a game (Griffin, 2005). It is possible to see Bardram and Bertelsen’s criteria for “operationalization” in Griffin’s discussion, in particular when he mentions generality and clarity. It is also interesting to consider how the “disappearance” of the button supports the process of performing meaning within the game space.

Writing prior to the release of the Nintendo Wii, and the subsequent explosion of embodied game interfaces, he argues that the lack of support for embodied interaction in current button-centric interfaces “impedes the development of the medium” (Griffin, 2005, p. 3). He argues that continued reliance on the button as the primary game interface ignores the “pleasures and benefits of physical involvement” (Griffin, 2005, p. 3). He envisions a future for embodied game interfaces that combines the pleasures of physical movement with the “generality and clarity” of modern controllers, ideally partaking of the unique benefits of both modes of interaction (Griffin, 2005, p. 3).
Griffin’s work foreshadows the rise of alternative game controllers, including accelerometer based controllers such as the Nintendo Wii and camera vision based controllers such as the Xbox Kinect and the PS3 Move. With the explosion of smartphones and tablet computing, multi-touch interaction has also gained significant traction within the design space of digital games. New schema and design strategies are needed to unpack the diversity of game controllers, in order to better understand its expressive power. One recently suggested set of interface design strategies was articulated by Ben Lin, whose 2007 thesis extends Bizzocchi’s work on narrativised interface (Lin, 2007). He describes six strategies for narrativising the interface, which we revisited with Bizzocchi in 2011, developing a series of examples from existing game designs (Bizzocchi, Lin, & Tanenbaum, 2011). These include:

- Interface Aesthetics – “The look of the interface”
- Narrativised Game Metrics – “Expressive indicators of gameplay states”
- Narrative Perspective – “Point-of-view”
- Behavioral Mimicking – “Literal mirroring of action”
- Behavioral Metaphor – “Expressive connections between behavior and game”
- Bridging – “mixed-reality interfaces”

Taken together, these six strategies represent a useful descriptive and analytical palette for narrativised interface. Understanding how narrative manifests at the interface level allows us to attend to the specific activities of the player when engaging with a game. As I will discuss in the following sections, the specific form of a players enactments serves as a sort of “Outside-In” scripting, supporting a cognitive experience of transformation.

2.1.2.4. Procedural Rhetoric, Games for Learning, and Persuasive Games

Another area of active research into digital games has to do with how they might be used for learning and persuasion. There is an extended body of work around these two applications for games, and so my discussion here is necessarily abbreviated. I have included some of this literature because I believe that some of the poetics of transformation have best been addressed through research into so-called “games for change”.

Gee’s book *What Video Games Have to Teach Us about Learning and Literacy* is one of the canonical texts on the subject of games and learning, and includes a number of distinct principles for good learning that are derived from a study of how video games engage and
support their players (Gee, 2007). Gee argues that because of their commercial mandate, games cannot afford to use the traditional “skill and drill” learning processes with their players before they engage them in the core gameplay. Instead, good games use situated and embodied learning to keep players engaged from their first interaction with the system. As a consequence, good games function as models of good learning design, which may be used to interrogate prevalent assumptions about learning present in other domains, such as schools.

Gee argues that playing games requires its own literacy: one which is bound up not only in the interplay of signs and symbols within games but also within the culture of interaction and social practices surrounding them. The meaning of signs, then, emerges out of the social practice in which they are used (which places Gee squarely in line with Baktihin’s notion of heteroglossia.) He uses the term “semiotic domain” describe these circles of practice that contextualize signs. Semiotic domains employ one or more modality of communication in order to convey meaning and can range from highly specific conceptual and discursive domains such as literary criticism to broader sensory and aesthetic domains such as “wine connoisseurship” and “rap music” (Gee, 2007, p. 19).

Gee argues that part of participating in a semiotic domain involves mastering “design grammars” related to that domain. Design grammars allow participants in semiotic domains to recognize acceptable content within a semiotic domain and acceptable social practices for the affinity group associated with that domain. This notion of design grammars highlights the fact that practices within a semiotic domain are at some level designed by the participants in its “affinity group”. By emphasizing this notion he argues that a semiotic domain’s design grammar is not just the province of the “designers” within that domain, but of everyone engaged in it.

Gee sees a game’s meaning as arising out of the potential to act within the game experience. He views all potentially meaningful signs in games (such as words, artifacts, and action) as invitations to embodied action, and argues that this characterises narrative experiences in games as immediate and participatory, rather than reflective and distant. In considering his own game play experiences, he discusses the pleasure that comes from being involved in the story at the ground level. Although he will occasionally step back from the experience and reflect on it as a whole, he argues that there is something viscerally enjoyable about being too close to the action to be able to consider the bigger
picture while playing (Gee, 2007).

Gee contrasts his experiences of situated and embodied meaning against the idea of more general meanings – meanings that are isolated from specific situations of use – and argues that “there is no other way to make sense” [emphasis in original] (Gee, 2007, p. 84) of the world without situated meanings. Without the ability to connect meanings to some sort of semiotic domain of practice, sense making cannot happen. Meaning, then, is a function of context: not just context as “circumstances surrounding” an interaction, but context as “the intention and potential application” of an interaction in regards to a specific semiotic domain.

2.1.2.4.1. Persuasion and Procedural Rhetoric

Ian Bogost coined the term procedural rhetoric to highlight the ways in which games operate as persuasive systems by authoring processes and activities for their players to enact (Bogost, 2007). He describes procedural rhetoric as a persuasive technique by which “arguments are made not through the construction of words or images, but through the authorship of rules of behavior, the construction of dynamic models” (Bogost, 2008, p. 125). Bogost argues that games and systems of procedural rhetoric require new literacies particular to their poetics. The new literacy of playing video games encourages players to think critically about the systems in which they are situated. Perhaps the most effective illustration of this in action comes from a game created by Gonzalo Frasca called September the 12th (Frasca, 2003).
In this game, the player is presented with a cartoon depiction of a city in the Middle East. The streets are populated with civilians going peacefully about their daily lives. Interspersed among the civilians are armed terrorists. The player has control to move a mouse cursor shaped like a targeting reticle around over the busy streets. When the player clicks the mouse button there is a brief pause and then a missile strike hits the section of the city that was targeted, killing any of the virtual inhabitants that may have wandered into the line of fire during the delay. When this action results in the death of a civilian, another civilian will stop and weep over his or her dead friend or family member, before picking up a gun and transforming into a new terrorist. Through this simple combination of rules and simulative logic, *September the 12th* makes a very pointed claim about collateral damage and the “war on terror”.

*Figure 2 Instructions for September the 12th (Frasca, 2003)*

This is not a game.
You can't win and you can't lose.
This is a simulation.
It has no ending.
It has already begun.
The rules are deadly simple.
You can shoot.
Or not.
This is a simple model you can use to explore some aspects of the war on terror.
The notion of procedural rhetoric is crucial to understanding how meaning making happens in games, as it directs attention away from meanings encoded in the content of the game and toward meanings in the processes and procedures of playing the game. The rhetorics encoded in the enacted processes of play are not always in perfect harmony with the visual, or textual rhetorics of the game. Mike Treanor and Michael Mateas argue that if a designer is not careful, the procedural rhetoric may elicit emotions that are inconsistent with the game’s themes and goals, as in the case of the game Madrid which is ostensibly a peaceful memorial for the victims of the 2004 Madrid bombings, but which requires frantic and grueling mouse clicking in order to succeed (Treanor & Mateas, 2009). They also raise the issue of games where unexpected and emergent properties of the system can undermine the message of the game. They provide the example of Bacteria Salad, a game intended to communicate the challenges keeping large-scale food production operations from distributing contaminated food. Due to a simplification of the game’s economic model, a dominant strategy is to build heavy industrial farms, sell a single crop, and then demolish the farms before they have time to output any contaminated food. They write “ Appropriately simplifying and constraining the underlying
procedural model such that it avoids actualizing unintended rhetorics is the hard design problem of procedural rhetoric." (Treanor & Mateas, 2009, p. 7)

It is important to consider how procedural rhetoric works in these kinds of contexts. Specifically it is important to emphasize the idea that procedural rhetorics operate as a function of what they require players to do as a function of their rule structures and play systems. It is this act of doing that is persuasive, and it is the experience of having done that results in changes to player’s cognitive processes. Procedural rhetorics, in other words, work through principles of enaction rather than interaction. Of course, there is a rhetoric encoded in the interactive loop of cause and effect that simulations and newsgames incorporate, but the message occurs at the experiential level: a game is persuasive because the player performs a set of desired interactions as constrained by the poetics of the simulation, and that lived experience is what elicits changes in perspective. As will become apparent in section 2.3, enaction lies at the heart of how method actors elicit cognitive transformations.

2.1.2.5. Jeepform and Nordic LARP

The final aspect of games and narrative that I wish to address here is a somewhat obscure, but growing area of practice within the Nordic Live Action Role Playing (LARP) community known as Jeepform (named from the Swedish roleplaying group “Vi åker jeep”, which translates to “We go by jeep”). This may seem like an oddly specific phenomenon to look at after considering such sweeping and general concepts as “immersion” and “embodiment”. I include it here because it so thoroughly and elegantly articulates many of the principles that I hold to be true about participatory narratives. In particular, Jeepform demonstrates a sophisticated understanding of the pleasures of performing and enacting narratives and of the importance of emotional transformation to that pleasure.

Jeepform is a variant of an older style of Swedish LARP known as Freeform, which was devised as a reaction against many of the simulation oriented aspects of LARP and Tabletop roleplaying games (Wrigstad, 2008). Tobias Wrigstad, one of the primary proponents of the style, and a founding member of Vi åker jeep describes its origins in Scandinavian Freeform LARP, arguing that it shared in Freeform’s rejection of “rules, dice, tables, dragons, and New York” (Wrigstad, 2008, p. 125)

We view rules (in the Dungeons & Dragons sense of the word, for simulating a world or determining the outcome of an action) as bad
because they constrain the game too much and focus on the wrong thing: simulation rather than story...

*Dice* are bad because they behave randomly. Granted, sometimes this is necessary, for example if it is impossible to decide between two equally interesting outcomes of an action, or if we just get stuck. But the way dice are used in traditional tabletop, they are just not beneficial to the story.

When it comes to *tables*, both kinds are bad. Tables in rule books are bad because going in to rule books to look things up breaks the flow of the game and draws attention away from the story and playing the characters. Furthermore, the canonical living room gaming table is bad as it distances the players from each other and encourages a sit-down style of play instead of using your entire body for acting things out...

By *dragons*, I do not mean dragons specifically, but the erroneous notion of bigger monsters being cooler than smaller ones – or no monsters at all. To *jeeps*, facing your suicidal, bullied-as-hell teenage daughter makes for a much more powerful scene than facing a boatload of orcs...

Last, by *New York*, I again do not mean New York specifically. For some reason, we have seen that most scenarios and campaigns take place in made-up worlds and cities that are labelled as “officially cool" from being featured in movies and TV shows. Why are there so few vampires in backwater towns? Why do so many players refuse to play games about their home towns? (Wrigstad, 2008, pp. 125–126)

Freeform is often more self-contained in structure than traditional LARPs, often occurring within a single room, among a small group of players, rather than spread across a large area. Freeform games often incorporate a *narrator* and are notable for using a set of predetermined *scripts* to direct the action. *Jeepform* takes the conventions of freeform and extends them, in an attempt to address several shortcomings that its practitioners perceived in freeform LARP including a relatively fixed form, the absence of a clear premise or subject for the games, and the tendency of freeform games to continue to revolve around hero and villain characters (Wrigstad, 2008). Wrigstad describes Jeepform as “*form-oriented, subtle and directed*” [emphasis in original] often revolving around a premise or subject such as “memory” or “love conquers all” or “greed leads to misery” (Wrigstad, 2008, p. 128).

From the outside, a jeep game looks like nothing so much as a piece of theatre. The players will have all discussed the premise and the goals and the scripts ahead of time, and the game itself plays out as if rehearsed. Often a “director" will supervise the game, stopping the action occasionally to highlight or emphasize a specific emotional moment. Vi åker jeep as a group maintains a website, which includes guidelines and principles for the “jeep tradition” including a list of “jeep truths” for game masters:
1. Restrictions foster creativity.
2. You basically cannot go wrong by letting people succeed (which doesn't necessitate doing so).
3. You should always have a message or premise. If you ask yourself "What is this game about?" and find yourself answering with long description of how you think it will be played — think again.
4. Setting does not make up for story. Assume that you are the only one that thinks your setting is cool.
5. Assume your players can handle difficult form.
6. Assume your players can understand complex stories.
7. Assume your players are interested and motivated to do the best possible thing with your game.
8. A game that stinks should be ended quickly, and then discussed.
9. A story can often benefit from having less lead characters than actual characters. There is no rule that says everyone should have equal direct impact on the story or equal screen-time.
10. Shorter games are often better than longer; it is okay to end a game after three hours (or less), even if you've, publicly, estimated the time to six.
11. Always make sure that the players know what they are playing, and where the story should be going.
12. A game can be played several times with the same players playing the same characters.
13. Keeping player number low and keeping players close together, such as in the same room, enables you to do cooler things with the form, helps keeping a unified vision and facilitates telegraphing.
14. The most important purpose of a story is to facilitate player interaction.
15. Don't be afraid of patch-work stories. (Vi åker jeep, 2007)

Jeepform is committed to emphasizing narrative over simulation, in a manner that often seems inconsistent with play, at least as it is commonly construed in other roleplaying and gaming traditions. The emphasis of jeep games is not on improvisation, but on emotion and enactment: players are expected to develop their characters and their scenes ahead of time; sometimes scenes are repeated multiple times to refine their emotional impact and performance; and the tradition is largely opposed to there being any secrets between the players about what is about to happen. In particular there are three poetics to Jeepform that merit significant attention: bleed, telegraphing, and transparency.
2.1.2.5.1. Bleed
One of the concepts that I find most interesting in Jeepform is the notion of bleed, which is “experienced by a player when her thoughts and feelings are influenced by those of her character, or vice versa” (Vi åker jeep, 2007). Bleed is about breaking down the barrier between a player and her character, to create a powerful emotional feedback loop between the two. The Jeepform website describes several situations where bleed is common, including horror role-playing (“it is harder to scare the player through the character than the other way around”) and in-game and out-of-game relationships where affections between players carry over into the game (Vi åker jeep, 2007).

This type of emotional interplay between the player and the character is a form of transformation similar to that described by Mar et al.(2011) and I’d argue that it lies at the heart of many of the contemporary approaches to method acting that I will discuss below.

2.1.2.5.2. Telegraphing
Telegraphing describes a number of techniques for communicating information between players during Jeepform games. Telegraphing seeks to incorporate as little “meta-game” material as possible into the play, and often relies on in-game and diegetic techniques (Vi åker jeep, 2007). Telegraphing is used to unobtrusively keep everyone on the same page during a scene, and it shares significant traits with techniques from improvisational and interactive theater. As will be discussed in greater detail below, improvisational theater has a deeply enshrined principle of “accepting dramatic offers” in which practitioners are trained to prioritize the reality of the narrative world created by their collaborators over their own personal desires for the scene. This is congruent with the notion of “accepting facts brought into the game by other players”. In interactive theater, there are a number of techniques that have been developed specifically to support the performance of untrained audience members who have been roped into participating in a scene. These techniques, known as “backleading”, are designed to provide naïve participants with support and information so that they can successfully contribute to the scene, even though they lack knowledge or training of what is going on. One technique for telegraphing is known as “bird-in-ear” and it entails the director speaking aloud desired bits of “inner monologue” for characters to interpret and perform (Vi åker jeep, 2007). This is very similar to a backleading technique called “overt cueing” where actors provide explicit cues and instructions to guide participants toward desired behaviors.
2.1.2.5.3. Transparency

Another important aspect of Jeepform is a commitment to transparency, as opposed to “secret keeping". This is a reaction against the competitive elements of traditional RPGs, where there was an incentive for each player to hide certain aspects of his character’s abilities and backstory in order to maintain a strategic advantage over the other players. Even more sophisticated story-oriented games often reward secrecy as a source of intrigue and drama (Vi åker jeep, 2007). Jeepform actively seeks to maintain transparency as the default mode.

Since jeepform players are collaborating to create the best possible story, they should be equipped accordingly. This means that secrets between characters should not be secrets between players.

If everyone knows that Manny is falling in love with Phyllis, the players can cooperate on creating situations toying with this fact. Fred can make sure to give them space, or the opposite, depending on where the game is going, or Phyllis might start getting friendly with Fred to make Manny jealous. Fred might even strike up a conversation with Manny about how raunchy Phyllis is, and how he’d like to tie her up and have sex with her. The point is that if Manny’s player is the only one who knows about Manny’s growing affection for Phyllis, the chances of this making it into the game in a good way are slimmer. The same thing goes if Manny is the spy who has infiltrated Fred and Phyllis’ terrorist cell. Knowing that Manny is a spy will help the other players to make the game better and more interesting.

Sometimes, keeping a secret makes for a nice surprise in a good way at some point in the game. Jeepform does not ban secrets between players, but stresses that they are rarely needed. Start out with the game being completely transparent, and only hide things if you think it will be an improvement. (Wrigstad, 2008)

In some Jeepform games this extends to the full details of the scenario being made available by the director to all of the players. Jeepform LARP is a niche form of narrative play; however, many of its lessons are highly applicable to the design of interactive narrative experiences. I will return to these concepts throughout my analysis of Mass Effect, and in my conclusion.

2.1.3. Interactive Digital Storytelling

My research interest in identity transformation in digital narratives is at least partially a reaction against the current state of affairs within the Interactive Digital Storytelling community. Interactive Digital Storytelling (IDS) is a specific subfield of AI and computer science that has undertaken to develop the next generation of Interactive Narratives. As
one of the most developed scholarly communities researching digital narratives, IDS has played a significant role in shaping a collective research agenda for computational storytelling. I have often found myself arguing against some of the core intellectual commitments that drive IDS research; I include a review of this work here, in part, to illustrate what I see as problematic agendas that dominate current discourse around digital storytelling. While I do not dispute the value of the work being done in IDS research, I contend that it frequently takes too narrow an approach to digital narrative, often overemphasizing formalist models of narrative to the detriment of the experience of the reader/player/interactor. Consequentially, there are many IDS systems that are capable of remarkable computational manipulations of the underlying structures of narrative, but that are insufficient to create a rich or meaningful story for a reader.

In particular, I will return again and again to what I perceive as a problematic narrative that is told about the player of digital narratives. This narrative is the story of the player as thug, the player as disruption, the player as subversive and transgressive. In this story, the player is selfish and disobedient; he plays for the pleasure of undermining the designs of the game-maker or storyteller. This notion of the subversive player has real implications for how games are conceptualized and designed. Espen Aarseth has written about the very real impact of designing with an “implied player” in mind (Aarseth, 2007). Aarseth’s implied player exists before an actual real human player begins to interact with the game: it is the imagined player that the game addresses itself to, the role that the game invites players to step into. The way that we construct our implied players deeply impacts how and what we design. This is especially apparent when looking at the work of the Interactive Digital Storytelling (IDS) community where scholars focus on exploring the future of digital narrative through artificial intelligence.

In the IDS community the default player model is one who seeks to undermine the narrative aspirations of the designer. Magerko and Laird view the player as an uncontrolled variable in the interactive story system, one who will be dissatisfied if his or her freedom is too limited but who will be a threat to narrative continuity if allowed to act unchecked (Magerko & Laird, 2005). They propose an Interactive Drama Architecture (IDA) that simultaneously attempts to steer players toward desired actions, while adjusting the story to mitigate damage done by them. Riedl et al. describe a technique called “narrative mediation” that is designed to detect and respond to unanticipated (and undesired) player activities in their Mimesis architecture (Riedl, Saretto, & Young, 2003).
Champagnat et al. describe an interactive narrative architecture designed to correct for the inconsistent inputs of the player (Champagnat, Estraillier, & Prigent, 2006). Aylett et al. go even further, arguing that interaction is completely inconsistent with narrative and that one must discard plot entirely, allowing stories to emerge from the actions of the player rather than the intentions of an author or designer (Aylett et al., 2006).

These systems are foundational to the IDS community and represent some of the canonical work in digital narrative. They are connected by the common and unexamined notion that the dominant motivation of the player is to act upon the system in a way that is damaging to the story. As a consequence, the systems that emerge from this community of research are designed to either correct for undesired player behavior or to abdicate authorial responsibility to tell a coherent story. In spite of what I perceive as shortcomings of much of the work done in this space, there is some canonical work that has significant value to any conversation about digital narrative, which I will present here.

2.1.3.1. Early Works in IDS: The CMU Oz Project and Façade

IDS owes much to the seminal writings of Brenda Laurel, whose 1993 book *Computers as Theatre* was one of the earliest works to draw on metaphors from the performing arts to frame digital narratives (Laurel, 1993). In it Laurel draws on inspiration from dramatic theory and structure to inform a new perspective on human computer interaction. She relies primarily on Aristotle’s *Poetics* to structure her dramatic principles, which she applies to the design of interfaces and interactive systems. Like many formal narratologists, Laurel distinguishes between a *drama* and a *narrative*. She describes three key differences between these two types of storytelling:

- **Enactment**, meaning to act out rather than to read. Enacted representations involve direct sensing as well as cognition. To state it more simply, the stuff of narrative is *description*, while the stuff of drama is *action*.

- **Intensification**, meaning that incidents are selected, arranged, and represented, in general, so as to intensify emotion and condense time. Narrative forms generally employ the reverse process, extensification, where incidents may be reported from a number of perspectives and in ways that expand or explode time....

- **Unity of action versus episodic structure**: Another basic difference between drama and narrative is in the structure of incidents. Dramas typically represent a strong central action, something the neo-classicists called the unity of action. Narrative tends to be more episodic; that is, incidents are more likely to be quasi-independent and connected.
thematically rather than causally to the whole. (Laurel, 1993, pp. 94–95)

Laurel’s distinction between drama and narrative reflects an Aristotelian distinction between *mimesis* and *diegesis*. In recent years, this distinction has become harder to apply, in particular because the primary dramatic forms of entertainment have evolved to take on more of the properties previously attributed to narrative forms. Specifically, television as a medium has begun to exhibit the properties of both drama and narrative, as articulated in Laurel’s depiction above. Long-form television like *Lost* and *Mad Men* exemplify a hybridization of the medium in which the poetics of episodic storytelling coexist with the poetics of unity of action across an entire season. Intensification and extensification are both in play in contemporary televised drama, as the medium becomes more novelistic in form. Even formulaic sitcoms, such as *How I Met Your Mother*, have incorporated the poetics of narration and diegesis into their otherwise mimetic structures. The classical distinction between drama and narrative cannot cleanly contain long-form enacted stories any more (if indeed it ever could).

Likewise, contemporary story based games challenge the distinction between drama and narrative. Games like *Uncharted: Drake’s Fortune* (Naughty Dog, 2007) incorporate a novelistic chapter structure alongside richly mimetic enacted storytelling. Other games, like *Heavy Rain* (Quantic Dream, 2010), use similar structural elements, but also incorporate extensifying techniques that present multiple viewpoints on the same narrative events.

The one aspect of this distinction that still holds up (in most cases) is the fundamental difference between the dramatic poetics of enactment and the narrative poetics of description. Laurel, like Murray, identifies something particular about enactment that differentiates it from other modes of engaging with media. Both see a difference between witnessing dramatic action, reading narrative description, and enacting a role within a drama. I would argue that this process of enactment also lies at the heart of Bogost’s work on procedural rhetoric discussed above: experiencing enactment and the poetics of cause and effect is a relatively unexplored rhetorical space.

One of the earliest IDS research projects, the CMU Oz Project, drew on Laurel’s theatrical inspiration to devise an *Interactive Drama* in which a player would be a first-person participant in a drama populated by AI controlled “Believable Agents” (J. Bates, Loyall, & Reilly, 1992; Joseph Bates, 1992; Loyall, 1997; Mateas, 1997; W. S. Reilly & Bates, 1992).
Michael Mateas provides an early overview of the field of interactive drama and believable characters, as framed by the “Oz philosophy” in a wide ranging report covering issues of classical and behavioural AI, character believability, robotics and embodied agents, Alife, animation theory, and narrative structure and authoring (Mateas, 1997). Mateas articulates a perceived tension between interaction and story that has become fundamental to how IDS has approached digital narrative, much to the field’s detriment:

Many observers have remarked that the concept of interactive story contains a contradiction. A story is an experience with temporal structure. Interaction is doing what you want, when you want (interaction as control: other modes are possible).

Accounts of story structure often describe some form of dramatic arc (first introduced by Aristotle in The Poetics). The experience of a story is thus structured: events don’t happen in some willy-nilly fashion. The experience has a global shape. Interaction, on the other hand is generally construed as the freedom to do anything at anytime. Story is predestination; interaction is freedom. Thus the conflict. (Mateas, 1997)

This report is one of the foundational texts for IDS as a field; this is not the first place where the so-called “incompatibility of interaction and narrative” is articulated, but is perhaps one of the most influential writings on the subject. Its conception of interactivity as unrestricted freedom is antiquated and misguided: subsequent writings on the subject would discard this concept as simplistic and inaccurate. And yet, even as the rest of the field has moved past this insufficient conception of interactivity, IDS remains permanently mired in this problematic perspective.

This issue is then compounded by the use of a formalist and ultimately reductionist notion of story that disregards the entirety of narrative theory around neoformalism and interpretation. Mateas reduces narrative down to simply the structure of the “plot”. When framed in these terms, of course there would seem to be an incompatibility between interaction and narrative, but this incompatibility is rooted in fundamental misunderstandings of both of these phenomena.

Mateas, to his credit, acknowledges that not all interaction is about control, and that there are non-plot-centric conceptions of narrative. In spite of this, the research undertaken in the Oz Project is framed to address the conflict between plot and user control. In the 20+ years since the CMU Oz Project was initiated in 1992, IDS has been driven primarily by efforts to solve this “problem”.

The OZ Project itself generated a significant body of early work on believable agents and
agent interactions; however, no fully realized interactive dramas were built with its software engine. Three prototypes were developed for the system: two text-based intelligent character simulators, *The Playground* and *Lyotard*, and one animated art piece called *The Edge of Intention* (colloquially known as *The Woggles*) (S. N. Reilly, 2002). Each of these systems demonstrated how the engine could be used to roughly simulate certain character behaviors, but none of them attempted to tell a story. Many of the researchers involved in the Oz project went on to found a company called Zoesis that sought to commercialize the technology, but aside from generating several patents around the control of believable characters, little emerged from this venture.

Mateas next worked on what would become one of the most successful interactive drama systems ever created. In collaboration with Andrew Stern, he created a system called *Façade* that was unique, not only for the sophisticated AI engine underlying it, but also for the fact that it was made publically available for free online (Mateas & Stern, 2003, 2005a, 2005b). In *Façade* the player takes control of a guest visiting two friends at their apartment for dinner. The two friends, Grace and Trip, are a pair of intelligent agents designed to portray a married couple whose relationship is in a very fragile state. Using typed natural language text input, the player can roughly communicate with the two characters, while navigating their apartment and interacting with several objects on tables and shelves. Over the course of play the player may attempt to damage the relationship between the characters beyond repair, or seek to reconcile them, or attempt to seduce either of the characters.

Mateas and Stern argue that in order to take advantage of the representational power of computers as a medium, new techniques for “procedural authorship” need to be developed. They describe the process of authoring in *Façade* as a case study of procedural authoring (Mateas & Stern, 2005a). Looking at Murray’s four “essential properties” of the computer as a representational medium, they argue that procedurality is a necessary precondition for the other three (participatory, encyclopaedic, and spatial). They contend that a lack of procedural literacy (knowledge of how code processes work) is to blame for the failure of the development of the “high agency interactive story” that they believe is the ultimate goal of IDS research. They frame interactions in *Façade* in terms of social games: the affinity game, the hot-button game, and the therapy game. They incorporate theatrical structures to guide the drama, breaking the narrative into 27 “beats” or units, and using a combination of dramatic tension and an Aristotelian three act
A central challenge they describe in the design of Façade is the tension between supporting high local agency and high global agency. Local agency provides the player with immediate feedback and reinforcement in response to her actions, while global agency provides the player with long-term implications for her patterns of behaviour. They also describe the challenge of representing the state of the social games to the player without incorporating game-like interface elements.

Façade is arguably the most successful and fully realized interactive drama to emerge from the IDS community. It incorporates many interlocking intelligent systems including a behavior engine for the two characters, a game engine for tracking the status of the “social games” that the player may play with the characters, a natural language processor for parsing typed text for meaning within the system, an animation and display engine to manage the presentation of the virtual characters, and an overarching “drama manager” that controls the structure of the scene and works to escalate dramatic tension and build toward a resolution by assembling a set of pre-scripted story “beats” for the characters to perform in various combinations (Mateas & Stern, 2003). The entire endeavor took Mateas and Stern five years to complete, and the resulting system has been enormously influential within the IDS field. However, I would argue that Façade is not an unalloyed success. For all that Mateas and Stern talk about a desire to foster procedural literacy, Façade’s core interactional assumptions are rooted in the notion that a player in an interactive drama should be able to seamlessly perform using existing communicative literacies and without any user interface elements that might interfere with the seamlessness of the experience. “Literacy” implies a set of learnable skills that measurably improve one’s ability to extract meaning from a mediated experience, but Façade does not coherently provide a path to those literacies within the body of the experience. It lacks support for development-in-use and so it denies the formation of new operations (Bardram & Bertelsen, 1995). Instead, the player is deposited in the dramatic situation with no support structures to hang on to: she is given no script, no instructions, and no backstory information about her character. There is no onscreen feedback about the world that she finds herself in, and no way of determining if she is succeeding or failing or even why she is here in the first place. Grace and Trip begin speaking to the player and, while it is possible to type communications into the system, the responses are often oblique and hard to interpret.
Facade is not sophisticated enough to mimic natural human conversation and the text parser that is analyzing the player’s expressions is somewhat limited, looking for specific words, but not always successfully extracting meaning from the context of a player’s utterances. But even if the natural language processing were perfect it wouldn’t make much of a difference; the fundamental problem is that the player doesn’t know who Grace and Trip are. She doesn’t have any meaningful relationship with them to draw on. To borrow a term from Jeff Wirth (discussed below), there is no endowment of the player, no history upon which to base her performance (Wirth, 1994).

In order to preserve player freedom (what Mateas and Stern refer to as “high agency”), the player’s role in the scenario is that of a generic stranger rather than of a close friend. Façade is not like a dinner party with people you know, but instead like being a voyeur who has been inexplicably drawn into someone else’s psychodrama. In the absence of goals, motivations, feedback, and context, Façade leaves the player very little to actually do with the agency that she has been granted. She can type any words she likes within the text parser; however, there are only a few truly meaningful expressions possible within the system. Playing Façade becomes an exercise in trying to discover how to act meaningfully, a frustrating endeavor that obstructs the experience of participatory dramatic pleasure.

2.1.3.2. Guidance Strategies and Player Management

Others within the IDS community, when confronted with the presumed incompatibility of narrative and interaction, seek to guide or otherwise manage the player towards desired actions while attempting to mitigate behaviors that threaten the coherence of the narrative. There is some merit to these strategies, although they are also based on shaky premises about interaction and narrative; specifically, the assumption that the core pleasure of interaction within a narrative is one of unrestricted freedom to act.

Riedl et al. describe a process called narrative mediation intended to detect and correct for unanticipated user activity within an interactive narrative (Riedl et al., 2003). As with much of the other research in this field, they frame their problem as one of keeping players from “breaking” the designed narrative with inappropriate interactions:

When the user is also in control of a character within the same environment, management of the coherence of the unfolding storyline takes on an additional complexity. The interaction between the human agent and the autonomous agents must be managed carefully to ensure that the human
agent does not disrupt the activities of the other agents to the point of failure. However, while the user is encouraged to play the role of a storyworld character, she typically only has partial knowledge of the narrative. In fact, this partial knowledge is often central to the user’s experience (e.g., in the creation of suspense in entertainment applications). When a lack of knowledge of the unfolding narrative is combined with the ability to interact with the storyworld in a relatively uncontrolled manner, the potential arises for the user, through her character, to perform action that are not only contrary to the plan shared by the other agents but even harmful to the coherence of the narrative. (Riedl et al., 2003, p. 741)

In addition to expressing the standard reservations about the dangers of uncontrolled interaction within a digital narrative, Riedl et al. express a new perspective: it is valuable for the player to not know the shape of the plot, in order to maintain narrative suspense. This treatment of suspense has some significant problems, in part by treating all possible player knowledge as global or macro-level knowledge about the story, thus discounting the importance of providing the player with local or micro-level knowledge about the scene in which she is participating. I would argue that it is much easier to provide a player with just enough knowledge to support desired enactments without giving up important plot twists than it is to devise a system that can compensate for any unanticipated player behavior in order to prevent the plot from being “spoiled”. Further, I’d argue that a player with a deeper knowledge of the relationship between her actions and the plot is going to get a much more pleasurable experience out of an interactive narrative than a player who is kept in the dark, but permitted the illusion of absolute freedom. And in the case of narrative mediation, this freedom is indeed only an illusion. Riedl et al.’s system identifies player behaviours that are “exceptions” to the desired outcome of the story and attempts to either computationally accommodate those actions or intervene by subverting the outcome of those actions. Accommodation attempts to work around an unexpected player action, by re-planning the story in minor ways that are not “computationally expensive” such as selecting a “different but compatible location for an event when the user take an unexpected turn down a new path” (Riedl et al., 2003, p. 744). Intervention, on the other hand, “involves altering the user’s exceptional action by surreptitiously substituting an alternate set of effects” which usually take the form of a “failure mode” by which the players action doesn’t actually impact the world (Riedl et al., 2003, p. 744). Accommodation and intervention represent two different levels of player guidance: one, which I term soft-guidance, attempts to nullify the undesired actions of the player by rearranging the context to render them meaningless (e.g.: moving an important event to a new destination when...
a player goes down the wrong path). The second strategy, which I term *hard-guidance*, actively denies the actions of the player when they are not appropriate to the narrative. The example Riedl et al. give for *hard-guidance* is of a player spending a mission critical resource (a coin in this instance) in a non-mission critical context (a vending machine). Intervention (*hard guidance*) substitutes a failure mode when the coin is spent in this manner, by refusing to dispense a drink and refunding the coin. In both cases, the authors make it clear that the goal of these two responses is to disguise the manipulation from the player by hiding it within the logic of the simulated world. Thus, the player receives all of the imagined benefits of being able to seemingly act freely in the world, without any of the consequences (or meaningful outcomes) that freedom to act might actually entail.

The problem with presenting a simulated world to a player that rests upon a promise of unrestricted agency is that eventually that system will break down. When it does, we find ourselves confronted with the consequences of what Crawford would describe as a mismatch between the *conceivable* states promised by the system and the *possible* states supported by it: the more a design promises, the more it will be held accountable for by the player. The examples given above – taking an incorrect path or trying to purchase a soda from a vending machine – are narratively trivial, but by hiding the limitations of the system from the player they intentionally mislead her into believing that there are more possible states than the system can actually support. This ultimately is the trap of designs formulated around an ideal of “limitless freedom”. In practice, they translate into “inconsequential freedom much of the time intermixed with frustrating inconsistent instances of occasional limitation.” This is the *illusion* of free will, rather than actual meaningful agency. *Narrative mediation* appears based on the premise that players prefer to act without restriction – even if those actions result in meaningless outcomes – to the exclusion of any other conceivable pleasure within a digital story.

This approach is the worst of all possible worlds: it greatly restricts the agency of the player, but it does so *invisibly*, manipulating the player into a set of unreasonable expectations about the system that are destined to be violated at narratively critical moments. What is the point of the *ability to act* when the meanings expressed by those actions are systematically and invisibly subverted beneath the hood of the system? It replaces *agency* with *impotence* by removing all consequences of the player’s actions, thus denying any role the player might wish to play within the system. This is a far more perverse and authoritarian system of control than a game where the player is limited in
action. A system that clearly articulates its limitations, and manages the player's expectations, supports far richer and more meaningful interactional possibilities than a system that naively promises a degree of freedom that neither enhances the narrative experience, nor can be successfully delivered as a coherent simulated reality. Narrative mediation denies the pleasures of both unrestricted agency, and meaningfully constrained play.

An interesting variant on this approach comes from David L. Roberts and collaborators (including Mark Riedl, who is largely responsible for the above work on narrative mediation). In a rare theoretical paper from the interactive narrative community, Roberts et al. discuss influence theory as an alternative to the currently employed “hard guidance” strategies used by drama management systems to keep players on the right track (D. Roberts, Isbell Jr, Riedl, Bogost, & Furst, 2008). Influence theory involves the use of psycho-social manipulation intended to persuade players to adopt the goals of the author while believing that they are acting according to their own goals. While there is much to like about this approach, it bears mentioning that the opening paragraphs of the essay are a perfect expression of the faulty assumptions about interactive narrative that currently dominate research within this community:

Researchers have investigated interactive narrative environments as an approach to meeting ever-increasing user expectations of engaging virtual experiences. A drama manager (DM) is a specialized type of experience manager that attempts to balance the competing goals of creating a dramatic experience for the user while affording the user the freedom to act however they wish at any time. (D. Roberts et al., 2008, p. 268)

Once again, by framing the goals of the author as being in direct competition with the goals of the player, IDS researchers are attempting to solve the wrong problem. That said, their solution is a much more elegant and interesting one than many of the others currently being pursued in at the moment. Roberts et al. choose to focus on principles of social influence, as identified within the fields of social psychology and behavioral economics.

—**Reciprocation**: give and take; when someone does something for us we feel obligated to return in kind.

—**Consistency**: we have a near obsessive desire to be (and appear) consistent with what we have already done or said.

—**Social Proof**: we look to others like us to determine the appropriate action to take.

—**Liking**: the more we like someone, the more likely we are to abide by
her requests.

—Authority: we have a deep-seated sense of duty to authority.

—Scarcity: something that, on its own merits, holds little appeal to us will become decidedly more enticing if it will soon become unavailable to us.

(D. Roberts et al., 2008, p. 270)

By manipulating these social dynamics, it is possible to guide players to desired actions and behaviors in a system, while discouraging unwanted behaviors. Unlike the strategies employed in narrative mediation, these strategies for social influence are designed so that the player finds herself voluntarily choosing to “go along with” the story. In this case, the player’s overall agency might be influenced, reducing the range of possible actions available to her, but her effective agency – the freedom to choose meaningful actions within the story – is preserved. These mechanisms of influence are not dissimilar to techniques used by interactive actors to do “backleading” of untrained audience members (see below for more details). They essentially make it easier for the participant to behave in desired ways, while discouraging him from acting against the common interest of the performance.

This approach requires authors and system designers to think carefully about what they want the player to do in the story, and by extension, what the enacted experience of the player will be. This sets this work apart from the majority of IDS research, which is more interested in how to computationally model narrative forms than it is in the lived experience of a reader or player.

Amanda Flowers et al. derived a similar approach to player guidance from the actions of human “gamemasters” in Tabletop Pen + Paper Role Playing Games (PnP RPGs) (Flowers, Magerko, & Mishra, 2006). In these games, the gamemaster is responsible for directing and adjudicating the activities of the players, while also controlling the actions of the simulated world itself. The authors hypothesize that an observational study of gamemasters in action can provide a categorizable set of techniques for guiding players to desired interactions. They observed four gamemasters running four different game sessions. In addition to coding video data of these sessions, they transcribed member checking interviews with each gamemaster as he or she re-watched the footage of the session.

They identified two dichotomies that distinguished gamemaster actions: game versus metagame and attractors versus detractors. Actions that happened “in game” took place
within the narrative world of the game play, while actions that happened in the “metagame” dealt with the situation in which the game was being played and the player’s awareness that they were playing a game. Attractors were actions intended to encourage desired behaviors while detractors were actions intended to discourage undesired behaviors.

Flowers et al. identified 24 distinct techniques used by gamemasters within the four different combinations of these dichotomies. First they described a series of in-game techniques [Table 1].

**Table 1 In-Game Techniques for managing player behavior (adapted from (Flowers et al., 2006))**

<table>
<thead>
<tr>
<th>Attractors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>Having a character in the game world tell players what they need to do next.</td>
</tr>
<tr>
<td>Inverse Instruction</td>
<td>Using reverse psychology to goad players into taking a desired action.</td>
</tr>
<tr>
<td>Focus</td>
<td>Using description and interest to draw players toward important things in the environment.</td>
</tr>
<tr>
<td>Character Hooks</td>
<td>Using knowledge of specific character personalities and goals to motivate actions</td>
</tr>
<tr>
<td>Spontaneous Conflict</td>
<td>Introducing a mystery or surprise combat to prod players into taking action, or increase excitement.</td>
</tr>
<tr>
<td>In-Game Reward</td>
<td>Providing general attractors such as treasure, or less tangible rewards such as the favor of an NPC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detractors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Authority</td>
<td>Using an authority figure or other respected NPC to discourage characters from unwanted actions.</td>
</tr>
<tr>
<td>Suspiciousness</td>
<td>Similar to focus, this detractor highlights dangerous or undesirable elements of the environment that the GM wants players to avoid.</td>
</tr>
<tr>
<td>Lack of Reward</td>
<td>Providing no reward for undesired actions.</td>
</tr>
<tr>
<td>Damage</td>
<td>Causing physical harm to a character to discourage players from continuing to take undesired actions.</td>
</tr>
<tr>
<td>Death</td>
<td>The most extreme detractor, used only as a final recourse by killing off a character who has taken a particularly game-breaking action.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other In-Game Techniques</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fate</td>
<td>Manipulating the outcome of player actions so that desired plot point occurs regardless of how they have chosen.</td>
</tr>
<tr>
<td>NPC Action</td>
<td>Demonstrating desired actions, or motivating players to action by having an NPC indicate what to do next.</td>
</tr>
</tbody>
</table>

Then they describe a series of metagame techniques [Table 2].

**Table 2 Metagame Techniques for managing player behavior (adapted from (Flowers et al., 2006))**

<table>
<thead>
<tr>
<th>Attractors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>System Reward</td>
<td>Providing players with a reward for in-character play, or desired actions. These rewards can often be “spent” to improve character performance at crucial points in the play.</td>
</tr>
<tr>
<td>Fortune-telling</td>
<td>Relying on the player’s knowledge of the rules and game system to govern the types of desired actions they will take</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Detractors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>System Punishment</td>
<td>The opposite of system reward, this is some sort of point system that can accumulate over time and reduce or limit the player’s ability to act in particular ways.</td>
</tr>
<tr>
<td>Hassle</td>
<td>Making undesired actions overly complicated or problematic to discourage players from engaging in them. Some gamemasters avoid this detractor and prefer to reward players for being willing to engage in hassles if they are dramatically</td>
</tr>
<tr>
<td>Metagame Techniques</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Admonishment</td>
<td>Telling a player out-of-game that she is taking an undesired action. Avoided as much as possible.</td>
</tr>
<tr>
<td>Expulsion</td>
<td>The most extreme detractor, this involves removing a player from the game entirely.</td>
</tr>
<tr>
<td>Knowing the Players</td>
<td>Using knowledge about the personalities and preferences of the players to anticipate player actions and plan game accordingly. Also includes influence theory: players that like the gamemaster are more likely to behave in desired ways.</td>
</tr>
<tr>
<td>Social Pressure</td>
<td>Players will not want to screw up the game for other players, so social ties help regulate player behavior.</td>
</tr>
<tr>
<td>Making Meta Comparisons</td>
<td>Using references to other known media forms and conventions to frame how players should treat a given situation.</td>
</tr>
<tr>
<td>Rebalancing Challenge</td>
<td>Assessing the success or failures of players and altering the difficulty of the situation to keep players moving forward, while providing the threat of failure.</td>
</tr>
<tr>
<td>Phrasing</td>
<td>Using theatrical tones of voice, and carefully chosen leading questions and phrases to provide hints to players about what to do next.</td>
</tr>
</tbody>
</table>

These techniques have significant overlap with the *influence theory* methods used by Roberts et al., and also have much in common with techniques for “backleading” from interactive theater. I’d argue that one thing all of these approaches have in common is that they emphasize the extent to which providing players with an *illusion of control* over a situation can be just as effective as providing them with absolute control. Each of these techniques emphasizes *enlisting players as willing collaborators within the story* rather than treating them as an unwanted and unwilling variable to be corrected for.

2.1.3.3. Drama Management and Performing Arts Theories in IDS

As seen above, one of the longest standing research directions in IDS operates under the heading of *Interactive Drama* (ID). IDS theorist and designer Nicolas Szilas outlined a vision for the future of Interactive Drama research in which he provides the following definition:

> Interactive Drama is a narrative genre on computer where the user is one main character in the story and other characters and events are automated through a program written by an author. Being a character implies choosing all narrative actions for this character. (Szilas, 2005, p. 193)

Interactive drama as he defines it does not yet exist, and so he presents a brief history of the field and discusses the strategies and approaches that he believes will bring us closer to this experience. He divides the history of ID research into three periods:

- **The Past:** Early interactive drama was characterized by attempts at creating branching narrative structures. Szilas argues that these are ultimately impractical because they require an extraordinary amount of
effort to create.

- **The Present:** As of 2005, the state-of-the-art in interactive drama were systems of conditionally linked narrative fragments. Szilas argues that these are also cumbersome to author, and also suffer from a limited degree of interactivity.

- **The Future:** Szilas identifies a trend within IDS research to position autonomous agent based systems as the next step for interactive drama research. He argues that while these systems operate at higher levels of granularity and interactivity than the previous approaches, they suffer from a reduction in the quality of the narrative.

Szilas proposes an alternate future for interactive drama; one which is driven by the addition of a computational Drama Manager (DM) to an Intelligent Agent (IA) based system. Szilas is not the first person to propose a drama manager; Roberts and Isbell identify Brenda Laurel’s 1986 doctoral dissertation as the first real articulation of the concept (D. L. Roberts & Isbell, 2007). Many current IDS systems employ a drama manager of some sort: a high-level system, often encoded with some heuristics around dramatic tension, narrative aesthetics, and other authored principles that is used to direct the actions of the individual agents within an interactive narrative.

Szilas argues for a move away from hierarchical systems where the DM decides what each agent should do and issues its instructions, toward a more hybrid architecture that operates around a feedback loop between autonomous performers and a director agent. He proposes two new approaches to drama management: a **Cooperative View** and a **Dialogical View**. In the cooperative view, the IA proposes a set of actions to the DM, which evaluates them and makes a recommendation in the form of a direction to the IA, which then plays the action like a virtual actor performing the instructions of a director. The dialogical view is similar but it adds another stage. The DM proposes a set of actions to the agents, who evaluate them based on their domain specific knowledge, before responding to the DM with a set of accepted actions and any new information about the context of that decision. The DM then re-evaluates, as per the cooperative system, and makes a recommendation which is then carried out.

Szilas also argues that in order to create a successful interactive drama, a multi-disciplinary collaboration between algorithm designers and artistic designers is needed. He contends that unlike previous media, where it was possible to build the tool before one could build the content, in Interactive Drama there needs to be reciprocal design process between the creation of tools and the creation of content. Roberts and Isbell take this work...
a step further, and articulate a series of desiderata, or desired properties, for drama management systems, including:

- **Speed**: players should not perceive any delay in game action due to decision making by the drama manager.
- **Coordination**: non-player characters in games should coordinate to enhance the experience of the player characters.
- **Replayability**: the game experience should be varied but retain high quality, even during repeated play.
- **Authorial Control**: a drama manager should provide a way for the author to influence the experience of the human player.
- **Player Autonomy**: players should not be so constrained by the drama manager that they cannot pursue their own goals.
- **Ease of Authoring**: the burden of authoring high quality dramatic experiences should not be increased because of the use of a drama manager.
- **Adaptability**: a player’s individual characteristics should be exploited to increase the quality of the experience.
- **Soundness**: the drama manager should be amenable to theoretical inquiry, supporting the ability to make verifiable claims.
- **Invisibility**: the drama manager should not appear overly manipulative to the player.
- **Measurability**: the system should provide affordances for measuring author’s satisfaction with the authoring process and the set of stories experienced by the player as well as the player’s satisfaction with the overall experience. (D. L. Roberts & Isbell, 2007, p. 2)

This list represents one of the more balanced approaches to IDS articulated thus far, although it too perpetuates the underlying assumptions about player autonomy that plague the field. Unfortunately, there is little evidence to suggest that this list has been taken to heart by the IDS community; there do not appear to be any new systems developed or under development that reference this work.

Some systems have been designed that take the notion of Interactive Drama more literally. Magy Seif El-Nasr designed an interactive drama system called *Mirage*, in which she applied a number of different techniques from the performing arts (Seif El-Nasr, 2005). She argues that current techniques for highlighting tension and drama and thus increasing the emotional engagement of players in IDS systems are limited, and contends that design techniques based in screenwriting techniques and acting theory can address this problem. *Mirage* takes some of the core technologies developed for previous interactive narrative
research systems such as *The Oz Project* and *Facade* and extends them by incorporating a number of techniques from the performing arts. Broadly paraphrased, these include:

- **Plot Structure and Magnitude**: These are two properties of dramatic plots that are taken from Aristotle. *Structure* deals with the sequencing of events, while *Magnitude* deals with how timing and pacing are used to give dramatic weight to plot events. Seif El-Nasr acknowledges that structuring plots in an interactive narrative is an ongoing challenge that has not yet been solved. *Mirage* uses NPC behaviors to try and modulate the magnitude of a scene, and incorporates a user model to help control the pacing of story events.

- **The Ticking Clock**: This is a dramatic device that uses projected future events to create a sense of anticipation or suspense. This is difficult to integrate into interactive narratives because it relies on an understanding of what the audience has and hasn’t experienced at any given point. *Mirage* uses a user model to try and predict the state of a user and trigger “clock events” accordingly.

- **Character Arc**: Seif El-Nasr links this to film scholar Jon Boorstin’s notion of the *Vicarious Eye*: the form of engagement in which an audience becomes emotionally engaged with a character. She links this engagement to the growth of a character over time. Rather than incorporate this technique in the NPCs of the game, *Mirage* adapts this technique to follow the actions of the player over time, slowly building the character through her actions and choices.

- **Defining Characters’ Tactics**: Tactics are the behaviors that a character adopts to accomplish her goals. These are continuously monitored and can shift and change as the character determines whether or not they have a chance of resulting in success. Seif El-Nasr argues that it is this tactical layer of behavior that allows AI characters to incorporate improvisational skills into a performance.

- **Defining Characters’ Goals**: Acting theory often instructs performers to choose goals for their character that both include other characters in the scene and also are in conflict with other characters’ goals in order to create tension and drama. *Mirage* approaches this by building a model of the user’s goals, and then placing NPC goals in direct conflict with those goals.

- **Emotions through action and activity**: This draws on Stanislavsky’s teachings that actors cannot portray emotions; they can only portray actions. *Mirage* does not propose a solution to this for interactive storytelling, but instead uses variation of pre-built actions that incorporate different emotional sub-texts. (paraphrased from Seif El-Nasr, 2007)

These six techniques represent a more complete application of dramatic theories to interactive storytelling at the computational level than any previous research in the field. Seif El-Nasr’s work represents an important first attempt at bringing theories from the
performing arts into the discourse around games and narrative. In the third major section of this literature review I will expand on this work significantly, however first I am going to delve more deeply into issues surrounding player agency.

### 2.2. INTERLUDE: Two Design Cases

I’ve had opportunities to engage many of the ideas discussed above though design. Putting theory into practice is epistemologically useful, in particular when it comes to building a deeper understanding of the poetics of a medium\(^5\). In this section I present two design cases from my work that have shaped my understanding of this research space, and done important work to frame the issues and concerns that this dissertation seeks to address. I follow this section with a more in-depth look at the poetics of Agency and Transformation.

#### 2.2.1. Design Case 1: The Reading Glove

*The Reading Glove* is a wearable, tangible, interactive storytelling system developed with Karen Tanenbaum in 2009 and 2010.

![Figure 4](image)

*Figure 4 (from left to right) The tabletop display and objects, the Reading Glove and a tagged object, an interactor using the system, and the collection of narrative objects.*

The Reading Glove system is comprised of the following elements:

- A wearable glove based interface with a Radio Frequency Identification (RFID) reader in the palm of the glove, and a wireless radio for communicating with a central server.
- A collection of antique (and antique seeming) objects, each tagged prominently with a unique RFID tag.

\(^5\) See Chapter 3, Section 3.1.4 for an extended discussion of the concept of poetics as it is used here.
• A large horizontal tabletop display surface.
• A laptop running a software application that uses a rules-based expert system to track reader interactions and make recommendations for where to go next in the story (via the tabletop display). The software layer also triggers playback of audio narration when an interactor picks up an object.

Interactors using the Reading Glove system “read” the story by picking up objects from the collection in order to trigger fragments of a narrative that are associated with those objects. Over the course of multiple interactions it becomes possible for readers to piece together the narrative like a puzzle.

The Reading Glove project incorporated reflexive insights from the design process, which it supplemented with empirical observations and qualitative analysis derived from a series of user studies. We ran a pilot study with seven participants, whom we videotaped, surveyed, and interviewed. We then ran two formal user studies: one with 10 participants and one with 30 participants. The first study was used to develop our protocol for the second study. We gathered quantitative and qualitative data about user preferences in the form of pre and post engagement surveys, utilizing a combination of Likert scale questions, multiple choice questions, and short-answer questions. We also screened the 30 participants in our second study for listening comprehension skills and language fluency, after discovering that these were significant factors in our first study. We videotaped each participant’s time using the Reading Glove, and also generated log-files of the participant interactions and system responses. We also administered a semi-structured interview to each participant following his or her engagement with the system.

In addition to the observational data gathered during the study, we also documented the design process extensively, through a series of blog posts, photographs, and published papers (J. Tanenbaum & Tanenbaum, 2011a, 2011b; J. Tanenbaum, Tanenbaum, & Antle, 2010; J. Tanenbaum, Tanenbaum, El-Nasr, & Hatala, 2010; K. Tanenbaum et al., 2011).

My primary interest in this system when I initially conceived of and designed the Reading Glove was to broadly explore how people experienced a story when it broke through into their physical and tactile world via narratively salient objects. We construed the objects as “boundary objects” – a notion from ethnographic research in which an object is situated between two distinct and different cultures (Star & Griesemer, 1989). Boundary objects allow for a point of contact and negotiation between cultures that lack other means of
interaction: in the case of the Reading Glove, the objects existed within both the physical world of the reader, and the imaginary world of the fiction. They were pieces of the fiction that the reader could hold, manipulate, and experience using senses that are not often deployed while engaging with other forms of fiction. Drawing on theories of affordance, we chose objects that constrained the body of the reader in particular ways, while affording very specific postures and bodily motions (Gibson, 1977; Norman, 1988). The coffee maker afforded turning the crank, the top hat and goggles afforded being worn in a particular way, the telegraph key afforded tapping and manipulation, etc. In this way, each object lent itself to a particularly embodied interaction.

Participants who interacted with the Reading Glove had many things to say about the experience, but one theme occurred enough times to catch my attention. Seven of the 30 participants referred to the experience in the first person mode and indicated that they had experienced the story as if they had become the protagonist. One participant (P12) referred to himself as the directly identifying with the character:

“I mean, I wonder if at one point instead of picking up the beer bottle, had I picked up the globe, would I have used that as a weapon instead? Would that have been same kind of narrative turn? Or instead maybe I would have...I say “I” because I’m so identifying with this character, which is pretty interesting...would I have, had I picked up the globe, would I have decided to run out of the bar. Is that the kind of interaction? Is it just different objects meaning I’m going to do the same thing with them, or are these different objects meaning I’m going to make different choices, I don’t know.” – Participant #12

And a little bit later he connected this experience to the physical objects:

“As I mentioned before, the first thing that I picked up, this vial, being able to pick it up and say "hey this is going to jumpstart the story", my expectation being like the button push where I pick up an object and it would tell me something based on the object, but again, nonetheless, hearing the story then hearing this object appearing in the story but being able to hold it...it was more immersive in a sense. I felt more connected to the world of the story. And perhaps this is related to why I was saying "I" in place of the protagonist.” – Participant #12

Another participant (P16) similarly connected her experience of identification with the physical objects:

“I’m quite visual when I read, I’m trying to imagine what it is the author’s trying to convey in words, so having the objects to actually play with really gave a neat dimension to being able to sort of put myself in that position. I think it also made me feel more like I was the character in the story.
Obviously it was first person narration anyway, but I think I felt more connected because it was like these objects, like finding the rose or using the morse whatever you call it and the camera, I think, I really liked that aspect of it.” – Participant #16

Other participants were more specific about the role that the objects played in this experience. Participant #7 described it in terms of “bleeding out” into the fictional world – a sensation that was triggered by putting on the top hat.

“In this experience, what I’m doing is I’m listening to segments of the story as they are related to objects, and then, like when I first put on the top hat, it gave me again, like, even another level of “woah, this is really really cool, I could become the main character”. And I thought that that, perhaps, was the….which means that my sense of feeling transfers into being, and I’m describing that as kind of bleeding out, that I’m feeling and being” – Participant #7

These responses called my attention to several interesting phenomena that were in the foreground of the experience of the Reading Glove

2.2.1.1. “Un-transparent” (Semantic) Interface

It became apparent as participants discussed their experience of the objects was that they were not simply transparent, instrumental interfaces to the storyworld, but instead meaningful components of the fiction in their own right. Although it was true that several participants were hesitant to pick up the objects, or handle them for longer than necessary, the majority of the participants physically engaged with the objects as a meaningful aspect of the story. Participants not only drew pleasure from the objects, but also narrative information: several readers remarked that the objects were the source of their knowledge of the historical era in which the story was set. In a sense there are several interfaces at work in the Reading Glove. The glove itself and its interactions with the tags constitute the most functional interface: when it was working it appeared to become fully “ready-to-hand” for the participants, disappearing into the reading experience. Sometimes it wouldn’t successfully activate a tag on the first try, at which point it would “surface” and briefly become “present-at-hand” or hypermediated. The next layer of the interface was the feedback on the screen: a non-diegetic interface that partook of the same aesthetic as the rest of the system, but which served primarily as an informational display (and a fairly opaque one at that). Finally, the objects themselves were the most prominent interface element. Each object represented a choice of content for the reader, but in addition to being mechanisms for selecting which content to access (via the glove and tags) the
objects were themselves “contentful”, and it is here that we see their value as “untransparent” interfaces. The objects violate Heidegger’s and Bolter & Grusin’s categories: They are present and meaningful: they are not invisible, instrumental mechanisms for carrying out a task, but instead loci of narrative meaning that evoke sensory associations as a central quality of their use. We have used the term “present-at-mind” to describe this phenomenon, although we recognize that it is an imperfect concept (J. Tanenbaum, Tanenbaum, Bizzocchi, & Antle, 2011).

2.2.1.2. Embodied Character
The second aspect of the experience that we found interesting is that the affordances of the objects appeared to give readers a more coherent sense of embodying the character. By touching and holding things that the character held, and by interacting with those things according to their physical affordances and constraints, the readers were given opportunities to embody the same physical postures as the main character. This is a form of behavioral mimicking, and it highlights one of the central narrative elements of that design strategy: behavioral mimicking uses the body of the player as a mechanism for communicating narrative information. By shaping and posing the player body in particular ways, behavioral mimicking elicits somatic memories, and connects the body to the imagined body of the character, with all of its associated cultural baggage and meaning.

2.2.1.3. Identity Transformation as Narrative Pleasure
The third phenomenon that I wish to discuss grows directly out of the other two. It is the notion that experiencing identity transformation into a fictional character is a profound source of narrative pleasure. Observing people interacting with the Reading Glove was what first made me think that transformation needed to be better understood. Unlike the pleasures of agency and immersion, both of which have established vocabularies in scholarly and vernacular circles, transformation lacks a clearly defined poetics. I watched participants struggle to articulate the transformative pleasures of the Reading Glove, even when it was clear from their responses that they had experienced some form of transformation. In some ways, transformation is the most frightening of Murray’s three aesthetic principles, because it requires that the reader put herself fully in the hands of the storyteller. Transformation makes us even more vulnerable than immersion, because we temporarily suspend our own identities and allow another being to take the wheel for a moment. And yet, when given the right tools and the right support, transformation can take
a reader to a place that she hadn’t imagined possible. The most positive reactions that we observed in participants using the Reading Glove were connected to this experience of transportation into a narrative world and this opportunity to embody the main character.

### 2.2.2. Design Case 2: Futura

To explore the poetics of procedural rhetoric, learning, and persuasion in greater depth, I’d like to briefly discuss a game design and research project that I was involved in for several years called *Futura*. *Futura* is a multi-touch, multi-player, tabletop game intended to engage players in a dialogue about sustainability. It was initially designed in collaboration with Alissa Antle, Alyssa Wise, Allen Bevans, Sijie Wang, Karen Tanenbaum, and Katie Seaborn in 2010. In *Futura*, players assume the roles of key stakeholders responsible for providing one of three basic needs to a growing urban community: food, shelter, and power. Players must work together to support an ever increasing population, while avoiding long-term damage to the environment. The game balance is very carefully calibrated to reward conservative sustainable actions, while punishing reckless production. The dynamic real-time simulation keeps players in a state of active assessment of potential actions and their consequences.
Figure 5  The introduction screen for Futura, which set up the goals for the players

Futura was initially designed so that its procedural rhetorics would lead to certain attitudes and positions on sustainability, rather than to communicate specific facts or data about sustainable development. If players didn’t coordinate their actions, communicate with each other and work together the game could not be completed successfully. Certain facilities could help offset environmental damage, but the cost to clean up the environment was extremely high, and players were better served to build more conservatively up front in order to reduce the environmental impact of their choices from the very beginning. The game engine had a logic of “long-term consequences” encoded in it so that mistakes early in the game would become even more detrimental to the situation the longer they remained in play, and we intentionally did not allow players to “undo” any of their actions once they were made: players had to learn to live with the consequences of their actions.
Figure 6  The main Futura game screen, showing the three roles that the players assumed, and the scoreboard at the top

We designed the game so that it was short: it took only three to four minutes for the game to be completed. This allowed players to quickly cycle through actions and consequences: a short feedback loop allowed players to more easily correlate their behaviors to outcomes. More importantly, this short play cycle created opportunities for discussion among the players about the impact of their choices on the game state. Each time a team of three players lost, there was an opportunity to consider their actions, and to discuss potential strategies.
I was also involved in a second stage of research with the system in 2011 with Alissa Antle and Anna Macaranas. My contribution to *Futura* was initially in the role of lead game designer; however, as I continued to work with the system, it provided me with an opportunity to delve deeply into the literature around procedural rhetoric, games for change, and games for learning. My work in the second stage of this project culminated in a collective close reading of a set of serious games for sustainability, done with Alissa and Anna. In this close reading we proposed and refined a framework of design markers for three different communicative models of persuasive games: the Information Deficit Model, The Procedural Rhetoric Model, and the Emergent Dialogue Model.
This work incorporated research from a collaborator at the University of British Columbia: John Robinson. Robinson shares a Nobel Prize for his work on climate change and sustainability studies, and his current work looks at how to enlist communities of stakeholders in generating actionable local practices and policies for sustainability. Drawing on his previous work on *emergent dialogue* (Robinson, 2004; Salter, Robinson, & Wiek, 2010) we developed a continuum of models of behavior change for the design of serious games, ranging from the most top-down and deterministic on the left to the most bottom-up and emergent on the right [Figure 8].

### 2.2.3. Trajectory towards Present Work

Both the *Reading Glove* and *Futura* have played significant roles in framing my current research. The *Reading Glove* highlighted the importance of transformation to me, while also exploring the ways in which props, costumes, and other external material objects could create opportunities for this experience of identification with a character. *Futura* provided me a chance to explore the power of procedural rhetoric in shaping a player’s experience of an interactive text. Procedural Rhetoric requires attention to the enacted behaviors of the player because these are the building blocks of experiential learning. In the above literature I discuss the dynamic relationship between the formal explicit elements of a text and the interpreted implicit response of the reader. Procedural Rhetoric
requires us to attend to that thing that happens when these two components of the mediated experience collide.

In game design, one of the dominant models for considering this relationship is Robin Hunicke et al’s MDA framework (Hunicke, Leblanc, & Zubek, 2004). MDA breaks game experiences down into "mechanics, dynamics, and aesthetics". Mechanics correspond to the underlying rule systems, engines, and interfaces of the game. They are the “formal” properties of the game, as represented within a given set of instructions, materials, or text. On the other side of the spectrum are aesthetics which are the cognitive-emotional experiences that the player has while playing. In the middle of these two elements are the dynamics of the game. The dynamics are what happens when a game’s rules are put into action: they are the processes that occur when a game is played. They are governed by the mechanics and they are what give rise to the aesthetics. It is at the level of dynamics that the formal properties of the text and the interpretations of the reader must negotiate the emergent meaning of the game.

In both the Reading Glove and Futura I had control over the mechanics of the experience, and I had some aesthetic objectives that I wanted to achieve. However, it wasn’t until seeing their dynamics in action that I really started to get a sense of relationship between agency, narrative, enactment, and transformation.

2.3. Agency, Meaning and Speech Act Theory

This third major section of the literature review provides a deeper look at my approach to agency. The concepts in this section have direct bearing on the formulation of one of my primary analytical lenses. In this section I take the critiques of IDS’s approach to narrative pleasure a step further and explore how an emphasis on unrestricted agency has been detrimental to building a real understanding of the pleasures of agency. I introduce new literature on communications and speech act theory that provides a new perspective on agency.

2.3.1. The Problem with “Agency”

Game Studies and IDS are both deeply committed to the project of facilitating player agency, but the conception of agency commonly employed in both fields is often overly
simplistic, in ways that are highly problematic from a storytelling standpoint. As seen above, agency is often conflated with interactivity which is in turn often associated with the freedom to act. In the previous section I highlighted a number of quotes from influential papers within the IDS community that argued that the primary pleasure of interacting within a narrative was the freedom for the player to do anything she might imagine within the narrative world. This interaction is often framed explicitly as a threat to the narrative, as when Ken Newman writes:

When narrative plots are explicitly used in interactive systems there is always a tension between them. A traditional story invites the participants to listen, to engage, and to allow themselves to be taken where the storyteller wants to take them. However, the participants are NOT generally being invited to join in or to add their own input to the story or to take it in unforeseen directions. Interjections from the listeners would destroy or at least weaken the structural integrity of the story. Interaction however implies the opposite that somehow the ‘listener’ is able to become an active participant, and there are various ways that interactive systems try to achieve integration between the lean forward and lean back elements. (Newman, 2005, p. 147)

This assumes that the only way of being an active participant in a story is to undermine the intentions of the storyteller: to take a creative stake in the direction that the story goes in. It does not consider the ways which a participant in a story might be able to engage constructively with the narrative without seeking to undermine the author. In doing so, this perspective misrepresents most interactors, who, as we have seen in the above discussion of player typologies, are often driven by a myriad of preferences and pleasures, including a desire to experience a narrative.

Similar rhetorics around agency have also developed within the discourses of game design and game studies. In 1999, game designer Ernest Adams wrote:

Interactivity is about freedom, power, self-expression. It's about entering a world and changing that world by your presence. In most games the world is static and dead until the player arrives; the player is the only thing that makes it move. Interactivity is almost the opposite of narrative: narrative flows under the direction of the author, while interactivity depends on the player for motive power….the player and her actions are the most important things in the game. In computer gaming you subordinate the player to the plot at your own peril.

It’s not our job to tell stories. It’s our job to build worlds where players can live a story of their own creation. (Adams, 1999)

One can imagine where Adams was coming from: there were certain things that games
could do that other mediums simply could not, and the most exciting of those was (and may still be) the power to place a player inside a simulated procedural world. It was difficult to reconcile the emergent dynamics of simulated worlds with the poetics of traditional narrative forms. When Adams wrote this, the golden age of adventure games had recently drawn to a close and with the widespread adoption of 3D graphics, first-person points of view, AI controlled enemies and Non Player Characters (NPCs), the medium was increasingly hostile to linear storytelling. The subsequent debate between narratology and ludology was in part due to the perceived discontinuity between the actions and desires of the player in a simulated world and the narrative aspirations of an author or designer. In 2004, at the height of this debate, Aarseth wrote:

In the adventure games where there is a conflict between narrative and ludic aesthetics it is typically the simulation that, on its own, allows actions that the story prohibits, or which make the story break down. Players exploit this to invent strategies that make a mockery of the author's intentions. Dead or not, the authors of these games are little more than ghosts in the machine, and hardly auteurs. When you put a story on top of a simulation, the simulation (or the player) will always have the last word. (Aarseth, 2004, p. 52) (Emphasis mine)

This quote gets right to the heart of the fear that players, left to their own devices, will actively (and perhaps maliciously) seek to undermine the intentions of the “author” within a simulated world. From this standpoint, players and designers exist in natural opposition to each other, fighting over the right to shape the narrative outcome of the world. Even after the narratology and ludology debates cooled down, this perspective on the player persisted. In 2008, game designer Steve Gaynor wrote:

Video games are not a traditional storytelling medium per se. The player is an agent of chaos, making the medium ill-equipped to convey a pre-authored narrative with anywhere near the effectiveness of books or film. Rather, a video game is a box of possibilities, and the best stories told are those that arise from the player expressing his own agency within a functional, believable gameworld. These are player stories, not author stories, and hence they belong to the player himself...the game designer’s role is to provide the player with an intriguing place to be, and then give them the tools to perform interactions they’d logically be able to as a person in that place—to fully express their agency within the gameworld that’s been provided. (Gaynor, 2008) (Emphasis mine)

The experience of acting freely, of authoring a personal narrative and telling an individual story, are unique and genuine pleasures that are afforded by certain kinds of simulated game worlds. However, this pleasure is only half of the equation that makes agency so
important and interesting. Let’s return to Janet Murray’s definition of agency:

Agency is the satisfying power to take meaningful action and see the results of our decisions and choices. (Murray, 1997, p. 126) (Emphasis mine)

I’ve bolded the words that I believe the above designers have lost track of in their headlong pursuit of unrestricted freedom. Agency is about meaningful choice; it is about doing something that makes a difference. The notion of meaningful choice lies at the heart of Katie Salen and Eric Zimmerman’s canonical work Rules of Play (Salen & Zimmerman, 2004). Rather than attempt to define meaning, they provide examples of how meaning occurs in play, claiming that “Learning to create great game experiences for players – experiences that have meaning and are meaningful – is one of the goals of successful game design, perhaps the most important one.” (Salen & Zimmerman, 2004, p. 33) They provide two definitions of meaningful play: a descriptive definition and an evaluative one. Their descriptive definition holds that:

Meaningful play in a game emerges from the relationship between player action and system outcome; it is the process by which a player takes action within the designed system of a game and the system responds to the action. The meaning of an action in a game resides in the relationship between action and outcome. (Salen & Zimmerman, 2004, p. 34)

Their second definition is intended to be used to evaluate this relationship between action and outcome:

Meaningful play occurs when the relationships between actions and outcomes in a game are both discernable and integrated into the larger context of the game. Creating meaningful play is the goal of successful game design. (Salen & Zimmerman, 2004, p. 34)

This second definition is less about meaning in a semiotic sense, and more about the experience of playing a well-designed game. Central to it are two terms: discernable and integrated. For the relationship between action and outcome to be discernable, it must be perceivable by the player; games must let players know what happens when they take an action. For these actions to be integrated into the experience of the game, they must have both immediate significance to the player and also some sort of long term impact on the play experience. In other words, action must affect the course of the game in order to be considered integrated. This fits with Murray’s definition of agency, which isn’t simply about taking actions, but about experiencing the impact of those actions.

The problem with the “freedom uber alles” approach to agency is that it misunderstands
one of the fundamental aspects of meaning and creativity, namely that both arise from the careful use of constraints. Significant research has been done into creativity in design that shows that constraints are an important and necessary component of a creative process (Biskjaer & Dalsgaard, 2012; Bonnardel, 1999, 2000; Candy, 2007; Edmonds & Candy, 2002). This knowledge has been present in the digital narrative and IDS literature since the earliest days of the field. Brenda Laurel devotes a significant portion of her book to the importance of constraints in creative situations. She argues that the tendency of game designers to imagine “magical spaces where they can invent their own worlds and do whatever they wish” is actually a trap and that the reality of these systems would be “more like an existential nightmare than a dream of freedom” (Laurel, 1993, pp. 99–101). She considers how the absence of any constraints or guidelines can lead to paralysis and a sense of powerlessness, and contends that limitations serve to focus our creativity and increase our imaginations by narrowing the possibility space.

Laurel and Murray both describe a form of constrained agency that is oriented toward meaningful actions rather than unrestricted freedom. In spite of this, the design rhetorics around agency have continued to advocate for a sort of meaningless freedom to act that is neither desirable in many play contexts, nor realistic as a design goal. To move past this conceptual roadblock, we must first articulate a richer approach to agency, one that foregrounds the ways in which it thrives on constraint and “meaningful commitment”.

2.3.2. Speech Act Theory and “Commitment to Meaning”

The notion of meaningful commitment is drawn from the foundational work of Winograd and Flores, Understanding Computers and Cognition (Winograd & Flores, 1986), in which they discuss a new way of understanding both human and artificial intelligence. Their central contention is that the goal of creating human-like artificial intelligence is hopelessly mired in a rationalistic worldview that reduces the complexities of lived experience to a set of objects, rules, and situations to be formalized and represented symbolically. They argue that this is not how people actually experience or act in the world, and put forth a phenomenological, Heideggerian notion of being-in-the-world, in which the majority of human action happens in a state of thrownness which has no stable representation and is not amenable to logical reflection and symbolic manipulation. Computer systems built upon the misconception that human language is primarily about the manipulation of facts and the transfer of information are fundamentally impoverished in their capabilities. The
logics of these systems assume that knowledge is about information representation, rather than about embodied experience, and they are incapable of accommodating the various ways that humans improvisationally negotiate and renegotiate meaning. They write:

The question we now have to deal with is how to design computers on the basis of the discourse about language and thought that we have been elaborating. Computers are not only designed in language but are themselves equipment for language. They will not just reflect our understanding of language, but will at the same time create new possibilities for the speaking and listening that we do—for creating ourselves in language. (Winograd & Flores, 1986, pp. 78–79)

They propose an alternative conception of artificial intelligence which demands that we recognize that all computational systems are reflections of the intelligence (and intentionality) of the people who designed them. Thus, the true potential for computers lies not in the mimicry or duplication of human intelligence but in the facilitation of human-to-human communication. To understand human communication and to expand on the idea of “creating ourselves in language”, the authors turn to speech act theory, which classifies “what people can do with language” by identifying the “illocutionary point” of speech acts, such as to make a request, to promise something, or to declare a fact. Accomplishing such a dialogue relies on the idea of commitment in the sense that both participants commit to enter into the conversation in good faith and also in the sense that they agree not to renege on any commitments made during the conversation. Crucially, these are commitments which are not just verbal and mental, but rather commitments to actions, positions and beliefs.

In a forthcoming paper on Games as Conversation, Cardona-Rivera and Young employ speech act theory to approach the challenges of interactive storytelling as “discourse problems”. Citing Searle they describe three distinct aspects of speech acts:

The locutionary act, or the act of putting words together into a form that is legal in the language. It is the act of saying something.

The illocutionary act, or the intended meaning that the speaker wishes to convey. It is the act in saying something.

The perlocutionary act, or the effected change in the listener’s mental state and/or future actions. It is the act achieved by saying something. (Cardona-Rivera & Young, 2014, p. 2)

They argue that the actions of both the player and the game system are locutionary acts, as they are circumscribed by the laws of the game system. These acts are motivated by illocutionary goals on the part of both the player and the designer. The challenge for game
designers that they identify comes in seeking to achieve a specific *perlocutionary* goal, or change in state, on the part of the player.

Each language act or utterance in a conversation between two or more people has consequences for the participants, typically related to actions they are about to take or will undertake in the future. Speech act theory categorizes an utterance in terms of its *illocutionary point*, with each kind of point entailing different commitments or attempting to achieve different goals. Winograd and Flores describe five categories of illocutionary point: Assertive, Directive, Commissive, Expressive, and Declarative.

- **Assertive**: Assertive speech acts commit the speaker to the truth of a statement. They are assertions of that truth. Thus, when a speaker says “it is raining outside,” he or she is making a truth claim about the weather.

- **Directive**: Directive speech acts are instructions from one interlocutor to another: they attempt to get the listener to do something specific. When a speaker says “come in out of the rain,” or “close that window” these are directive acts that seek a specific response in the world from another person. Questions fall into the category of directive acts, as the speaker directs another to provide specific information.

- **Commissive**: Commissive speech acts occur when a speaker commits to a future action. They are statements of intentionality, such as a speaker saying “I am going to take a walk in the rain.”

- **Expressive**: Expressive speech acts are demonstrations of the speaker’s psychological or emotional state. An expressive act communicates something about the inner life of the speaker, such as when he or she says “I love it when it rains.”

- **Declarative**: Finally, declarations are speech acts that bring reality into alignment with the contents of the statement. Declarative acts directly change the world through their declarations, such as when the officiator of a wedding declares “I now pronounce you man and wife.” In this case, the status of marriage is conferred by the declaration of “man and wife”, and it is the speech act that causes this to occur.

These five categories of speech act are summarized in Table 3

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive</td>
<td>Commits the speaker to the truth of the statement</td>
<td>“It is raining outside”</td>
</tr>
<tr>
<td>Directive</td>
<td>Attempts to get the listener to do something</td>
<td>“Come in out of the rain”</td>
</tr>
<tr>
<td>Commissive</td>
<td>Commits the speaker to future action</td>
<td>“I am going to walk in the rain”</td>
</tr>
<tr>
<td>Expressive</td>
<td>Expresses the speaker’s psychological state</td>
<td>“I love it when it rains”</td>
</tr>
<tr>
<td>Declaration</td>
<td>Brings reality into alignment with the content of the statement</td>
<td>“I now pronounce you man &amp; wife”</td>
</tr>
</tbody>
</table>

Commitment as entailed by the illocutionary point of an utterance is critical to establishing trust and communication between actors, as seen in improvisational theater as well as
everyday conversation. People who make assertive statements that are shown to be false, or who make commissive utterances that they do not follow through, on will be judged untrustworthy and unreliable. Successful communication requires something that Winograd and Flores term as *communicative competence*, which they define as “the capacity to express one’s intentions and take responsibilities in the networks of commitments that utterances and their interpretations bring to the world” (Winograd & Flores, 1986, p. 162). Successful communication isn’t something that happens automatically. Instead, it is a skill that can be developed and improved through effort and practice. Winograd and Flores hold that the ability to negotiate and commit to action via language is a key characteristic of humanity, and one which we cannot replicate via computers. Computers are incapable of making their own communicative commitments: they might be encoded with the commitments of their authors, programmers, and designers, but they lack *intentionality*. A computational system has no point of view of its own, even if it is capable of combinatorially or procedurally generating content that might be interpreted by a reader as having a meaning that was never encoded within it by its designer. Lacking a set of desires and motivations to impel it to express a particular meaning, an AI storytelling system can *represent* meaning, but cannot *commit* to it.

### 2.3.3. Agency as Commitment to Meaning

Winograd and Flores’ work on speech act theory provides the basis for a new formulation of agency: one grounded in the notions of communicative competence and meaningful commitments. In previous work with Karen Tanenbaum, I have argued that rather than viewing agency as being about the freedom to act, we should instead treat it as a form of *commitment to meaning* undertaken by a player within a digital game. It is a sort of speech act by which the player both articulates her own desires within the framework of potential meanings encoded in the game, and adopts the potential meanings prepared for her to enact by the game’s designers (K. Tanenbaum & Tanenbaum, 2009, 2010). This perspective on agency further emphasizes the importance of situating the player’s actions within a web of meaningful commitments. From this perspective it is insufficient to simply facilitate freedom to act and expect the player to experience the pleasures of agency. Instead, I argue that agentic pleasure is only experienced when the commitments of the player are mapped to meaningful outcomes within the game. Although this approach may seem similar to Salen and Zimmerman’s notion of *meaningful choice* it actually has some
interesting additional implications. I argue that commitment to meaning is a cognitive process rather than an interactional one. By this, I mean that a player can commit to meanings within a digital narrative without necessarily making choices between different potential outcomes: committing is different from choosing or selecting, in that it may occur in situations where the only option is whether or not to move forward at all.

This is perhaps best exemplified through sequence at the end of the game *Metal Gear Solid 4* (Kojima Productions, 2008) in which the hero, Old Snake, must traverse a tunnel filled with deadly microwave radiation in order to prevent the destruction of the planet.

![Figure 9](image)

**Figure 9** *Solid Snake Struggling through the microwave tunnel in Metal Gear Solid 4*

The microwave tunnel sequence is widely regarded as one of the most powerful and emotional moments in contemporary games; a quick search of the Playstation 3 forums or of the many YouTube videos in which the sequence may be viewed reveals a large community of players talking about how profoundly emotional the scene was. (hexen2k7, 2009; SmoKey197, 2008)

What makes this sequence remarkable is how little control the player has over any aspect of the experience. In it, the player is told that he must maneuver Snake down the tunnel quickly or he will die. As the character moves through the gauntlet of microwaves, the top half of the screen shows the final moments of a climactic battle in another location. Suddenly, there is a flash of sparks from the wall of the tunnel and Snake collapses to the
floor. A voice over the radio implores “Don’t give up on me, Snake!” and the player is prompted to tap the Triangle button on the controller in order to keep Snake moving forward. Over the next moments of gameplay this escalates: Snake grows ever more crippled, the corridor becomes more and more hazardous, and the prompting from the system demands ever increasing button mashing in order to move the character forward. Games journalist Anthony Burch describes the final moments of the sequence, writing:

Snake goes down again, presumably for the last time. He inches forward pathetically, just barely crawling as his health meter speeds down to its last few millimeters of life. The triangle button animation appears for a moment -- "press it, or he'll die!" -- but disappears once you press the button even faster, even harder. Then it appears again, the animation running twice as fast as before, sending a clear message: As fast as you were pressing it before, you're not pressing it fast enough now -- for Christ's sake, press triangle faster or everyone you love is going to die. (Burch, 2009)

This sequence leads the player accept the drama and the desperation of the situation. Through carefully arranged cues the player is invited to frantically mash a single button in order to advance the game. The beauty and irony of this is that even this limited set of interactive possibilities -- to rapidly push the button or not -- is not actually required by the system.

Snake's ever-decreasing health bar cannot possibly reach zero before the end of the corridor so long as you press the triangle button once every few seconds. In purely mechanical terms, you might as well be holding a DVD player remote that has been jury rigged to only continue playing a film if the viewer presses "play" every so often. (Burch, 2009)

Even when a player’s actions have no real impact on the world, in the sense that there is nothing she could have done that would have yielded a different result, players nevertheless come out of the experience feeling as if their actions were meaningful and the game was enjoyable. In this scene, the player is committing to meaning, but she is not choosing between any outcomes, or even engaging in any meaningful interactivity. From an agency as freedom standpoint the player thoroughly lacks agency here. And yet, the pleasures that players derive from this scene are agentic in nature, in part because simply participating in the sequence yields a profound sense of effectiveness. Murray’s definition of agency as “the satisfying power to take meaningful action and see the results of our decisions and choices” is satisfied by this sequence. I would argue that the pleasures of agency are more about experiencing meaningful outcomes of our participation in digital narratives, and are not even remotely connected to unrestricted freedom to act. From this
standpoint, agentic pleasures may be made more profound if we improve our communicative competence within a system: more skillful enactments and a deeper command of the expressive literacies required to make meaning within a digital game can yield greater pleasures of agency.

2.3.4. Agency and the Subjunctive

The notion of commitment to meaning entails the player into holding some sort of opinion about the potential outcomes of the narrative; it requires an investment of some sort. Much like Coleridge’s “willing suspension of disbelief” (Coleridge, 1952) and Murray’s “active creation of belief” (Murray, 1997), commitment to meaning only happens when the player voluntarily steps into the fiction of the game and becomes attached to its potential outcomes. In this sense, commitment to meaning functions according to the principles of what Margaret Mackey has termed the subjunctive mode (Mackey, 2008, 2011). Grammatically, the subjunctive mood or mode, entails the realm of make-believe and imagination, and particularly is invoked in the expressions of desire about a contingent or hypothetical future. Mackey writes that “questions about factuality, fictionality, contingency and make-believe entail somebody with an opinion: ‘I hope that’, ‘I expect that’, ‘I believe that’, ‘I wish that’, ‘I fear that’, I doubt that” (Mackey, 2011, pp. 77–78). The relationship between the creator of a media artifact and an interpreter of that artifact is a contingent one, built on the imagined intentions and desires that each one envisions from the other. If we consider the relationship between the creator and the interpreter from the standpoint of speech act theory, then we see that the media text itself is a form of speech act, committed by its creator, but it is also a context for the meaningful expressions of the interpreter. As with all communicative commitments, the speaker takes some responsibility for the consequences of those acts in the world, even with the understanding that one cannot fully anticipate those consequences when the act is interpreted.

The subjunctive mode requires that readers act “as-if” the fictional world is real, at least during the moment of interpretation. Mackey fruitfully maps the notion of the subjunctive to Murray’s criteria for imaginative immersion, and to the active creation of belief in a narrative. This framing of make-believe is crucial to understanding the stance of the reader in relationship to a work of fiction, and provides some leverage into understanding how fictional experiences can be understood as “lived experiences”. Mackey describes this in terms of “anomalous suspense” in which a reader experiences suspense about the
outcome of narrative where she should have no uncertainty (Mackey, 2011, p. 78).

Readers and players consent to the fiction of an experience. They adopt a perspective towards the fictional world in which the logics of the fiction override any metafictional knowledge they might have brought to the experience. Without this capacity, we would not be able to enjoy rereading a book, or rewatching a film, or seeing different productions of the same play. There is a pleasure that comes from surrendering oneself to the reality of the fiction that is closely coupled with the pleasures of commitment to meaning.

2.4. Transformation, Drama, and Method Acting

The fourth section of this literature review considers perspectives from the performing arts and from scripted theater in particular, with an emphasis on American Method Acting. In this section I provide a new body of research that has significant implications for the creation of a robust understanding of the pleasures of transformation in digital narratives. It became evident to me, when researching interactive drama, that the vast majority of the performing arts literature in use within the IDS community draws on techniques from improvisational theater. Consequentially, relatively little work has been done to explore the potential implications of the vast body of theatrical knowledge around scripted drama and method acting.

As discussed above, the basis for incorporating theories of improvisational theater into IDS research is a fixation with the notion of agency as freedom. When we set aside that limited view of agency, we must also re-evaluate the value of improvisation as a metaphor for interactive storytelling. Theories from the performing arts provide a rich set of practices that go beyond the relatively simplistic view of improvisors co-creating a narrative together. Most importantly, we must be willing to engage with the ways in which the performing arts engage with embodiment and the types of bodily knowledge that actors draw upon.

My own performance background is as a (partially) trained method actor, which in part is why I turned to method acting as inspiration for this work. Many of the resources I draw on in this section are teaching and theoretical texts; they deal with acting at one level of remove from the actual experience. These works are mainly designed to aid actors in developing their craft. However, they provide insight into many of the practices, knowledges, and activities that actors undertake when transforming themselves into a
character. My goals here are to highlight the ways in which these texts engage with character transformation, a phenomenon that lies at the heart of most theatrical practice.

Relatively little has been written about method acting as it pertains to interactive narrative, in spite of the popularity of drama as a metaphor for IDS systems. I first choose to investigate method acting because as a practice it leads to a unique and participatory narrative pleasure. Acting trainer Robert Benedetti describes this pleasure when he invokes some of the greatest actors of our age such as Sir Laurence Olivier and Alec Guinness, both of whom regarded acting as an opportunity to “have experiences they would never have in real life” (Benedetti, 1997, p. 4). Acting is a challenging activity, but it is also a deeply pleasurable one. There is something profoundly enjoyable about the experience of performing a role, becoming a character, and enacting a narrative script. Playing on a stage and playing in a game overlap in many useful ways. Kurt Daw aligns the mindset of actors performing and imaginative exercise with that of children playing, and considers how this can often frighten inexperienced actors who have spent their adult lives avoiding undignified or “childish” behavior (Daw, 2004, p. 105).

As we will see, a very common theme in acting theory is the notion that the work of an actor is fundamentally a form of play. This is apparent in the language around the theater: actors are players; a theater is a playhouse; plays are…plays. Exercises for training actors are often referred to as theater games. Play is central to acting because it can be simultaneously uninhibited, free, and deeply serious.

2.4.1. Scripts and “The Actor’s Nightmare”

Acting is a powerfully creative act, both in spite of and because of the relationship to the scripted page. Method acting involves adopting a mental state in which the performance of prewritten lines can feel like a spontaneous and emergent choice. This experience is a promising template for the design of an IDS system.

One might argue that actors have a distinct advantage over participants in a digital narrative because they have access to the script. Indeed, the concept of the Actor’s Nightmare hinges on this advantage and the sudden loss of it. Most actors, at one time or another, have dreamt that they are standing backstage waiting for the curtain to rise when suddenly they realize that they’ve forgotten all of their lines! When I have this dream, I find myself panicking: What’s my cue? What part am I playing? What play am I even in?
This particular form of anxiety is all too familiar to anyone who has had to perform in front of a live audience. Preparation, rehearsal, and a deep knowledge of the script are the tools that actors use to stave off this fear. And yet, there is a sense within IDS research that a player should be able to enter into a simulation as a character and perform seamlessly. Systems like Façade use natural language as their primary interface because there is an assumption that the player’s existing linguistic fluencies have prepared her to perform within a simulated social setting.

However, it quickly becomes clear while playing Façade that this fluency actually confounds the literacies needed to perform successfully in the story. This is partially because of the limitations of the speech parsing system, which cannot meaningfully account for every nuance of language used by a player. Only through trial and error and repeated interaction with the system does a player learn to speak with the kinds of language that Façade is capable of recognising and responding to. It requires a dedication to rehearsal on the part of the player to gain sufficient literacy to meaningfully perform within the simulation. But there is an additional hurdle that interactors with Façade must overcome: they are provided with no motivation, no character, no backstory, and no script to guide their actions. In its commitment to simulating a real life social situation, Façade eschews any visual user interface conventions or feedback mechanisms. In the absence of these supporting structures, many players experience a deep loss of control and ownership over their interactions, often concluding that the system simply isn't listening to them (Milam, El-Nasr, & Wakkary, 2008).

Imagine a highly trained actor, thrust on stage in front of an audience without any knowledge of his character’s identity and backstory. What advantages does that actor have that a player of Façade doesn’t? For one thing, the actor is interacting with other trained actors, who, for the sake of this hypothetical situation, are well rehearsed in the script and the show. The actor doesn’t simply enter into a completely open-ended situation; instead there is a pre-existing structure waiting on the stage, under the direction of expert performers who understand the need to coach and guide their colleague through the scene. The actor may not have knowledge of this particular show, but he is well versed in the craft of performing. He knows how to listen to the actions on stage, how to respond to cues from the other actors, and how to insert himself meaningfully into the show. Perhaps he is wearing a costume that provides some insight into his role. The reactions of the other characters to his entrance and the design of the set are also filled with clues.
about the situation. Is he holding a prop? What can he do with it? Given opportunities to practice this situation, an actor can adopt performance skills that allow him to more swiftly pick up on the many cues that the setting has to offer, building literacies needed to meaningfully perform without foreknowledge.

When designing digital narratives and games, it is important to imagine our players as this naïve actor: lacking knowledge of the specifics, but equipped with a set of literacies and capabilities that can be built upon and leveraged by a well-designed narrative architecture. And unlike live theater, where providing direct instructions to an actor could violate the reality of the scene, in games we have access to many richly developed interface conventions, communicative backchannels, and other techniques to scaffold the player’s engagement. As I will demonstrate in this dissertation, a deeper understanding of techniques from method acting can provide us with insight into how digital games meaningfully support narrative performance and can illuminate important new directions for the design of digital storytelling systems.

2.4.2. Inside-Out and Outside-In Approaches to Acting

At a very high level, contemporary theater has two broad approaches to the work of acting. These both have their roots in the work of Russian actor, director, and theorist Constantin Stanislavsky, whose acting System sparked a revolution in actor training and preparation at the turn of the twentieth century (Blumenfeld, 2008). Over the course of his career, Stanislavski pioneered two very different but highly complementary approaches to acting, which we can loosely term “Inside-Out” and “Outside-In”:

- **Inside-Out**: This approach focuses on connecting the emotional memory of the actor with the experiences of the character. Inside-Out Method acting works first through a deep analysis of the script and given circumstances. The actor builds many cognitive “layers” of reality inside his or her own head to create a lived experience of being the character, with the understanding that this imaginative commitment to the truth of the play will manifest in a performance that is perceptibly more lifelike and immediate for the audience.

- **Outside-In**: This approach instead emphasizes what Stanislavski called the “psychophysical” activities of the character. Outside-In Method acting works through embodied actions and external scaffoldings, intended to elicit an internal cognitive transformation into a character.

Stanislavski’s early work emphasized the Inside-Out approach, relying primarily on emotional memory to motivate truthful performances. However, as his System matured, he began to attend more carefully to what he called the Method of Physical Actions that
was more oriented towards Outside-In methods (Blumenfeld, 2008).

For a period of time, Method acting was split between these two approaches, with British actors primarily advocating for the Outside-In approach and proponents of the American Method favoring Inside-Out techniques. However, this has shifted in recent decades, with the work of influential practitioners like Jerzy Grotowski, Keith Johnstone, and Anna Deveare Smith (Grotowski, 2012; Johnstone, 1992, 1999; Lewis & Smith, 1993; Martin, 2002; A. D. Smith, 1997).

The American Method itself is split into a number of sub-schools, originating from the teachings and interpretations of the founding members of America’s Group Theater (including Lee Strasberg, Stella Adler, and Sanford Meisner). Most of these early proponents of the method focused on Inside-Out techniques: both Strasberg and Adler prioritized and actors work on his or her own self alongside a focus on the role and the “given circumstances of the play” (Krasner, 2000, p. 4).

However, Sanford Meisner originated a perspective on the Method that more directly explored Stanislavski’s Method of Physical Actions. Acting theorist Brant Pope explores how Meisner’s action oriented version of the Method differs from more traditional, emotion-oriented approaches. Pope does not claim to teach the “Meisner Method” (reserving that honor for the late Sanford Meisner) and instead describes a process of teaching acting that is greatly influenced by the work of Meisner. He contends that “the radical nature of Meisner’s work is expressed in the core principle of doing ” which emphasised the action on the stage and the reactions of other characters over the internal emotions of the actor (Pope, 2000, p. 148). Pope argues that by shifting the focus of an actor outward toward the other actors on stage that the Meisner method can help overcome the tendency of method actors to be self-absorbed. He claims that this mode of acting is more joyful due to the pleasures of real social contact with the other actors on stage. He identifies two common failings in traditional method acting that this technique can help solve. The first failing is “playing the problem”, in which actors attempt to demonstrate how their characters are feeling or create a “quality” or “mood” resulting in flat performances. Pope’s version of the Meisner method instructs actors to not attempt to display how they are feeling but instead to identify what response or change their words and actions are seeking to elicit from the other actors in the scene. In doing this, the mood of the scene is made manifest in the social fabric of the interaction between actors, rather than in the individual
performances of each player. The second failing that Pope identifies is a tendency for actors and directors to try and pre-define characters as a collection of personality traits. Pope argues that characterization is more effective when seen through the lens of another person. So, rather than trying to perform a character a certain way, a Meisner actor would focus on how he or she perceived and experienced the personality of the other characters in the scene. Pope argues that this focus on the other actor forces Meisner actors to reconceptualise conflict on stage as a “result of two people trying to change each other” (Pope, 2000, p. 156). In this new conception of conflict, actors are instructed to play the scene for “positive energy” instead of negative. This means focusing on how to effectively change the other character, even in brutal, knock-down-drag-out fights.

Meisner’s approach can be seen as a step on the path to more fully realized Outside-In strategies and techniques, such as the language oriented work of Anna Deveare Smith. Smith’s work starts with trying to master the words of her subject, focusing on the details of how her character speaks. This leads to a bodily transformation into that character, a physiological change that is necessary for the production of the language. One of Smith’s best known works is a one-woman show called *Fires in the Mirror* in which she tells the story of the Crown Heights Riots in Brooklyn by portraying a range of people who she had previously interviewed about the events. In discussing her portrayal of Leonard Jeffries, a professor of black studies whose outspoken anti-Semitic views reflected a growing tension between the Black and Jewish communities in New York leading up to the riots, Smith describes this techniques of focusing on the word:

The point is simply to repeat it until I begin to feel it and what I begin to feel is his song and that helps me remember more about his body. For example, I remembered he sat up but it wasn’t until well into rehearsal that my body began to remember, not me, my body began to remember. He had a way of lifting his soft palate or something. I can’t see it because it’s happening inside. But the way it played itself out in early performances is that I would yawn, you know, ’cause he yawned at a sort of inappropriate moment [yawns]. I’ve realized now what is going on. My body begins to do the things that he probably must do inside while he’s speaking. I begin to feel that I’m becoming more like him…

In spite of myself. Many of the characters have chiselled away at the gate that’s between them and Anna. That’s the part that’s very fascinating, challenging, difficult, painful. Psychological technique is built on metaphors for a reason. I believe it’s quite organic. You listen to some of the characters and you being to identify with them. Because I’m saying this stuff over and over again every night, part of me is becoming them through repetition—by doing the performances of themselves that they do.
I become the “them” that they present to the world. For all of us, the performance of ourselves has very much to do with the self of ourselves. That’s what we’re articulating in language and in flesh—something we feel inside as we develop an identity. (Martin, 2002, p. 198)

For Smith, the act of repetition of a character’s language leads to an experience of becoming that person. She views words as a powerful form of action.

Theater is action, but in the beginning was the word. And the word was all. And speech is action. Theater is action, but’s not movies where you see images. The way action happens in theater is through the propulsion of words. The text is spoken to push action forward. You get information about what happened before and what’s going to happen, and people cause action with each other through their words. And on a less obvious level, on a less literal level, there’s a visceral action that’s going on so that the words you hear in the theater don’t just go to your head, but they go into your whole system, and if there’s a catharsis it’s because the words get into you…We all, all individuals, speak our own language. But all individuals have agreed…to participate somewhat in the language of the other, the communal language. Then, either as groups or as individuals, we make our own declarations. We speak English, but we’ve figured out how to do something different with English. We have a special brand of English. And so at the same time that we speak communally, we also speak specifically. (Lewis & Smith, 1993, p. 58)

This aspect of Smith’s work has some interesting connections to Bakhtin’s notion of heteroglossia, the idea that we exist within intersecting fields of discourse and language. One can also see some strong similarities to Meisner’s techniques, in particular his infamous repetition exercise in which actors repeat the same phrase back and forth for extended periods of time.

These approaches lay a foundation for my interest in Outside-In techniques within the theatre. In the following sections I will focus largely on the ways in which contemporary approaches to the Method (and even improvisational theater) use Outside-In techniques to elicit cognitive transformation.

2.4.3. Sensory Work: A Contemporary Approach to Stanislavski

One of the theorists whose I’ve found most influential in this regard is Kurt Daw, who frames his teaching method as a clarification of Stanislavski’s System (Daw, 2004). Daw seeks to move away from ambiguous and metaphorical explanations of Stanislavski’s work and instead incorporates insights from contemporary psychology, philosophy, artificial intelligence, neuroscience, and cognitive science to attempt to unpack why and the principles of the System work. He argues that Stanislavski’s System intuits and
anticipates many truths of human embodiment and cognition, while lacking the vocabulary to fully articulate them. He breaks the System into a 10 part outline, comprised of:

1. **Relaxation.** Learning to relax the muscles and eliminate unnecessary physical tension while performing.

2. **Concentration.** Learning to think like an actor in an alternate perceptual mode and to respond to the stimulus of one’s own imagination.

3. **Work with the senses.** Discovering the sensory base of the work: learning to memorize and recall sensations, often called sense memory and/or affective memory; learning to work from a small sensation and expand it, a technique Stanislavski called “spheres of attention.” Discovering the sensory basis of both physical feeling and emotional feeling and their relationship.

4. **Sense of truth.** Learning to tell the difference between the organic and the artificial; Stanislavski believed that there were natural laws of acting, which were to be obeyed.

5. **Creating given circumstances.** Developing the ability to use the previous four skills to create, physically and emotionally, the reality of the world of the play (the circumstances given in the text by the director) through true and organic means.

6. **Contact and communication.** Developing the ability to interact with other performers spontaneously, and with an audience without violating the world of the play.

7. **Units and objectives.** Learning to divide the role into sensible units that can be worked on individually, and developing the ability to define each unit of the role by an active goal desired by the character rather than as an entirely literary idea.

8. **Logic and believability.** Discovering how to be certain that the sum of the combined objectives are consistent and coherent and that they are in line with the play as a whole.

9. **Work with the text.** Developing the ability to uncover the social, political, and artistic meaning of the text and seeing that these ideas are contained within the performance.

10. **The creative state of mind.** An automatic culmination of all the previous steps. (Daw, 2004, pp. 19–20)

This catalogue of the Stanislavski approach might be viewed as a list of specific literacies and skills needed by actors in order to play a character for an audience. There are several concepts in this list that recur throughout discussions of the Method. Most important are the notion of given circumstances and the creative state. Game players controlling a character need not acquire all of these skills; they are their own audience (in single player games) and so need not be concerned with how the character appears, only how it feels.
The increased mediation of games bootstraps a lot of the creative work needed to create given circumstances and bounds the choices available to players in useful and interesting ways. There is much, however, to be gained by trying to further develop player literacies in some of these areas, such as contact and communication.

Perhaps most important to understanding Daw’s relevance to Outside-In transformation is his re-imaging of sensory work. Drawing heavily on Roger Sperry’s work in neuroscience, Daw describes a model of cognition that is heavily grounded in embodiment. He visualizes it as a pyramid:

![Daw’s Pyramid of Thought](image)

**Figure 10  Daw’s Pyramid of Thought (Daw, 2004, p. 32)**

Daw situates sensory perception at the bottom of the pyramid, and argues that the majority of an actor’s mental resources are devoted to “monitoring and observing [her] surroundings through [her] senses” (Daw, 2004, p. 32). Actors must be aware of this layer because of the ways in which performances take place in “a consciously self-created and entirely artificial environment”, which Stanislavski termed the “given circumstances” of a
scene (Daw, 2004, p. 32). The next layer of Daw’s pyramid considers how social interaction occupies a significant part of an actor’s mental life, requiring ongoing attentiveness to the actions and responses of other actors on the stage. Daw argues that it isn’t until language comes into play at the verbal layer that an actor becomes self-aware, but he believes that work with language is of less importance to an actor than work with the senses. Finally, at the top of the pyramid is logical abstract through, which Daw thoroughly deprioritises, and often seeks to avoid entirely through his work. Daw’s teaching techniques reflect this pyramid by emphasizing sensory work as a dominant skill for an actor entering into the present tense of a play. He describes this as “experiencing your character in the first person (I am doing this) instead of in the third person (Hamlet would do this).” (Daw, 2004, p. 44) This sensory work is a form of Outside-In performance: it emphasizes “listening with all the senses” to create a mental attitude that Stanislavski described as the creative state.

2.4.4. The Creative State and Dual Consciousness

Acting is a craft, and like any craft, it is comprised of specific techniques and skills that may be practiced and perfected. It’s essential to recognize that much acting is about learning the skills of the craft of acting, rather than about some ephemeral or mystical “talent”. There are systematic ways to understand the work that an actor does and the tools at an actor’s disposal in order to accomplish that work. Kurt Daw breaks these down into a series of seven lessons. The first four lead up to a solo performance while the final three are needed for the performance of a full scene:

- **Relaxation.** Getting physically and mentally ready to act by eliminating distractions and excess baggage.
- **Actor’s concentration.** Learning to recognize, induce and control the actor’s perceptual mode, and how to use this creative state.
- **Creating given circumstances.** The most common definition of acting is ‘living truthfully in imaginary circumstances.’ This lesson teaches you how to leverage the creative state to help create a physical and emotional reality on stage.
- **Adding speech.** Learning to add the element of speech without shifting back into the wrong mental model…
- **Creating a relationship.** Using the previous skills while interacting with another actor.
- **Making Choices.** Living in the moment through the element of choice.
• *Working with a text.* Understanding the script and how to analyze it. (Daw, 2004, p. 12)

Daw discusses the mental space that an actor inhabits in terms of the “creative state”: a state of mind in which the actor may seamlessly act as though he or she is the character. The creative state has many of the same markers as Csikszentmihalyi’s flow state (Csikszentmihalyi, 1990), and Keith Johnstone’s trance states (Johnstone, 1992). Daw describes this state in terms of a “spacey or floating” sensation characterized by the “dropping away” of one’s inner monologue; a “lost sense of time” and a lessening of urgency; a feeling of intense concentration, and a profound experience of pleasure and well-being (Daw, 2004, pp. 50–51). To arrive at this state, Daw uses exercises in which actors focus on everyday objects with intense sensory attention. For Daw, the creative state arises out of direct embodied experience: as manifested in his pyramid of thought. Although he never specifically mentions them, theories of embodied cognition figure heavily into his framing of human experience. He views acting as a process of recreating this complete pyramid of lived experience, within the artificial confines of a performance.

Benedetti also connects the mental state of an actor with an embodied immediacy that he connects to childhood make believe play. He sees acting as a process rediscovering the “natural integration of mind and body that you enjoyed as a child, when ‘making believe’ was a total and natural process” (Benedetti, 1997, p. 9). He also invokes the term “creative state” in connection to the process of becoming uninhibited and unjudgmental and argues that actors need to work to overcome their internal tendency toward censoring their internal child. At the same time, he recognizes a need for attention to the craft and process of acting that is aware of the need to play to an audience. He asks if it is possible to be simultaneously “engrossed in the action and world of your character, while simultaneously being aware of the demands of performance and making the artistic choices required to express your action in a public form worthy of your audience’s attention” (Benedetti, 1997, p. 78). His answer to this question is the notion of *dual consciousness*, by which an actor can function at multiple levels simultaneously. Other acting theorists have discussed this dual consciousness in terms of a cognitive paradox, in which the actor must inhabit two mental states simultaneously. Peter Lobdell writes:

> First, the Method supports actors’ abilities to live actively in the center of a paradox—namely, they are at once the character and not the character. They must live simultaneously within the imaginary given circumstances of the play and on the actual stage—allowing both and denying neither.
Second, the Method trains actors to invent behavioural metaphors that illuminate their characters. Strasberg’s assertion that concentration is the key to what has been loosely thought of as imagination is central to my argument. I will frame my position around an extended discussion of actors’ imaginative use of their senses. (Lobdell, 2000, p. 180)

Lobdell also draws a strong connection between sensory work and the creative state, although his perspective is more grounded in Strasberg’s version of the Method, which emphasizes the internal life of the actor. Lobdell contends that the sensory work of actors is an inherently private experience, that it is not necessary or appropriate for an actor to disclose the sense memories or experiences he is drawing on to inform his experience of a scene. Lobdell encourages a blending of imaginative memory with real experiences, constructing a hybrid attention that shifts fluidly from the current circumstances on stage, the knowledge of the script, and the imagined sensory metaphors that the actor is using to augment her experience of the scene.

The paradox described by Lobdel and Benedetti’s notion of dual consciousness have some useful overlaps with Mackey’s notion of the subjunctive mood and Murray’s concept of active creation of belief. All of these phenomena require a participant in a fictional world to simultaneously deny the logic of the “real world” along with any metafictional knowledge that it might entail, and instead embrace the truth of the imaginary world.

2.4.5. The “Illusion of the First Time” and the “Magic If”

Non-actors are not accustomed to thinking about acting in terms of choice. Acting certainly takes place within a set of highly ritualized constraints imposed by the playwright in the form of the script, the director in the form of the staging directions, and the technical configuration of the stage, sets, and props. However, Daw identifies choice as lying at the core of an actor’s practice. According to Daw, acting is about making the choice that the character is making, as if for the first time. This type of preordained choosing resembles the imaginative immersion of the “willing suspension of disbelief”. Daw describes this in terms of creating a sense of life on the stage, as if the action playing out on the stage is “spontaneously created at the instant the audience sees it” (Daw, 2004, p. 10).

Actors create this sense of life not by manipulating appearances, but by experiencing the action as it occurs. They are in the ‘here and now,’ a state where concentration on the details of the moment preclude the distractions of the past or future. In this sense, they have a great deal in common with those other ‘players,’ athletes. (Daw, 2004, p. 10)
For an actor, one pleasure of playing a role is experiencing making the choices of the character within the moment, as if they were new. When done right, a performance is experienced as spontaneous and alive. To create this “illusion of spontaneity”, actors are taught to choose their actions fully and completely every time they enact them – to fully commit each action as-if he or she means it, even in situations that are highly scripted and rehearsed (Daw, 2004, p. 129). Daw teaches this by having actors perform scenes under a number of unusual seeming conditions. In one exercise, he instructs actors to consider not saying each line, before choosing to deliver the line. By “fully choosing” his actions, an actor commits to the meaning of those actions, as if he were experiencing them for the first time.

Benedetti also regards “artistic choices” as the heart of the acting process. He frames this in terms of the “Magic If”: actors playing roles are making choices constantly as if they are the character. These are deeply meaningful choices, even though they are within the confines of a scripted set of events. This notion of as if is key to much acting theory. It forms the core of Benedetti’s five steps of the acting process:

1. You put yourself into the circumstances of your character as if it were your own circumstance;
2. You experience the needs of the character as if they were your own needs;
3. You allow yourself to form the same objectives the character chooses to satisfy those needs, and to care urgently about them as if they were your own objectives;
4. You allow yourself to do the things (the actions) the character does in order to try and achieve those objectives as if they were your own actions;
5. If you do all this, simply and completely, you begin to experience a natural process of transformation (the ‘magic if’). A new version of yourself, a new ‘me,’ begins to develop according to the same principles by which your personality developed in life. (Benedetti, 1997, pp. 81–82)

For Benedetti, the process of transformation follows the process of commitment to the character and to his or her actions. An actor need not first fully imagine herself to be the character, she simply needs to agree to accept the character’s needs as her own and perform the actions from which the transformation will arise.

Your experience of your character’s significant choices is the mechanism by which the Magic If produces transformation. When you have entered
into your character’s circumstances as if they were your own, felt their needs as if they were your own, and made the choices they make given those needs in those circumstances, then action follows naturally and with it transformation. (Benedetti, 1997, p. 145)

We see a strong connection between the notion of the Magic-If in acting and Mackey’s writing on the subjunctive mode, which engages the fiction as-if it is true. Similarly, Benedetti describes how action can also lead to evoking emotional states in the actor. He writes that actors need not be concerned with playing emotions; rather, they need to play actions and the emotional states will arise automatically from that process. This is a very strong approach to acting as an Outside-In practice: the actions and behaviors of the actor lead to emotional and cognitive transformations into a character. However, perhaps the strongest evidence for the power of Outside-In transformation comes from the historical traditions of Mask work.

2.4.6. Masks and Embodied Knowledge

I first encountered the concept of “Mask Work” in Keith Johnstone’s book Impro: Improvisation and the Theatre (Johnstone, 1992). Johnstone is trained in a tradition of theatrical work using Masks (always capitalized) that he connects back to primordial rituals, but which has been formalized in a variety of traditions including Italian commedia and Japanese Noh theatre. Mask work uses masks (most commonly), but also costumes (as in the case of Chaplin’s Tramp character) as gateways into characters and identities that Johnstone argues exist within all human consciousness at some level. Johnstone describes the experience of seeing oneself in a mirror while wearing a good mask as “disturbing” and transformative, often leading to a “moment of crisis” where one feels that the Mask is going to take over (Johnstone, 1992, p. 151). He writes that “in a Mask class you are encouraged to ‘let go’, and allow yourself to become possessed” by the character (Johnstone, 1992, p. 151). Johnstone cites Stanislavski, who also wrote about the mask state in Building a Character, in which a student discovers a character in himself through the (mis)application of stage makeup, who describes the experience in terms of divided consciousness. Mask work is often described in terms of trance. Johnstone writes about a number of actors who report dual states of consciousness: “they speak of their body acting automatically, or as being inhabited by the character they are playing.” (Johnstone, 1992, p. 151) He argues against the idea that a trance state somehow disconnects one from reality, and uses game play as an example of a form of trance in which the participant...
is deeply engaged in the present moment.

In ‘normal consciousness’ I am aware of myself as ‘thinking verbally’. In sports which leave no time for verbalisation, trance states are common. If you think: ‘The ball’s coming at that angle but it’s spinning so that I’ll anticipate the direction of the bounce by...’ you miss! You don’t know you’re in a trance state because whenever you check up, there you are, playing table tennis... (Johnstone, 1992, p. 153)

He connects this trance state of a number of spiritual practices, describing Maya Deren’s experience of voodoo ceremonies in Haiti, and other ecstatic religious practices such as the possession of priestesses at Delphi in ancient Greece. He also connects it to more recent practices of hypnosis. Crucial to Mask work is the surrender to an external influence, which allows the actor to be transformed. It is important to Johnstone that a student doing Mask work not force the change, and he argues that it is better for the student to stop “thinking” and instead act from intuition (Johnstone, 1992, p. 167).

Johnston’s Mask work has clear connections to the techniques Daw and Benedetti describe to put actors into the “creative state”. Daw discusses working from a sensory state in which verbal thinking is suspended (Daw, 2004), while Benedetti describes a state of dual consciousness in which the actor suspends her own desires and commits to acting as if the character’s desires were her own (Benedetti, 1997). Johnstone’s discussion of trance states also has some strong resonances with Csikszentmihalyi’s descriptions of the flow state (Csikszentmihalyi, 1990).

This type of Outside-In work is a highly literal approach to transformation, and it has some interesting implications when considered in a context of digital games. Murray equates avatars with masks, which she identifies as “threshold markers” that help players negotiate the boundary between the ritualized symbolic world of the game and their ordinary lives (Murray, 1997, p. 113). What are the connections between the trance of an actor and the trance of a player experiencing immersive flow? Perhaps more importantly, how can we understand the relationship between the embodiment of an actor when transformed into a character and the embodiment of a player in a digital narrative?

Performing arts theories and practice have long been concerned with embodiment, with an emphasis on sense memory, somatic awareness, and proprioception. Acting theorists Lesa Lockford and Ronald Pelias argue that actors draw on “performative knowledge” that is rooted in their bodily engagement in the world (Lockford & Pelias, 2004). They hold that this knowledge arises from the body and the mind simultaneously. Performance, as they
view it, is and “epistemic” act that is “written on and created through the body” (Lockford & Pelias, 2004, p. 432).

This framework is both epistemic and aesthetic, drawing on embodied performance as the basis for knowing and for creating. Their term for this process is \textit{bodily poeticizing}, and they use it to encompass knowledge that is “intuitive, somatic, affective, and cognitive”. They focus on examples of performers in improvisational situations due to improv’s unique demands.

Improvisational moments are engaged through an ongoing process of negotiation and coordination, through a positioning and repositioning of performers and their characters, which is often done in an instant. Adapting to emergent circumstances, these performers are called to be aware communicators who can draw upon their cognitive, affective, and intuitive abilities—sometimes with great urgency—in order to absorb interaction details, create characters, and establish relationships. Establishing a communicative connection they must listen to each other and adjust their thinking and behaviour accordingly. They must incorporate new information spontaneously while also keeping an eye on producing a coherent narrative. They must be artists with expressive bodies who can open creative possibilities for each other, who can push against the expected, and who can account for their double identity. (Lockford & Pelias, 2004, p. 434)

This description of improvisation incorporates vocabulary which should be familiar to researchers of Interactive Narrative. This quote also illustrates why I think that improv is a dead end for designers of AI narrative systems: it demands a set of advanced human communicative competencies that have eluded computer science for years. However, setting aside how difficult (and human) improvisation is, the framework of knowledge described by Lockford and Pelias provides valuable insight into the relationship between the body, the senses, and the mind when an actor is performing. In the table below is a collection of questions that they ask about performers under each of their five categories:

<table>
<thead>
<tr>
<th>Knowledge Type</th>
<th>Questions Asked of Performers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>&quot;Are the actors engaged in an ongoing process of negotiating and coordinating their characters and themselves through interaction? Do the actors seem connected, listening to and incorporating what each other is saying? Are they adjusting their thinking and action according to what they are hearing? Are they producing a coherent story?&quot;</td>
</tr>
<tr>
<td>Playfulness</td>
<td>&quot;Are the actors open to possibilities? Are they functioning with spontaneity and imagination? Are they playing with language? Are they recognizing linguistic and social constraints? Are they working within the limits of the given circumstances? Have the actors moved beyond established patterns to the ‘intricacies’ of the scene?&quot;</td>
</tr>
<tr>
<td>Sedimentation</td>
<td>&quot;Are the actors relying upon lifetime structures of learning? Are they trusting their bodies, following their impulses, paying attention to what feels right? Have they become reflective about their&quot;</td>
</tr>
</tbody>
</table>
hidden, tacit knowledge? Have they considered the degree to which their sedimented behaviors match those of their characters?"

<table>
<thead>
<tr>
<th>Sensuality</th>
<th>“Are the actors’ senses alive, ready, actively engaged? Are the actors taking in what they need? Are the actors feeling with their bodies? Are they open to the pleasures of sensory response?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerability</td>
<td>“Are the actors willing to put themselves at risk? Are they willing to make difficult situations work? When feeling vulnerable, do they have the ability to keep focus on what needs to be accomplished? Are the actors willing to trust one another?”</td>
</tr>
</tbody>
</table>

Two of these forms of knowledge, sedimentation and sensuality, merit particular consideration here. Sedimentation refers to the ways in which experience and knowledge accumulates in the body through the course of our daily lives. This is a form of tacit and intuitive knowledge that arises out of repeated experiences in the everyday world.

Much like baseball players, who after years of playing the game know as soon as the bat hits the ball where to go on the field, performers know after years of performing where to go to make a scene work...Their knowledge is habituated and embedded in the body; it comes from intuitive sedimentation. It is a knowledge that draws upon a place of artistic grounding, a place where performers can call upon past endeavors to inform their choices. It is a place where performers sense what is right without, perhaps, being able to explain why...This place of tacit knowledge is essential to bodily poetics and to the work required in moments of improvisation...It is a wealth of accumulated bodily knowledge that allows them to rely upon their incubated sensibilities, spontaneously. (Lockford & Pelias, 2004, pp. 436–437)

Sedimented knowledge arises out of experience within a domain, rather than out of some inherent or universal human experience. It is a form of “know-how” that often precedes linguistic articulation. If we apply this as a lens to game studies, we can see evidence of this at work in the fundamental embodied literacies that experienced players bring to games.

Sensuality refers here to the process of drawing on the phenomenological awareness of the body’s senses and on sensory memories to inform a performance.

Actors may access their reservoirs of knowledge through keying into their sensuality...they depend upon sense and muscle memory...This sensuality, as we have noted, is first a kind of awareness of their bodies that enables actors to forge a communicative exchange and to discover appropriate responses. This bodily sensitivity, this sensory alertness, this physical presentness is a source of knowledge that fuels the dynamics of an improvised moment. (Lockford & Pelias, 2004, p. 437)

These approaches to embodiment and sensory work have powerful resonances with the work that I’ve already presented on embodied interaction and narrativised interface. If we look at some of the lessons from my previous work on *The Reading Glove* we can see...
that the object interfaces that led to a sense of “embodied character” were drawing heavily on sedimentation and sensuality. From a theatrical standpoint, objects or props have affordances that elicit character behaviors in ways similar to masks and costumes. They are held a certain way, they connect to a wide range of social and cultural scripts, and they provoke embodied reflections through touch and sense memory. They are another example of Outside-In processes in the theater.

Eliciting bodily memory is a powerful tool that bridges scripted theater with improvisational theater. By invoking Johnstone, I have already made a leap back to improvisational techniques, in part because these techniques take the form of externalized embodied scripts. In the next section I will consider a technique from a theater form where improvisation and scripted theater converge to create experiences that are emergent, participatory, and highly structured by pre-existing scripts.

2.4.7. **Interactive Theater, Dramatic Offers, and “Backleading”**

In improvisational theater there is the notion of the “dramatic offer”, which is anything that is communicated in a scene that an actor may respond to. Usually dramatic offers take the form of explicit statements, and in improvisational theater are used to establish the “given circumstances” in which the performance takes place. An actor might say “I was so sorry to hear about your accident” to a fellow improviser, an offer which provides him an opportunity to invent further details of the scene. In improvisational theater it is considered bad form to refuse an offer, a practice known as “blocking”. Blocking breaks the momentum of the scene, and is a violation of the trust needed to improvise successfully. An actor who says “What accident? I’m fine!” is blocking the offer. His response implies that his co-performer is either lying or mistaken, and it undermines the creation of coherent given circumstances. Instead of blocking, improvisers are trained to accept dramatic offers and extend them in interesting directions. Given the offer of concern over an accident, an actor might respond “It’s alright…I didn’t need my eyebrows anyhow,” thus expanding on the reality implied in the first offer and providing a new detail to the first actor as a counter offer.

Learning how to successfully accept and extend dramatic offers can take years, and requires a significant amount of trust between improvisers, making it difficult to adapt improvisational techniques into interactive digital storytelling.
Interactive theater is a form of practice that occupies a middle ground between purely improvised theater and scripted drama. The most recognizable example of this form is interactive “dinner theater”. Interactive dinner theater is comprised of a cast of trained actors performing a set of open-ended scripts in a venue like a wedding or banquet hall. The actors are all aware of the scripts for the show, but the audience is not. Occasionally, an actor will pluck an audience member from his seat and incorporate him into the action of the show. Audience members are suddenly transformed from passive spectators to active participants in the show. Most audience members lack the training or the feeling of safety needed to improvise successfully. Without a script to follow they panic when put on the spot. Interactive live theater practitioners regularly confront this problem and have developed a repertoire of techniques intended to support and encourage audience participation. Collectively, these techniques are known as “backleading” (Wirth, 1994). Backleading allows trained improvisers to guide, encourage, and support the participation of untrained interactors. When done well, the interactor never even realizes that he or she has been led, cued, and scripted. Instead, the interactor experiences a sense of contribution that is seamless and pleasurable. Backleading, and indeed interactive theater in general, has much in common with the Jeepform LARP practices: it relies on telegraphing even more heavily than Jeepform, due to an imbalance of transparency. In interactive theater, the actors all know what is going on ahead of time, and so they benefit from full transparency, while the audience remains in the dark. Backleading techniques use telegraphing to communicate necessary scripts to audience members in the moment. Interactive acting theorist, Jeff Wirth, has articulated a number of these techniques, including cueing, endowment, blind offers, steps, primers, and strokes.

2.4.7.1. Cueing
The most overt form of backleading involves simply providing the participant with direct instructions about what to do. This can be overt, done in full view of the rest of the audience, such that the participant is following a set of public directions, or it can be covert, communicated to the participant via backchannels so that the participant's eventual action appears spontaneous to the rest of the audience. Wirth also describes a technique for cueing participants called “cuing by objective”: a method in which a performer gives the spectator a goal and then leaves it up to him or her how to interpret and achieve that goal.
2.4.7.2. Endowment

Endowment is a mechanism for encouraging participation by treating a participant as though he or she possesses a particular set of qualities or attributes. Endowment creates a framework of given circumstances that helps fill in gaps of knowledge for the participant. Wirth describes several specific methods of endowment that are helpful, and which I will paraphrase here:

- **Character Identity**: Let participants know who they are by providing character details such as a position, role, or station in life for them to enact.
- **Character Personality**: Treat participants as though they have specific personality traits, abilities, attributes, and qualities.
- **Relationships and “trump cards”**: Endow participants with something that gives them agency or power. Giving a participant useful or heroic traits gives them something to feel good about enacting, and makes them more willing to participate.
- **Objectives**: Give participants a motivation to enact within the scene.
- **Credit**: Give participants credit for a deeper knowledge of the scene and given circumstances than they might actually have.
- **Don’t ask, tell**: Avoid ambiguous questions that can cause a participant to panic, and instead include clear dramatic offers, even in questions.
- **Prevent Participant “blocking”**: Don’t ask participants easily blocked yes or no questions, but instead endow them with information through questioning statements such as “I have heard that…” or “It’s my understanding that you…”
- **Make Assumptions**: Making an assumption about participants creates given circumstances that can support their performance.

2.4.7.3. Blind Offers

Participants in an interactive drama often make offers unconsciously, through their reactions to the performance or their nonverbal behavior cues. These unconscious offers are “blind offers”, and they may be incorporated back into the story by a skilled actor. By transforming a blind offer into a “defined offer” an actor can make a participant feel more like part of the story.

2.4.7.4. Steps

Steps are incremental opportunities for participants to engage with a performance, ultimately leading to more active play. Wirth includes five sub-techniques for this form of backleading:
• **Start with the physical:** It is far easier for spectators to begin with physical tasks. That is because they perceive a physical task as being more within their realm of capability than coming up with something to say. Spectators feel less on the spot when they have been given a simple task to accomplish.

• **Start small to build big:** Don’t ask spectators to step too far outside their comfort zones at first. If you want him to run, start by getting him to walk quickly, jog, trot, and then run.

• **Use the buddy system:** When backleading spectators to do something challenging, you set them more at ease if you do it with them. The spectator who won’t yell alone may be willing to yell along with you.

• **Use momentum:** Momentum can also help a spectator take a big step. Here’s how: Build the momentum of what is going on until it is really rolling; then draw the spectator into the action without giving her time to stop and think. It’s like running and jumping into a cold pool instead of going in one foot at a time.

• **Expect a lot from them:** Small steps don’t mean small expectations…Inside of everyone is stored the ability to play…When you offer steps to spectators, you are giving them the opportunity to remember that they know how to play. (Wirth, 1994, pp. 118–119)

### 2.4.7.5. Primers

Primers are more advanced techniques for eliciting participation from interactors. Primers work by creating opportunities for participants to fill in the gaps of a scene, by eliciting information or creating opportunities for the participant to take a position of responsibility within the scene. Wirth describes too many primers to go into detail here, but their names can provide some insight into the types of support they provide: view and resolve; tell me about it; multiple choice questions; potent questions; fill in the blank; connect the dots; get them to help you; actor failure syndrome; title topics; gossip; secret objective; routines; play off spectator expertise; play on universal themes (Wirth, 1994).

### 2.4.7.6. Strokes

The final technique for backleading discussed by Wirth is “strokes”: essentially diegetic rewards to the self-esteem of a participant who succeeds at contributing to a scene. When an interactor successfully makes an offer for the first time, or creates an interesting character detail, the actor strokes his or her ego, while also building new details into the scene. The idea here is to increase the confidence of the participant and encourage even more active participation.

Wirth’s strategies for backleading in interactive theater are all designed to support a
transformation away from passive audience member and into active participant in a dramatic scene. Wirth’s fundamental assumption is that participation in a drama is a form of play and that an audience member need not be formally trained in improvisation in order to enjoy this play. These strategies allow those members of the drama who are trained to take responsibility for the scene, while providing the emotional support and creative constraints needed to encourage audience participation.

2.4.8. Conceptual Overlaps with Speech Act Theory and Commitment to Meaning

For the most part, the literature on speech act theory that I outlined above and the literature on method acting that I have referenced do not actively engage with each other. However, there are some interesting overlaps that occasionally crop up. In particular, David Saltz uses speech act theory to consider the ability of an actor to commit to real communicative meanings while on stage. He challenges Searle’s widely accepted theory of fictional discourse, which asserts that due to the fictional frame of the theatre, any speech acts on stage lack any illocutionary force.

The illocutionary force of a speech act is the interpersonal action that a person carries out in the very act of making an utterance. For example, in the appropriate context, a judge who declares ‘I sentence you to ten years hard labor’ is performing the illocutionary act of sentencing a prisoner;....someone who utters the words ‘please pass the salt’ is making a request...What determines an utterance’s illocutionary force is not the speaker’s actual intention but the listener’s interpretation of the speaker’s intention—along with a variety of other factors, such as the speaker’s authority to issue the speech act in the first place. Ultimately, the illocution is a social fact, not a psychological one. As Austin puts it, we do things with words. The action is not something that happens between the lines, or beneath them in a ‘subtext.’ The action is the utterance. Speech act theory, then, is much closer in spirit to Adler and Meisner’s version of the Method, which follow Stanislavsky’s later approach in emphasizing interpersonal action, than it is to Strasberg’s version, which emphasizes the actor’s internal states. (Saltz, 2000, pp. 64–65)

Searle, on the other hand, argues that actors only “pretend” to perform illocutionary acts, and that actors on stage are disengaged from all real speech acts. Saltz gives the example of an actor requesting a backrub from another actor onstage, to illustrate why Searle believes that speech acts fail in the theatre. He identifies two obstacles to the authenticity of staged speech acts. First, they fail the sincerity condition, since the actor need not necessarily genuinely desire the outcome requested by the speech act. Second, they are
subject to a problematic chain of causality since the response of the second actor is
stipulated, not by the speech act of the first, but by the script to which both are referring.

To overcome these obstacles, Saltz turns to games for inspiration. He introduces the
notion of “borrowed intentions”, in which the actor is acting on behalf of the needs and
desires of the fictional character. Using games as a frame for this, he writes:

It is not only during dramatic performance that one temporarily adopts
another person’s interests. The actor’s situation is, in fact, analogous to
that of an employee, or more closely, a player in a game. Game players,
like employees, adopt a set of borrowed intentions that govern their
behaviour only as long as they are in a specific role. The basketball player
has no need to ponder deeper motives, and the chess player need bear no
particular grudge against the opponent’s king. In a game, however, the
intentions adopted do not belong to another agent, even an institutional
one, such as a company. Chess players do not play on behalf of anyone
else or even of the ‘game of chess.’ They simply play according to the rules;
the motivation is built into the game. (Saltz, 2000, p. 70)

Through the use of this game model he is able to argue that speech acts in both
improvised and scripted theatre have real illocutionary force.

I am positing a game model of dramatic action, wherein actors do not
merely imitate actions as they would be performed offstage but really do
commit illocutionary acts within a theatrical context. These acts function
just like illocutionary acts in any other context, with one exception: Their
conditions of satisfaction are determined with respect to borrowed
intentional states, specifically game intentionality. Because they act from
game intentionality, actors remain committed by their stage actions—
promises, commands, assertions—only while they are action within their
stage roles, just as a Monopoly player is not committed to buying
Boardwalk after the game ends. (Saltz, 2000, p. 73)

In this sense, Saltz has arrived at a model of dramatic action that is not dissimilar to
Huizinga’s Magic Circle in game studies (Huizinga, 1949). He compares it to the types of
free-form role-playing that children often play, and makes the obvious connection back to
improvisational theatre as a form of play. He argues, however, that there are challenges
in incorporating this model into scripted theatre:

Actor training in the Stanislavsky tradition is geared toward achieving the
spontaneity of improvisation in the performance of scripted plays. The
challenge for these techniques is first to find ways for the actors to move
beyond the utterance and find the illocutionary point of the dialogue they
perform and then to balance the desire for spontaneity with the demand for
control and repeatability. The game model proposed here suggests that the
objective is, in fact, possible but also identifies the deep obstacles to
obtaining that goal. It provides support for the intuition that performances
sometimes, but only sometimes, achieve a kind of theatrical truthfulness—that sometimes something real is happening on stage. (Saltz, 2000, p. 75)

He argues that rather than limiting acting to strict realism, it instead allows acting to “transform whatever social reality the actors choose to portray into a living reality, at least for the duration of the performance event.” (Saltz, 2000, p. 77) By linking together speech act theory, borrowed intentions, and method acting, Saltz provides a roadmap for how we might build a theory of character performance in games that draws on these distinct traditions.

2.5. Literature Review Summary

The literature presented in this chapter covers a very wide range of disciplines and conceptual territories; however, broadly speaking there are three structural categories that it falls into: digital narrative and game studies, studies of agency and studies of transformation. The first of these areas is by far the most broad and inclusive. It introduces the concepts and the terminology that my work is built on. The second two categories each engage with one of those concepts, and connect it to bodies of literature from outside of the canon of digital games research.

- **Digital Narrative and Game Studies:** In the first section of this literature review I presented a wide-ranging history of the central concepts surrounding digital narrative and games, and specifically engaged with the debates around story and interaction within the Interactive Digital Storytelling community. I grappled with one of the core problematics of interactive storytelling: the notion that interaction is fundamentally at odds with narrative. Drawing on theories of new media, I argued that this dichotomy has created an artificial conflict that leads the design of digital narratives into a dead end. To escape this conflict I proposed that we move away from the term “interaction” and all of its attendant assumptions, and instead consider “participation” as a way to open up new design spaces for digital narratives. I then dug more deeply into two specific areas of literature around agency and transformation.

- **Studies of Agency: Speech Act Theory:** Drawing on frameworks from **speech act theory**, I looked at how this notion of commitment to meaning manifests in contemporary story-based games. How do designers respond to the commitments of the player, how are interactions imbued with communicative meaning, and in what ways does this phenomenon break down?

- **Studies of Transformation: Performing Arts Theories:** Drawing on theories of method acting training and scripted theatre, I identified some
strategies for character transformation in theater that are similar to those used in story based games to engage players. In particular, games use avatars in ways similar to the ways in which method actors use Masks; bodily posture and gesture exercises operate on the same principles that are at play in gestural and embodied game interfaces; and the actorly notions of “the creative state” and the “magic-if” have compelling overlaps with the notions of “flow” and “the subjunctive mode” as applied in game studies. Techniques for backleading participants in interactive theater parallel techniques for managing players in standard tabletop RPGs and telegraphing techniques from the Nordic LARP style known as Jeepform. I will be looking for how these techniques manifest in the games I study.

These three high-level constructs allow me to focus on these specific phenomena during my close reading process. It is my expectation that as the analysis progresses I will be able to refine these constructs into a more coherent theoretical framework, grounded in evidence drawn from the games that I am playing. These constructs raise some important questions about the design and experience of digital narratives. In the next chapter I will take these initial research areas and questions and shape them into proper analytical lenses.

It is already apparent to me here that the last two constructs have far more specificity and utility than the first, which really isn’t an analytical lens, so much as a collection of foundational concepts that frames this research. In the following chapter I will discuss my methods and approaches, and will work to clarify these constructs into practical tools for undertaking a close reading of the three Mass Effect games.
3. Methodology

In the previous chapter, I described the foundations of my research perspective, which culminated in several preliminary theoretical constructs. These constructs can be roughly divided between the three areas of literature, game studies, speech act theory, and theater studies, which provide the theoretical basis for my work. The remainder of the dissertation is a takes the form of a hermeneutic exploration in which I apply these analytical lenses to the Mass Effect trilogy of games. In doing so, my goal is to not only refine each of these constructs into more fully realised analytical lenses, but to also develop a rigorously grounded framework for understanding digital narratives that can be used to inform and guide future analysis and design.

Game Studies as a field is young when compared to other media studies disciplines, such as literary theory and film studies. Coming of age after the postmodern turn, games research has often struggled to balance the demands of modern constructivist perspectives on knowledge creation (Denzin & Lincoln, 1994) against the long-standing traditions of humanities scholarship. Consequentially, games research is one of a new breed of natively interdisciplinary fields, with all of the challenges and opportunities that this entails. While there is much to be said for being able to draw on different methods and perspectives (Creswell, 2003; Creswell & Clark, 2007), this inherent interdisciplinarity entails the games scholar in a unique balancing act between often contradictory epistemological positions. This dissertation does not undertake any such methodological juggling acts: this research is firmly grounded in the humanities tradition of close reading, and the practices of philosophical hermeneutics.

3.1. Hermeneutic Inquiry and Close Reading

While there is a rich tradition of critique and hermeneutic scholarship within game studies, very little has been explicitly said about the methodological and epistemological practices involved in applying this approach to game analysis. In this chapter I explore the historical and conceptual roots of hermeneutics as a broad intellectual tradition, and close reading as a specific literary approach, which I have adapted for the study of digital games. This overview takes a very quick tour through an intellectual landscape that could easily fill
multiple dissertations, but it should be sufficient to provide a high-level overview of the epistemological foundations of the work undertaken herein.

3.1.1. **Hermeneutic Inquiry and Rhetoric**

Hans-Georg Gadamer, the foremost modern expert on Hermeneutics, provides a detailed history of the field, distinguishing between two historical forms: Theological Hermeneutics and Juristic Hermeneutics (Gadamer, 2006). Both of these forms are concerned with processes of interpretation and rendering informed judgment, upon religious texts and laws, respectively. These critical practices have become central to contemporary hermeneutics as a broader epistemological system concerned with how we can make knowledge claims about a given subject. Hermeneutic inquiry is grounded in the expert interpretation of texts from a given point of view. The inherently subjective nature of hermeneutics is seen as problematic from the perspective of the natural sciences, where objectivity is highly prized. Gadamer, however, argues that subjectivity is essential to hermeneutical understanding:

Philosophical hermeneutics concludes that understanding is in fact only possible when one brings one’s own presuppositions into play! The productive contribution of the interpreter belongs in an indispensable way to the meaning of understanding itself. Certainly philosophical hermeneutics does not legitimize private and arbitrary subjective biases and prejudices, because for it the sole measure which it allows is the ‘matter’ being considered at the time, or the text one is seeking to understand. Certainly the ineradicable and necessary distance between time periods, cultures, classes, races, or even between persons, constitutes a more than subjective moment that imparts life and tension to each understanding. One can describe this as follows: the interpreter and the text each possess his, her, or its own horizon and every moment of understanding represents a fusion of these horizons. (Gadamer, 2006, p. 45)

Gadamer’s use of the term “horizon” here can be traced to the phenomenological work of Edmund Husserl, who studied how our subjective perspectives on the world are “imbued with meaning” (Føllesdal, 2001). Føllesdal describes this in terms of a web of anticipations

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6 Hermeneutics was first applied to philosophical and literary texts by Friedrich Shleiermacher in the 18th century, and later expanded into a broader epistemological system for all “manifestations of the human spirit” by Wilhelm Dilthey (Føllesdal, 2001).

7 Textuality can be broadly construed to apply to any observable or “readable” phenomenon. A strong case has already been made within media studies for the treatment of digital media and games as “texts” to be read (Inman, 2003; Winthrop-Young, 1997).
about the world that goes beyond our sensory awareness of the world to form a horizon, or background, of experience (Føllesdal, 2001).

Gadamer, in his main work *Truth and Method* (1960), and in several smaller works, applies this phenomenological conception of hermeneutics to the subject matter of traditional hermeneutics, the interpretation of texts. Husserl's notion of the horizon becomes particularly important in this enterprise. Gadamer emphasizes that when we read a text, our reading is shaped by anticipations we bring to our reading…A most important feature of Husserl’s notion of *anticipation*, or better *fore-meaning* or *fore-structure*, is that it is unconscious. We are not aware of it, and this is just why it is such a challenge to hermeneutics.

A main task of hermeneutics is to adapt our fore-meaning to the text. We must approach the text with openness, that is with awareness that we have fore-meanings and that the text may have a meaning that is incompatible with our fore-meaning. When we perceive a physical object we adapt our anticipations to the object: we revise anticipations that do not fit until we reach an equilibrium. Similarly, when we encounter a text, we adapt our fore-meanings to the text: we revise our anticipations of what is expressed in the text until we find an interpretation that seems to us to be true or at least reasonable. That is, we adjust our interpretation and we adjust our opinions until we find that we can agree with the text. The criterion of understanding is this kind of ‘fusion of horizons’. (Føllesdal, 2001, p. 377)

This notion of the “fusion of horizons” is the basis for judgements and knowledge claims in hermeneutic practice. A reader enters into a relationship with a text, traversing it for as long as is necessary to reach an equilibrium between his or her own situated subjectivity\(^8\) and the demands of the text. From this position of equilibrium it is possible to render *meaningful judgements* about the text. It is crucial to understand the difference between hermeneutic “judgements” and other forms of knowledge. Judgements are not subjected to the same burden of “proof” that is often required in order to attain validity in other epistemological systems (although good judgements will often incorporate knowledge from these systems into their argument); however, judgements are an actionable form of

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\(^8\) The horizons of the reader can be understood to arise from a wide range of contextual elements including her intellectual history, her mood at the time of reading, and her personal history and situatedness within a broader cultural or historical context. Thus the same reader may approach the same text with radically different horizons in different contexts. Consider, for instance, viewing the film *Die Hard* (McTiernan, 1988) on September 10th, 2001 versus watching it on September 12th 2001, within the emerging context of the September 11th attacks on the World Trade Centre. The horizons of the viewer would be fundamentally altered by the socio-historical context of the viewing. There would suddenly be a looming cultural gap between the cavalier treatment of possible terrorist threats by the police in the film (something that now stands out to me as one of the most grating markers of cultural change in pop culture) and the visceral reality of terror attacks in the real world.
knowledge. Consider the two classical forms of hermeneutics: Theological and Juristic. Each invests an individual or group of individuals with the responsibility to render judgements through a process of interpretation of the law, be it a religious or civic text. Modern theology continues to rely on the hermeneutic exegesis of religious texts as a central epistemological practice, and the US judicial system similarly invests legally binding power in the interpretation of law by both expert judges and representative juries. Even the highest judicial body in the United States, the Supreme Court, issues “opinions” on law: hermeneutically grounded interpretations of legal texts and precedence intended to render judgement rather than establish “Truth”.

Philosophical and literary hermeneutics has roots in two classical intellectual traditions: logic and rhetoric. Of these traditions, Gadamer argues that rhetoric is of greater significance to the practice of hermeneutics (Gadamer, 2006). Rhetoric encompasses and includes other forms of knowing and is concerned with broad claims about values and meaning. While rhetoric is able to make very broad knowledge claims, it does so with a low degree of certainty (especially when contrasted against the natural sciences which make narrower claims with higher certainty). Raymond describes this in terms of nesting boxes:

The nesting boxes represent a hierarchy of certitude, the pinnacle of which is mathematics, as well as a hierarchy of reductiveness, the pinnacle of which is mathematics again. In other words, greater degrees of certitude are always achieved at the cost of reductiveness. Mathematics, as a number of philosophers have observed, may be the only sure form of knowledge, because it is a self-contained system, purely rational, unsullied by the uncertainties inherent in empirical observation. Empirical science is more useful but less certain – more useful because it describes physical rather than rational events, but less certain because its descriptions are always subject to revision imposed by new data, always limited by the inaccuracy of measurements. Rhetoric, applied to the humanities or to any other field, is even less certain than science, but also more useful because it deals with questions that science methodologically excludes: questions about values, ethics, esthetics, meaning, politics, justice, causality involving human motives, and causality involving an indeterminate number of variables. In short, physics can tell us how to build a nuclear reactor, but it cannot tell us whether we ought to build one, or whether, on balance, the costs will outweigh the benefits. (Raymond, 1982, p. 781)

Raymond’s nesting box metaphor is useful when thinking about the relationship between rhetorical methodologies and other forms of knowing. Although his model predates much of the current work on mixed methods research, it is inherently compatible with it,
envisioning humanistic knowledge as a container for more narrow (but precise) forms of knowing, including those methodologies that have come to be classified as Qualitative and Quantitative methods.

Figure 11  A poster from a recent “humanities relevance campaign” at the University of Utah (University of Utah, 2013)

3.1.2. Close Reading and Literary Theory

Within this epistemological tradition I will be applying the specific method of close reading,
a hermeneutic technique developed in literary theory. When close reading was initially formulated by John Crowe Ransom and the other “New Critics” in the late 1930s and 40s (Inman, 2003) it was articulated in opposition to a dominant school of literary criticism that was overly preoccupied with the social and historical contexts in which a work was produced, rather than the work itself.

The New Critical approach suggests more or less that text may be analyzed as an object itself and, thus, that it is best understood in terms of its central elements, like symbol and image—these are, so the thinking goes, what holds any text together. The identification of these elements, then, is close reading, and the implicit suggestion is that history, economy, and other human conditions are less important in any interpretive transaction. (Inman, 2003)

In striving to separate the text from the intentions of its author, the New Critics strove to also attain some form of objectivity in criticism that allowed a work to be understood according to its formal properties (Wimsatt Jr & Beardsley, 1946). The New Critics practiced close reading as a call to return to the text as the primary subject of literary critique, sometimes even to the exclusion of the emotional reaction of the reader. In two semi-infamous essays, Wimsatt and Beardsley described what they called the “Intentional Fallacy” (Wimsatt Jr & Beardsley, 1946), in which they decried the practice of seeking to read for an author’s intentions, and the “Affective Fallacy” (Wimsatt Jr & Beardsley, 1949) in which they attempted to similarly discard the emotional impact of a text on the reader.

We believe ourselves to be exploring two roads which have seemed to offer convenient detours around the acknowledged and usually feared obstacles to objective criticism, both of which, however, have actually led away from criticism and from poetry. The Intentional Fallacy is a confusion between the poem and its origins...It begins by trying to derive the standard of criticism from the psychological causes of the poem and ends in biography and relativism. The Affective Fallacy is a confusion between the poem and its results (what it is and what it does)...It begins by trying to derive the standard of criticism from the psychological effects of the poem and ends in impressionism and relativism. The outcome of either Fallacy, the Intentional or the Affective, is that the poem itself, as an object of specifically critical judgement, tends to disappear. (Wimsatt Jr & Beardsley, 1949)

This formulation is perhaps too extreme. In trying to isolate the text from both its causes and its effects the most strident of the New Critics created an artificial critical vacuum, in which reading a text was isolated from the reader. From an epistemological standpoint, there is something appealing about the semblance of pure objectivity in criticism; however, stripping away the context of a reading and its impact on the reader is neither possible nor
desirable. To do so undermines the project of “fusing of horizons” endorsed by Gadamer that lies at the heart of hermeneutic inquiry. The objectivity advocated by Wimsatt and Beardsley may have been a bridge too far, but it did serve to move criticism back to the text, a move whose importance should not be underestimated. Later work on criticism embraced the unique perspective of the reader (much as Gadamer’s hermeneutics embraces the horizons of the reader), resulting in a softer approach to objectivity. Literary theorist Richard McGuire writes:

...criticism was not simply "New Criticism" and not simply an "objective approach." It was the personal relationship of a reader to the work in any of its many different aspects; the individuality of the reader was what made it valuable....each person must rediscover experience for himself, and bring it back to others. That which is valuable in the world is unique human experience which is offered in its richest semblance to another person, not that the person must accept it as law, but that his own vision may be enriched by having the vicarious vision of another person. (McGuire, 1973, pp. 3–4)

McGuire’s position is in keeping with contemporary approaches to close reading, in which the unique perspective of the reader provides a meaningful interpretative frame for a textual critique. McGuire still sees a role for “objectivity” in close reading practice, but he positions it alongside three other approaches to literary criticism:

These correspond to the areas of experience that literary works are related to. The mimetic approach describes the relationship of the literary work to the world or the “universe” in which the work was conceived or is being read. The pragmatic concerns itself with the effect of the work on its audience. The expressive proposes the study of the relationship of the work to the writer. The objective approach is that which studies the work in and for itself without reference to the world in which it exists, its effect on its readers, or its relationship to the author. (McGuire, 1973, p. 13)

By this reckoning, the New Critics were eager to discard the mimetic, the pragmatic, and the expressive areas of experience, elevating the objective approach to primacy. McGuire instead argues that the goal of a critical reading is to strike a balance between one’s subjectivity and the meanings of the text.

One must always begin by finding out what the work is saying, for the critic is not responsible just to his own mind and imagination, but to the mind of the work he has chosen to study. He has a difficult task; he must maintain a balance between preserving the integrity of the work he is studying and building the integrity of his own ideas in the context of that work. If he abandons the work, he moves into the area of personal subjectivity. He may then produce a personal essay, but it will not be about the literary work in front of him. If he moves to the other extreme, he will be reduced to
paraphrase and summary, and sacrifice the possibility of his new vision of the work to a mere repetition of its contents. (McGuire, 1973, p. 62)

3.1.3. Challenges for Critical Reading

Much work on reading seeks to grapple with the text as a living artifact. The uncertainty of a text is both the source of its richness and a source of difficulty for interpretive epistemologies. In our casual day-to-day experience of reading it is easy to overlook the weird magic that happens when we encounter a text, but reading is uniquely strange and worthy of closer examination. Literary theorist Julian Wolfreys traces the origins of the word “read” to acts of haruspicy, interpreting the entrails of an animal for the purposes of predicting the future (Wolfreys, 2000). He argues that textual citation can be seen as a form of vivisection: the critical reader incises into the work, opens it up to reading, and excises the desired fragment of text for citation.

Reading, therefore, is always—always already—connected with some mystical or perhaps telepathic possibility, with the desire to translate in ways which are not reducible to matters of logic or rationality, so as to make sense of events or, in some other fashion, to make sense of events yet to occur. The question of multiple temporalities conjoint in a single moment is complex and paradoxical. To reiterate, the suggestion is one of transference. The read⁹ of the slaughtered creature becomes, through consideration on the part of the appointed expert, the one who keeps the significance of the signs a secret, transposed onto the mind, into the discourse of that self-same expert, which is then, subsequently, passed on to the rest of the community, digested, regurgitated, disseminated. The read of the animal passes into the reading of the shaman. The material of the innards is internalised in the mind, and made palatable—translated in some manner—for the consumption on the part of others. All subsequent acts of reading therefore seek to retrace the traceries of veins, arteries, vessels, and other means of communicative tissue in the form of textile, textured exegesis. And that we term this exegesis suggests, through its classical form, that we wish to rationalise and distance ourselves from the moment of psychic consumption. The grotesque, corporeal aspect of reading is cleaned up, the act aestheticised, given a refuguration in a clean light. Yet in reading there is still, always, regurgitation. In our acts of reading, research comes back via the bodily ruins we call citations. (Wolfreys, 2000, p. x)

This is a vivid, if somewhat disturbing, image. It can be uncomfortable to think about reading as a violent act performed upon the body of the text or to imagine citations as the extracted remains of the text. And yet, what are citations if not textual remnants, taken out

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9 Wolfreys uses the word “read” as a noun here, representing the viscera of the slaughtered creature from which the act of “reading” derives.
of context, and re-presented (regurgitated?) in service of an argument? What then does it mean to read or to have read a text? Wolfreys grapples with this, arguing that reading is fundamentally paradoxical:

This opening or staging of the aporetic experience in reading is precisely the moment of appearing to want to decide on the undecidable. Such an instance invokes the temporary suspension of reading. With it comes that moment of not reading, which...is in fact the spur to response and responsibility. In the face of the undecidable, what remains except the reading of remains? What remains except the response and, with that, the responsibility, to continue reading? In Beckettian fashion, unable to go on, we go on, the moment of the reading being the retreating horizon towards which we attempt to read. (Wolfreys, 2000, p. ix)

Reading must engage with the ephemeral and ungraspable text via mechanisms that hastily foreclose on the possibilities of the text by rendering judgments via decontextualized, fragmentary citations. As soon as one steps away from a text in order to reflect on what has been read, reading ceases to happen and yet reading entails reflection. This paradox means that having read something is inevitably a shadow of the present-tense act of reading itself.

The bad reader (whom Derrida admits to loving, by the way) is the one who rushes with indecent, even journalistic haste, to decision, to decide on a reading, and thereby have done with reading, once and for all. Bearing this in mind, and seeking all the while to avoid becoming the bad reader, to have the last word or to close the book on reading, how do we read so as to avoid having read? How do we learn to read patiently, rigorously, in such a manner that we know all the while that we have not yet read, we have not yet done (with) reading...all we can do is practise acts of strong reading which will be, inevitably, misreading. (Wolfreys, 2000, p. ix)

Is reading for knowledge, then, a doomed effort? Even as Wolfreys casts a shadow of uncertainty over acts of reading, he also shows us that a reading need not be “closed” in order to have epistemological value. We must make peace with the inevitable uncertainties that come from having read and accept that even in “misreading” there is value. Certainly, there are traditions of criticism that celebrate the contingent, emergent nature of reading. In Chapter 2 I discussed a number of these, including Bakhtin’s notion of texts as consisting of multiple overlapping voices (heteroglossia) and Eco’s conception of texts as being fundamentally open to interpretation by a reader (Bakhtin, 1981; Eco, 1989). Perhaps the strongest claim made to the indeterminacy of meaning in texts is that of Barthes, who, in a line of critique that owes much to Wimsatt and Beardsley’s Intentional Fallacy, is willing to disregard the author entirely in order to elevate the interpretations of
a reader (Barthes, 1977).

Reading, from these perspectives, is neither as simple as it might seem at first glance nor as intractable as it might seem upon closer examination. Acknowledging the contingent and interpretative nature of reading helps to clarify the scope of claims that can be grounded in an act of “strong reading”.

3.1.4. Poetics and Empirical Inquiry in Close Reading

It's essential to remember that in spite of all of the subjective and interpretive challenges entailed in reading, readings are grounded in texts, to which they are ultimately accountable. Close reading is an empirical discipline, in which a reader seeks to explicate some insight from his or her encounter with text. Film scholar David Bordwell discusses this process in terms of seeking to reveal a work’s poetics.

“Poetics” derives from the Greek word poiēsis, or active making. The poetics of any medium studies the finished work as the result of a process of construction—a process which includes a craft component (e.g., rules of thumb), the more general principles according to which the work is composed, and its functions, effects, and uses. Any inquiry into the fundamental principles by which a work in any representational medium is constructed can fall within the domain of poetics. (Bordwell, 1989, p. 371)

We can understand Bordwell’s notion of poetics as a kind of formalist reverse engineering of a work, seeking to articulate the mechanisms by which it achieves its aesthetic effects. Bordwell argues that one need not hide behind jargon and obfuscatory theory in order to create knowledge within this paradigm.

The best means to produce reliable knowledge, it seems clear, is the tradition of rational and empirical inquiry. By rational inquiry, I mean probing concepts for their adequacy as descriptions and as explanations of problems. Problems are stated as questions to be answered; the more concrete, the better. Empirical inquiry—not “empiricism,” as humanists have been told over and over—involves checking your ideas against evidence that exists independent of our beliefs and wishes—not evidence delivered in pristine innocence, without conceptual commitments on the part of the seeker, and not facts that “speak for themselves.” What is evidence? It's what is corrigible in the light of further information. (Bordwell, 2008, p. 3)

Close reading may be seen as a form of rational and empirical inquiry into the poetics of a work that relies upon hermeneutic methods to account for the interpretive frame of the reader. Unlike many of the other possible lenses which one might apply to a close reading, an emphasis on poetics is oriented toward observable, empirical details within a text, and
thus approaches a form of objectivity. With all of these pieces in place, it becomes possible to discuss the specific methods employed in pursuit of this form of knowing.

3.2. Methods for Close Reading Games

Having devoted a significant amount of time to the theoretical concerns around hermeneutics, rhetoric, and close reading, it seems only fair that I now consider some of the practicalities of putting these methods into practice when analyzing digital narratives and games. In the following section I shift my attention away from the questions of epistemology, and toward the issues encountered when applying close reading in practice.

3.2.1. Challenges Unique to Interactive Media

Much of the early theoretical discussion around the analysis of games and other interactive artifacts centered on the unique challenges associated with critiquing computational media (Inman, 2003; Winthrop-Young, 1997). Close reading has gone in and out of favor in scholarly circles, often masquerading as other methods in order to gain legitimacy, as in the case of the “textual analysis” advocated by Dianne Carr (Carr, 2009; Carr, Burn, Schott, & Buckingham, 2003). Close reading as a practice must adapt to the particular demands of digital media when used to explicate games and gameplay experiences as texts. This is a subject that I have written on at some length with Jim Bizzocchi in previous work (Bizzocchi & Tanenbaum, 2011); however, I’d like to revisit and expand upon some of those ideas here.

In our previous work, Jim Bizzocchi and I identified three particular challenges inherent in the reading of digital texts. The first was indeterminacy:

New media and games suffer from a certain degree of indeterminacy: one cannot guarantee that two readers will encounter the same media assets while interacting with a game, or that they will experience them in the same order. Nor can one guarantee that they will observe and attend to the same details of the experience. In traditional literary discourse, the text is a fixed point to which the critic may safely refer. Digitally mediated texts, on the other hand, have the potential to shift aspects of their form, making it problematic to refer back to any element of a reading as representative of a singular, unified text. This may take the form of changing the ordering of a reading, as is the case in hypertext fiction, or it might take the form of traversing a virtual environment in a different way on different readings. In a digital text, the reading must be able to account for the indeterminate
nature of the experience. This is further exacerbated in games where players are often forced to choose between multiple exclusive paths without the option of backtracking to see the other potential outcome. This indeterminacy is a different phenomenon from the notion of shifting interpretations and readings of the same content...Rather, the instability of digital texts is rooted in an explicit and literal restructuring of the content and presentation of the experience in conjunction with a shifting set of reader interpretations.

The procedural nature of digital environments, coupled with the unpredictability of the reader conspires to transform digital texts into “moving targets”. (Bizzocchi & Tanenbaum, 2011, p. 299)

In this dissertation, the linearity of Mass Effect’s structure does a lot of work in limiting the possibility space that the player encounters. Certain aspects of the games are subject to significant variation as a result of the player’s choices: the appearance of the main character; the details of the combat sequences; the ordering of some plot events. In the most impactful of these cases, this manifests in terms of quantity of narrative content that the player encounters, which is a function of how much exploration she undertakes outside of the “central quest”. Indeterminacy manifests in terms of modulating the narrative’s depth: the storyworld is constant, but not all players see all of it. In this case it is helpful to consider the game texts as non-singular narrative worlds, or as bundled collections of both primary and auxiliary texts. Certain aspects of the game are obligatory: the player has no choice but to experience them as she traverses the game world from beginning to end. We can think of this material as the core text of the game or the story canon. Other elements of the game are optional: they supplement the core material, enriching the storyworld and deepening the player’s relationship with the characters, but they are unnecessary for a basic comprehension of the narrative. A comparison may be made to how much epic fantasy literature constitutes core and auxiliary texts. Tolkien’s Lord of the Rings trilogy, for instance, may be experienced independently of its prequel, The Hobbit, or its extended mythology as presented in The Silmarillion, however reading these additional materials can deepen and enhance the understanding of the narrative in the core texts. In my reading of Mass Effect I strove for completeness due in part to my own preferences as a narrative oriented player, and in part due to a desire to identify the full range of possible examples afforded by the game. Even so, there was one significant aspect of the game that I was forced to leave unexamined. The games include three different and distinctive “ethical valences” available to the player as she selects dialogue for the main character. These have significant impact on how the character is constituted,
both in terms of the software system’s model of the character, the aesthetic performance of the character, and the player’s perception of the character. To fully experience each of these variations on the character, a player would need to play each game at least three times through – a project that wasn’t tenable in the time available to me for this work. Consequentially, my reading is explicitly undertaken from one of these perspectives, and speaks primarily to that version of the text. In some sections of the game I executed multiple playthroughs in order to compare how the engine handled different inputs, and where appropriate I disclose this aspect of the process, but I also seek to present an analysis and a reading that can be reproduced by another player or theorist seeking to explore the specific version of the text that my conclusions are drawn from. It bears noting that the variation that is native to playable media differs in scale when compared to traditional texts, rather than in kind. Different editions of books, various “directors cuts” or “special releases” of films, and the inherent cognitive interactivity that a viewer or reader brings to a text all confer a degree of indeterminacy to traditional media. Digital texts cause that indeterminacy to surface in a more explicit and measurable fashion, often in response to input from the interactor.

A related challenge that we identified is the scope of interactive texts and games:

The very size of many of these texts often defies rigorous explication, with some computer Role Playing Games (RPGs) requiring upwards of 400 hours of gameplay time to traverse the narrative from beginning to end (compared to the time it takes to watch a film or read a novel). In RPGs, one of the measures of a game’s quality is the number of hours of play afforded. One of the best examples this can be found in Grand Theft Auto: San Andreas (GTA:SA). GTA:SA is one of a growing genre known as “sandbox” games, in which the player is deposited in a large seamless environment with only a loose mission framework to govern her actions – a framework which she may disregard entirely if so inclined. In a sandbox game, the size of the world substantially impacts the game experience, and thus as these games have evolved, so too has the scope of their environments. GTA:SA takes place in an environment that is 6km by 6km, or 36 million square meters – a measurement that excludes the interior environments in the game (GameSpot, 2005). GTA:SA doesn’t just include a single urban environment, like its predecessors: it includes three distinct “cities” separated by rural environments and small towns, bordered on one side by miles of ocean. In a physical environment of this size, it can take a reader many weeks of play to begin to feel as if she has fully apprehended it.

Often in games it is possible and even necessary to replay the game several times in order to experience all of the possible available content (such as variations to playstyles across different character types, or
variations to the game narrative that are contingent upon different player choices). Replayability is also one of the ways that games measure success: many games often intentionally limit the player’s ability to experience everything the first time through in order to encourage multiple playings...All of these factors add up to an artifact that requires a substantially larger time commitment in order to read and which problematizes the process of reading closely. (Bizzocchi & Tanenbaum, 2011, p. 300)

The third challenge we identified was difficulty:

Games require highly specialized skills ranging from hand-eye coordination in order to manipulate the controller to complex modelling of the interrelated dynamics of a game system in order to understand the impact of player actions in the game world. A player who is busy struggling with the controls and mechanics of a game is likely to attend to very different details than a player for whom the interaction has become automatic. Similarly, a player who is immersed in the interplay of challenge and success in a game (Csikszentmihalyi, 1990) will attend to different details than a player who has grown so skilled as to render the challenges of the game trivial...Readings of games must contend with the changing skill level of a player over time. Careful repeated play, such as that practiced in a close reading of a game, has an inherent danger of distancing the player from the pleasures of the game. In order to address this, a reader of games must learn to oscillate between a position of critical distance and one of immediate pleasure. (Bizzocchi & Tanenbaum, 2011, pp. 300–301)

To these three challenges, I'd like to add the issue of random access and bookmarking. A scholar performing a close reading of a book can access any point in the book with minimal effort. A film scholar has a number of options available should she wish to re-watch a scene or find a particular moment. In contrast, games often constrain where the player may enter and exit the experience, through problematic systems such as limited “save points” or automated “checkpoint” systems that make going backwards impossible. In some games, this is done to prevent using the game saving mechanism to bypass challenges: in the Mass Effect series, it is only possible to save the game when you are not engaged in combat and there are an arbitrarily limited number of “savegame slots” available. While many games provide some contextual information in the labeling system for saved games (such as character level, time played, and gameworld location), it is often insufficient to tell what is actually going on in the game at that point. Issues of random access and bookmarking are connected to the abovementioned issues of scope: the larger a game is, the more important it becomes to have methods for “chunking” it into smaller, more manageable pieces.

All of these challenges are wrapped up in the broader difficulty of oscillation between a
scholarly stance and an authentic “playerly” stance toward the experience. To some
degree this is something that all media scholars struggle with. On the one hand, one
wishes to receive a work as it was intended to be experienced, to experience what Bolter
and Grusin describe as transparent immediacy (Bolter & Grusin, 1999). On the other hand,
the task of scholarship entails a researcher into a certain degree of analytical distance
from the work. Should one become too focused on the mediated nature of an experience
(focusing on the stylistic choices of the author, or the cinematographic choices of the
director, for instance) the experience can become hypermediated (Bolter & Grusin, 1999).
If a reader or viewer of non-interactive viewer becomes hypermediated, the novel or film
does not cease to operate: the reader may need to go back a few paragraphs and the
viewer may need to rewind to the beginning of the scene, but the story proceeds,
indifferent, to the attention of the reader/viewer. But in games, should a player’s
concentration or immediate engagement with the experience slip, it can often have non-
trivial consequences on the dynamics of the simulated world. Oscillation, thus, presents a
more immediate challenge to games researchers.

In my readings of Mass Effect, this oscillation was a constant companion, but not always
an unwelcome one. Unlike many games where combat is the primary gameplay activity,
Mass Effect offers a variety of different modes of engagement, each with different
demands on the immediate attention of the player. This affords a cycle of engagement
and reflection that reinforces the “natural” reading of the game. Players are expected to
step back from the game and occasionally ponder the meaning of its events and history
from a perspective at a level of remove from that demanded by the combat sequences. At
the same time, many of the most powerful and effective narrative moments emerge from
the situated reactions of the player that are elicited in the “heat of battle”. This cycle of
engagement allowed me to invest myself in the game when it was appropriate and to trust
to my data collection process, my analytical lenses, and the breaks in the action, for
opportunities to turn a more critical and scholarly eye to the game.

3.2.2. Strategies for Successful Close Reading of Games

In our chapter on close reading in Well Played (Bizzocchi & Tanenbaum, 2011), Jim
Bizzocchi and I presented several strategies for close reading games that help to address
these challenges. The first of these is the imagined naïve interactor, a concept first
articulated by Jim during his close reading of the CD Rom puzzle game Ceremony of
Innocence (Real World Multimedia, 1997).

My observations form the basis for the close reading sections that follow. The observations can be treated as a data set built through multiple reviews of the books and the puzzles, constant referencing and modification of my notes, and repeated screenings of a videotape of the cut sequences. Despite the considerable amount of information I had at my disposal, I tried to write the descriptive sequences of the close reading sections as if they represented the perspective of a naïve interactor. The naïve interactor whose voice I created is someone who has not read the books, and is playing the game for the first time. These descriptive sequences therefore represent a constructed phenomenology. It is completely based on my own experience, but it approximates the experience of a different and theoretical interactor. This theoretical interactor is far less informed than I was, but has considerable power to observe and comment in detail on his own reactions to the event. (Bizzocchi, 2001, p. 25)

As discussed above, as a player devotes time and energy to a game, learning effects change how he or she engages with the game. Puzzles that once took a long time to solve become known and trivial. Enemies that were once very difficult to defeat become non-threatening. The imagined naïve interactor is a lens through which the scholar can attempt to set aside the effects of this learning. By imagining himself as a naïve interactor, Bizzocchi addresses concerns about his own skill and experience, which could potentially result in a close reading that doesn’t resemble the intended experience of the game.

The second strategy we described is the creation of performative identities based on player stereotypes, which I first articulated during my Master’s thesis research (J. Tanenbaum, 2008). Drawing on Bizzocchi’s notion of the imagined naïve reader, I proposed a method of reading The Elder Scrolls: Oblivion (Bethesda Softworks, 2008) in which the player constructs a performative identity rooted in a specific play-style or bias towards the text to explore how the system reveals itself to a particular perspective (J. Tanenbaum, 2008; J. Tanenbaum & Bizzocchi, 2008). The goal of this approach was to address issues of indeterminacy in interactive systems by framing each play-through as a being motivated by a particular set of preferences. This allowed me a degree of specificity in my writing about the game that wasn’t possible in a more generic reading: I could write from the perspective of a player primarily interested in stealth or a player seeking visceral hand-to-hand combat. I could adopt one of Richard Bartle’s player-types (R. A. Bartle, 1996), such as the Achiever or the Explorer and see how that altered my reading of the game. This approach is in keeping with some of my more recent work, where I have argued that players can be motivated by multiple, often-contradictory goals while playing,
adopting different playstyles and preferences as needed to succeed in making sense of the gameworld (J. Tanenbaum, 2013). Adopting a performative identity allows the scholar to artificially limit a reading to a smaller subset of motivations and preferences, which can reduce the variability of the play experience and allow other researchers to reproduce the reading by adopting a similar stance.

Both the *imagined naïve interactor* and the use of *performative player stereotypes* are forms of what Husserl called “Phenomenological Reduction”. Of this, Føllesdal writes:

> This method, which he called the phenomenological reduction, is a special kind of reflection that makes it possible to bring our anticipations to consciousness and study their intricate structure. We can never uncover them completely, and we may make mistakes in recognizing them. Phenomenological reduction, like all other enquiries, is fallible, and when we use it, we often discover that earlier findings have to be revised. This is partly because the reduction, like all other actions of ours, takes place within a horizon, which influences what we observe, but which largely remains unknown to us. (Føllesdal, 2001, pp. 376–377)

Phenomenological Reduction is a technique for creating what is essentially an artificial subjectivity, a constructed horizon, through which to view a text. Rather than approach a text from a position of undisclosed subjectivity, a scholar seeks to simplify and articulate his or her biases and assumptions. For our purposes, the goal of this practice is not to eliminate subjectivity, but instead to explicate its impact on the reading so that the reading may be better understood within the context in which it was read.

Mass Effect explicitly enshrines three common stereotypes within the design of the game itself, through the three moral valences that it includes in the dialogue options. While players are free to perform more complicated identities, these three “templates” provide the building blocks for character performance within the games. For some portions of my close reading I took advantage of the clarity provided by these three types of character identity to do deep comparative analysis of the same sequence of the game from each perspective. In this case I traversed a short section of the game in each of the three possible ways, capturing and annotating the ways in which the system responded to each performance.

The third solution that we proposed is the use of *analytical lenses* to focus the close reading, and help to manage the issues of scope encountered in larger games. Analytical Lenses are artificial frames that a scholar can apply to a game in order to direct his or her attention to specific phenomena, while filtering out elements of the game that are less
relevant. They are an essential tool for managing the huge amounts of data that a close reading can potentially generate, and they provide a conceptual touchstone to direct and focus analysis. Analytical lenses can be thought of as “filters” that allow a games scholar to sift out the important information from the torrent of data that is present in most gameplay experiences.

Analytical lenses, as I use them in this dissertation, are grounded in a combination of my own research experience and in the literature and discourse within the field (as discussed in Chapter 2). They are the most important conceptual constructs in the dissertation, and I will return to them again and again in this document. They operate as both tools to aid in inquiry and as dynamic reflections of the reading process itself. It is in their nature to change and grow through use and through encounters with different texts. For this reason, in this work, I will return to and reappraise my analytical lenses several times. In their first appearance they represent a set of starting assumptions and theoretical interests (Chapter 2). In their second appearance they are employed in the collection and analysis of data (Chapters 3 & 4), a process which led to refinements and modifications to the lenses. In Chapter 5 I revisit the analytical lenses and reformulate them to better incorporate insights from the close reading process, and they also structure my discussion and conclusions in Chapter 6.

3.3. Close Reading: Selection Criteria and Games

3.3.1. Selecting Games to Read
For this dissertation I have undertaken a close reading of the Mass Effect trilogy of games (BioWare, 2007, 2010, 2012). I initially played and annotated a much larger set of games; however, in the interest of keeping this work manageable and focused, I have chosen to constrain my analysis to the Mass Effect games. The Mass Effect trilogy is critically acclaimed and widely regarded within both research and vernacular communities as a significant (mass market) contemporary digital narrative.

In focusing on games that have been published within the mainstream of gamer culture, I recognize that I am potentially overlooking some very interesting and important work being done in the indie games, electronic literature, and art games communities. This decision has been made to limit the scope of a dissertation that is already in danger of becoming
unwieldy and is somewhat arbitrary. It certainly is not meant to diminish the importance of the many independently produced games that provide platforms for design experiments that are often too risky to find their way into mainstream game publication. I am interested in mainstream story based games because I believe they are representative of the “center” of the medium, rather than the edges.

I initially considered a very wide selection of games for the dissertation, before applying the following rough heuristics to help narrow my focus:

### 3.3.1.1. Criteria for consideration:

- **Significant narrative elements:** Narrative in the game is meaningfully foregrounded as an intentional and significant component of the game as text. For this criterion I turn to Bizzocchi’s framework of narrative elements of games to determine what constitutes a “narrative element”, with the expectation that the selected game contain several of these elements (Bizzocchi, 2007).

- **"Importance" to development of medium:** The game either does something new or represents a breakthrough in existing techniques. This is a somewhat subjective criterion, wherein "importance" is a function of some combination of critical and commercial success and “innovative” new approaches to game narrative.

- **Embedded Narrative:** The narrative elements of the game should be embedded in the system as designed, rather than emerging incidentally from gameplay. I draw on Zimmerman’s distinction between emergent and embedded narrative in digital media to distinguish between narrative content that is pre-authored and narrative content that arises from procedural dynamics (Zimmerman, 2001).

- **Presence of a viewpoint character:** Because I am primarily interested in how players experience transforming into a character, the games selected need to provide a viewpoint character of some sort. This excludes "god" games such as *Black and White* and more abstract narrative puzzle games such as *Flower* (although an interesting case could be made for exploring transformation and embodiment when playing as a non-human, possibly even non-sentient entity, as in *Flower*).

### 3.3.1.2. Criteria for exclusion:

- **Open world or "sandbox" game:** While many sandbox games have elements of narrative to them (including some of the best open world story games of recent years such as *Fable, Oblivion, Skyrim,* and *Red Dead Redemption*), they privilege emergent narrative exploration over any embedded narrative elements. In my Master’s Thesis on *Oblivion* I demonstrated how the presence of simulation-oriented, emergent narrative and a railed, embedded narrative in the same game posed significant challenges to overall believability and plot coherence. For this
reason I excluded open world games from this research.

- **Online or socially constructed narrative:** I excluded games whose narratives rely primarily on the actions of other players in real time. This extends to massively multiplayer games like *World of Warcraft* and also cooperative games (or the cooperative modes of single player games).

- **Non-game electronic literature and research prototypes:** While many important explorations into digital narrative exist across a spectrum of academic and artistic endeavors, I excluded anything that doesn't have some ludic or gamelike structure to motivate the player. This includes pure hypertexts, digital poetry, and experimental IDS systems like *Façade* and *FearNot!*

While many games fit these criteria, I ultimately settled on the three *Mass Effect* games for my final analysis.

### 3.3.1.3. The *Mass Effect* Series

The *Mass Effect* games are among the most critically acclaimed story based games of recent years. They follow in a long tradition of narratively rich games published by Bioware, who are the creators of *Star Wars: Knights of the Old Republic, Jade Empire,* and *Dragon Age: Origins.* The *Mass Effect* series draws on genre conventions from classic science fiction and space opera to tell a story that is simultaneously galaxy spanning and personal in scope. The player experiences the game from the perspective of Commander Shepard, a human soldier who discovers an ancient threat to all sentient life in the galaxy and ends up instrumental in the war to protect civilization. The games are notable for their balance of story oriented and combat oriented game play, the richly developed narrative world, and the many minor choices available to players with repercussions that span the three games in the series. Perhaps most importantly, the second and third games in the trilogy allow players to import characters and world-states from the previous games, enabling the player to experience an extended continuity across the trilogy. The trilogy was developed and published over six years and reflects evolving trends and sensibilities towards digital narrative during that time period.

### 3.4. Close Reading: Data Collection Techniques

As discussed above, Bordwell’s conception of *poetics* treats critical and rhetorical methodologies as fundamentally *empirical* undertakings rather than purely argumentative or subjective reports (Bordwell, 2008). Central to this process is a systematic commitment
to treat the text as a site for data collection and to rigorously ground the argument in the available data. This commitment lies at the heart of my close reading process, which has lead me to a systematic approach to the game texts as sources of empirical data. This process of data collection is similar in some respects to the “database of observations” that Jim Bizzocchi gathered during his close reading of *Ceremony of Innocence* (Bizzocchi, 2001) and to my own previous work on *Oblivion* (J. Tanenbaum, 2008). In both cases, the form that the data took was a function of the poetics of the text and the specific analytical and theoretical goals of the research.

To facilitate the data collection process I developed several formal protocols for documenting my play process. Other research groups doing similar work to this rely on video data to capture the play experience. In particular, Bernard Perron’s research group has developed a rigorous approach to data collection in which researchers capture and catalogue significant amounts of video, parsing and coding the data for contextual information about the interaction modalities employed, the environment in which the game was played, and the particular types of interactions required by any given sequence in the game (Perron, Arsenault, Picard, & Therrien, 2008). Video data is costly to work with, both in terms of the storage media required to archive it and the time and effort required to render it tractable to analysis, citation, and selective access (i.e. the ability to quickly find a desired sequence within the video archive). As Perron and colleagues point out, even full video documentation of interactive works is imperfect, as it does not readily capture the actions of the interactor or the context of play. It is evident from this that determining which data to collect when analyzing video game requires that the researcher make compromises. The nature of these compromises is dictated by the demands of the specific research and the situation in which the data is being used. In the case of Perron’s group, because there are multiple researchers playing and writing about a wide range of games, coded video data is a reasonable approach to data collection, balancing the labor costs of maintaining and managing the data against the need to preserve as much of the experiential fidelity as possible for multiple scholars.

In my work, I have made a different set of trade-offs which arise from my own research context. Because I am the only researcher who needs to reference this data, I have no obligation to create a holistic record of the game text or some other surrogate for my experience of play. The primary goal of my data collection is to provide myself with a documentation of my play experience that is sufficient to both prompt my own recall and
to support deeper analysis of certain sections of the games I’m looking at, without requiring that I play through those games again in their entirety. The secondary goal of my data collection process is to provide me with a body of documentation that I can readily draw upon for examples as I retell my play experiences in the context of this dissertation. To this end, the most important properties of this data are that it be accessible, easily perused, and easily cited. Rather than capture full video, I opted to capture screenshots at regular intervals.

Initially my plan was to use a series of principles and heuristics to guide when I manually captured screenshots\(^\text{10}\), but I quickly discovered that I was unable to divide my attention between the gameplay, my note-taking, and the screenshot process. Doing so increased the experience of oscillation between perspectives to such a degree that I ceased to be able to succeed within the game. I investigated several automated options, before settling on the use of Fraps\(^\text{11}\), a commercial piece of video capture software that has the capability of automatically taking screenshots at configurable intervals and indexing them by date and time taken. To improve the value of this documentation I turned on the subtitles for all character dialogue and narration wherever this option was supported. I initially set the system to capture screenshots every three seconds; however, after I completed *Mass Effect 1*, I evaluated the data I had gathered and determined that too much information (dialogue, character movement, menu navigation) was lost with this interval, so I reduced the interval to two seconds for *Mass Effect 2* and *3*. Even this level of coverage has proven to be insufficient, and for some sections of the dissertation I have returned to the games to capture specific gameplay sequences at one second intervals. For each game, I sorted the screenshots into numbered folders, where the numbering reflected the chronology of my play. I used the internal logics of each *Mass Effect* game to dictate how I structured the organization; I created a new folder every time the game loaded a new region, since the mission structure of the game is governed by the geography of the galaxy. The final outcome of this process was 293,293 screenshots across the three games, sorted into 531 folders.

While this number of screenshots seems like an unwieldy amount of data, it has actually been a very practical form in which to have the data stored. It occupies significantly less

\(^{10}\) These heuristics are preserved in the “Analytical Cheat Sheets” that I developed over the course of the close reading process, and can be found in the Appendices of this document.

\(^{11}\) http://www.fraps.com/
space than the equivalent video data would (about 50 gigabytes total), and because it is carefully sorted and labeled, it is highly tractable, should I need to find a particular moment or event [Figure 12]. While quite a bit of experiential fidelity is lost (the screenshots are insufficient to fully reconstruct the play experience, there is no audio data preserved, and the user interface experience and play context are often elided) the data collected is invaluable for cueing my own recall and for supplementing and illustrating my notes from play.

**Figure 12**  A portion of the directory structure for the Mass Effect 1 data.

In order to facilitate replaying of key sections of each game, I employed as high a granularity process of saving my progress as was allowed by each game engine. In *Mass Effect*, the game automatically saves your progress as you move through the world, requiring that the player remember to manually create savegames should he or she wish to return to a specific section. This required a fairly disciplined process of bookmarking, in which I created a savegame upon entry to any area of significance. I kept notes of which savegames were of particular interest for possible replay.

Using an iPad as a notebook, I took regular breaks to journal and reflect on significant moments of play as they occurred, creating a record of my key reactions to the games in the moment. The note taking process was facilitated by the presence of “analytical lens cheat sheets” [Figure 13 and Figure 14]. I discuss the creation and evolution of these cheat sheets in greater detail in the next section.
Figure 13  My close reading data collection environment: “analytical lens cheat sheets” are on the central monitor, and also printed up for easy reference. The main monitor is running Mass Effect 1, and the iPad is nearby for easy note taking. The leftmost screens show some of the screenshots I’ve collected, and the software application that is automatically taking new screenshots.

Figure 14  A screencapture of my entire desktop layout while playing Mass Effect 2. On the leftmost monitor is a player-created guide to the various side missions available, in the middle is my set of “analytical lens cheat sheets” and on the right is the game.

Entering into this process, I was concerned that the additional cognitive load of stopping
regularly to save the game, write notes, and take screenshots would have the effect of hypermediating my play experience. While it is probably impossible to fully close the gap between my “researcher” and “player” identities, there are things that can be done to minimize it. Some of these techniques are outlined in the above sections; however, there are also some structural aspects of the data collection process that can aid in reducing oscillation. In the case of this work, I made a point of playing each game from start to finish at least once without any data collection apparatus present. These initial playings of the games were not framed as “research”. Instead, I played the games for my own enjoyment as a gamer, following the paths that my own playing sensibilities dictated, rather than undertaking to enact a particular constructed identity or point-of-view. These playthroughs provided me with an experiential benchmark against which to frame my more systematic playthroughs; they allowed me to experience the games from a position of immediacy that is often denied to scholars when closely examining a media text. Subsequent playings were subjected to much closer scrutiny and were, perhaps, less “authentic”, but my experience of genuinely naïve play that preceded them allowed me to at least recognize when my scholarly distance was impinging upon the immediacy of the game experience.

It is also important to consider how to encapsulate the content of a game within a scholarly critique. As I have written this work, I have often struggled with the tension between my desire to convey the richness of the experience and the need to keep the document from becoming cumbersome and unwieldy. In ethnographic practice and qualitative research, the notion of “rich-thick description” is often brought to bear as a means of conveying lived experiences, but this technique does not scale well when the phenomenon under study occupies hundreds of hours of experience. Games have an advantage over many of the subjects of qualitative inquiry in that they are in the world, waiting to be played and replayed. This means the burden of proof in my own presentation of the material lies in making certain that I’ve provided sufficient contextual information about the experience to guide someone else to discover the same material that I discuss in my critique. To this end I have attempted to strike a balance between descriptions of the game content, screenshots as individual placeholders, and short sequences of “frame-to-frame” visuals, intended to convey action where appropriate. In spite of these efforts, I have often felt limited in how much descriptive material I can justify including, while also worrying that withholding details will hamper the understanding of a reader who is unfamiliar with these games. In an attempt to alleviate this anxiety I have included an extended Appendix with
detailed descriptions of the *Mass Effect* storyworld, game mechanics, and essential narrative events, which I highly encourage the reader to refer to throughout the reading.

### 3.5. Close Reading: Analytical Lenses and “Cheat Sheets”

At the end of Chapter 2 I introduced two theoretical constructs and a broader conceptual frame to contain them. I arrived at these through an extended period of design research and theoretical explorations over the course of my time as a graduate student. These provided a starting point for my close readings, by establishing my starting assumptions, and laying the ground work for a set of more fully realized analytical lenses. However, they needed to be fleshed out and clarified before they could really guide my reading process. In anticipation of beginning the data collection and analysis, I revisited these constructs, and shaped them into more formal lenses.

Reporting on this process requires some foregrounding, and a bit of an explanation in order for it to make sense. This is in part because clever readers will notice a pretty significant disconnect between the lenses presented below and the final analysis as presented in this dissertation. Fundamental to hermeneutic processes is a full disclosure of the horizons and biases of the researcher; however, there is an expectation that those horizons will transform over the course of a rigorous hermeneutic analysis.

In my case, I initially formulated a set of three analytical lenses, prior to undertaking the close reading process. Over the course of that process, it became clear that not all of these lenses were providing the same amount of analytical leverage on the phenomenon. After careful consideration, I determined to set aside one of the three lenses, the one termed “participation vs. interaction” here, which was providing useful context for the other two, but which wasn’t generating any new insights on its own. In doing this I was faced with a dilemma: all of my notes, screenshots, and documentation of the process, along with all of my initial ideation around the research included a triad of lenses. If felt disingenuous to try and disguise the presence of this third lens, which played a significant role in the preliminary framing of the research, but it also felt confusing and inappropriate to discuss it as a complete functional analytical tool.

When I went to write my literature review, this dilemma increased: the literature underlying the third lens was essential to understanding the formulation of the other two: it provided
an overarching frame that established my starting assumptions about narrative, games, and interactive digital storytelling. It needed to be in the dissertation. I’ve sought to find a middle ground here by including this material above, but also properly described the relationship between the framing literature and the two specific lenses which exist as subsets of the broader interest in digital storytelling. However, in this chapter, where I am presenting my methods, I cannot ignore the fact that I started out with three lenses, and eventually reimagined them as two. In the following section, I present my initial notes on the analytical lenses. This material includes early and partially formed thoughts about the literature that I would later describe in detail in the dissertation. It is included here as a form of data, evidence of the initial horizons that I brought to the research. Following the presentation of these early analytical lenses, I will revisit my decision to restructure the dissertation and explore some of this methodological implications of this choice.

### 3.5.1. Commitment to Meaning

From my notes:

**Commitment to Meaning, V.2**

As initially framed, commitment to meaning was connected to agency to emphasize the relationship between action and semantics as initially articulated in Murray and Laurel’s formulations of Agency (Laurel, 1993; Murray, 1997). While it has become popular in the game design discourse to celebrate unrestricted freedom-to-act in a game regardless of the *meaning* of those actions, I have used the notion of commitment to meaning to emphasize moments of engagement within games that are specifically about the narrative layer, regardless of whether those moments are coupled with a specific action or non-action. Thus, we might say that a player is making a meaningful commitment when his action (or inaction) is done in service of a specific narrative goal: to save the princess, to kill the dragon; to express frustration or fear or joy; to solve the mystery.

- Committing to meaning is what (potentially) happens when a player consistently chooses the Paragon option for Commander Shepard in *Mass Effect*, even when it is strategically problematic.

- Commitment to meaning may happen in a player’s head when running in terror from a swarm of spiders in *Uncharted 3*.

- A player might commit to meaning through inaction in *Heavy Rain* when she
chooses to allow Ethan’s son to win a fight with toy swords by refusing to fight back.

Privileging meaning in this fashion renders a player’s intentionality more important than her behavior: a problem for observational methods. Committing to meaning is about the subjunctive desires the player has for the story outcome (Mackey, 2008) and as such is rooted in what Murray describes as the “active creation of belief” in a game world (Murray, 1997). The challenge introduced by this construct is to find ways to systematically ground a largely cognitive process within observable evidence. As demonstrated in the three examples above, it is possible to identify elements of a game’s design that support situations in which commitment to meaning might occur. It is similarly possible to identify design markers in games that actively deny the commitments of the player, such as those I identified in the opening sequence of Oblivion during my master’s thesis (J. Tanenbaum, 2008). Thus, in practice, reading for commitment to meaning becomes about identifying the ways in which a game communicates potential meaningful commitments to its players, and how it responds to the meanings enacted by players within it. This is where method acting becomes especially relevant, as it too deals with frameworks of enaction rooted in pre-existing scripts.

3.5.2. Method Acting and Transformation

From my notes:

Method Acting and Transformation, V.2

I will be drawing heavily on frameworks of Method Acting during this analytical process. Within digital narrative research, a lot of attention has been paid to acting theories and theories of drama in general, but the vast majority of this attention is directed towards systems of improvisational theater. While there is much of importance within improvisational theater, and while I will be drawing somewhat on the work of improvisers, such as Keith Johnstone, and Viola Spolin (Johnstone, 1992; Spolin, 1999), I contend that this concern with “improv” reflects a preoccupation with the pleasures of unlimited agency within narratives. In searching for a model of participating within a narrative that was simultaneously active, creative, and restricted I encountered theories of Method Acting, which provide a rich framework for participating with scripted drama. To my knowledge these theories and practices have never been systematically brought to bear on the question of participating in digital narratives, and so I see a strong value in drawing out
the parallels between these two previously unrelated domains. Method acting theory provides analytical leverage at both sides of the close reading process: it helps shape the observations from Phase 1 into more fully focused analytical lenses for use in my close readings, and it also provides a fresh perspective on the theories and concepts that have been in use within the field for many years.

Method acting works because it uses external scaffoldings and frameworks including the text, the player's body, costumes, props, memories, and social relationships, to transform the actor from the outside in. The key question that method acting raises for game design is "how do me communicate the script to the player?" Or, to put in terms of commitment to meaning: "how do we communicate to the player the meanings available for her to commit to?" We can imagine game systems, rule structures, and embodied interfaces, as elaborate external structures designed to provide players with information about potential roles they can play and meanings they can express.

To put this in a slightly different way: every actor has a nightmare where he finds himself onstage performing a role he hasn't rehearsed in front of an audience. If we extend the metaphor of theater to game play, and imagine the player as an actor, then we need to think about ways to compensate for that crisis of not knowing what to do. Many games already do this very well, but I think there is a lot more that can be done with prompting, feedback, and narrativized reinforcement of gameplay to actively script player commitments (and reward players who commit successfully to desired meanings). Looking for evidence of situations in which games currently do this or fail to do this is at the heart of this analytical lens.

The other aspect of method acting that I see as crucial to these readings is the ways in which it deals with transformative experiences. Method acting uses external phenomena to induce a cognitive transformation into a character: actors experience transformation as a consequence of undertaking the frameworks and practices taught through method acting. By this token, when I am looking at how games script a player's behavior I will also be looking at the ways in which these games use actorly scaffoldings of behavior to support a transformative experience.

One open question for this work is whether or not the intersection of these two worlds – method acting and games – will generate useful insight into issues of performance and experience for theater practitioners. There is clear evidence within the literature around
the Method, especially within more recent work, and work on interactive theater (Benedetti, 1997; Daw, 2004; Wirth, 1994), that systems of play, and rule structures have immense value in actor training. I suspect that articulating the relationships between theories of acting and theories of play will be mutually beneficial.

3.5.3. Participation vs. Interaction

From my notes:

**Participation vs. Interaction, V.2**

The final lens I will be bringing to bear on these games is that of participation. I have at least loosely mapped these two terms to differences between “readerly” and “authorial” modes of engagement within games. Participation is a form of “playing along” with the game, while interaction is rooted in practices of more self-indulgent play, or “playing against” the game. To explore these two modes of engagement in narrative games I am interested in the ways in which these games present themselves to the players: what types of play are rewarded? What culture of play does the game design communicate? How does the game communicate desired behaviors and restricted actions to the player? What is the range of systemic impacts of player actions? This lens has obvious overlap and relationship with the first two lenses discussed, but it provides a different perspective on the phenomenon, by prompting speculation about the culture and context of play implied through a game’s design. Central to the operation of this lens will be identifying how the games frame what Aarseth has characterized as the “implied player”: “the role made for the player by the game, a set of expectations that the player must fulfill for the game to “exercise its effect” (Aarseth, 2007).

I used these initial summaries to start thinking about the questions that I would be trying to answer for each lens during the close reading process. This led me to create “cheat sheets” that I could continue to refer to throughout my data collection (See Appendix A). These cheat sheets evolved over several iterations as I eliminated redundancies, and clarified the questions, until they finally settled into a stable configuration:

**Analytical Lens #1: Commitment to Meaning**

*This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.*

1. How do I commit to meanings?
2. What are the meanings I want to make?
3. Which meanings are explicit in the game?
4. Which meanings are implicit, or only apparent to me?
5. Where are my commitments clear? Ambiguous?
6. When do my commitments correlate with (or contradict) the games?
7. How does the game communicate potential meaningful commitments?
8. How does the game reflect my commitments back to me?

**Analytical Lens #2: Method Acting and Transformation**

*This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.*

1. How do I know the “Script” for my actions?
2. What “masks” do I get to put on and how do they transform as I play?
3. When do I experience the “creative state” and what happened to elicit it? When is it broken?
4. What is the relationship between text and subtext in the game?
5. What am I asked to react to by the game? How am I asked to react?
6. How does Status play out in the game?

**Analytical Lens #3: Participation vs. Interaction**

*This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.*

1. What actions does the game reward?
2. What actions does the game discourage?
3. Who is the “implied player”?
4. What is the range of systemic impacts of my actions?
5. Where are the “edges” of the system? How are they communicated?
6. What are the narrative consequences for acting incorrectly?
7. What are the ludic consequences for acting incorrectly?
8. What is the tone of the game’s guidance?
9. Is any play “inconsequential” or “free”?

These questions structured my notetaking process and my analysis of the data. After each game I sat down with my archive of screenshots and worked through the questions, answering them and digging deeper into my own experiences of play. In this way, I generated three “debrief” documents [Appendix B] that form the basis for my analysis in Chapters 4, 5 and 6.

**3.5.4. A “Failed” Analytical Lens**

As discussed above, the third lens, Participation vs. Interaction, proved to be problematic when I embarked upon my analysis. The “failure” of this third lens provides some interesting insight into the discipline of close reading, and stands as proof of the iterative nature of this process to focus and direct a scholar’s attention toward the most relevant phenomena within the experience of play. While the ideas within this lens are highly relevant to my work, they lack the specificity of the other two lenses, and are thus less useful at illuminating particular design concepts within the close readings of the games. A rigorous close reading is undertaken with the same risk as any other empirical process: the scholar enters into the work with an interest in a particular phenomenon and with a set
of observational and analytical tools that should hopefully provide leverage on that phenomenon. However, sometimes those tools do not generate useful data, perhaps because the tools are ill suited to the task or because the observed phenomenon isn’t actually doing what the scholar thought it was doing in the first place.

In the case of the “participation” lens, I believe that the problem lay as much with my own initial construction of the theoretical frame as it did with the phenomenon that I was looking at. The concepts of “participation” and “interaction” have been problematic within game studies for a long time: they are difficult to define, and it is unclear how much work they do to accurately reflect the experience of engaging with digital media or to differentiate between computational and non-computational media. “Interaction”, in particular, is a term loaded down with theoretical baggage. My use of these terms was meant as a synecdoche for the various theoretical perspectives developed in digital game studies and new media. I believe that my mistake was in failing to sufficiently narrow the focus of this lens towards a particular aspect of this field. Given that the overarching interest of this dissertation is grounded in the study of digital games, this lens was both redundant and diffuse, which did not yield a new perspective on the phenomenon of identity transformation in digital narratives. The particular argument in digital narrative studies that this lens was framed to address, the theorized conflict between interaction and narrative, is a thread that runs through the entire dissertation, and is best addressed through the application of my other two lenses, both of which employ unique perspectives from outside the core game studies discourse.

It can be difficult to admit when an idea doesn’t pan out, but in the case of this lens I am taking its failure as an indicator of the strength of the method I have employed. One critique that might be leveled at close reading is that the theorist over-determines the theoretical outcomes by intentionally or unknowingly encoding bias into the primary investigative frame: the analytical lenses. In practice, however, when confronted with the realities of a text some lenses succeed while others fail. Acknowledging and learning from those failures is important to the validity and rigor of the close reading process.

3.6. Close Reading: Validity and Burden of Proof

To close off this chapter, I’d like to step back from the specifics of method and return to
some of the higher level questions of *methodology*, so that I can address the question of validity. “Validity… is seen as a strength of qualitative research, but it is used to suggest determining whether the finding are accurate from the standpoint of the researcher, the participant, or the readers of an account.” (Creswell, 2003, pp. 195–196) Validity in research is a measure of how successfully the researcher has accomplished what he or she has set out to do. The standards for validity vary greatly across different epistemological paradigms because the burden of proof is radically different for each. To establish the validity of a research project, one must first frame the scope of the contribution. As Raymond has discussed, it is often the case that as research becomes more certain of its results, it also becomes narrower in scope (Raymond, 1982). Thus, should we wish to make highly specific truth claims, such as those made in the natural sciences, we must work on reducing our scope until it deals with a highly constrained phenomenon. This is the basis for reductionism in postpositivist research. In contrast, in constructivist social science research and in the humanities, we are often concerned with bigger questions around messy human phenomena. In these instances, one must sacrifice a degree of certainty in exchange for the freedom to make broader claims.

Even as one does this, however, there are techniques for building confidence in these broader claims. Cresswell identifies a number of strategies of validation for qualitative research, including the *clarification of the bias* of the researcher, the use of *rich-thick description* to transport readers into the research setting, and the use of *trangulation* from multiple sources of data (Creswell, 2003). These validation strategies all contribute to making a work of qualitative research more convincing to the reader.

I have sought to clarify my own bias throughout this dissertation. In hermeneutic inquiry this is perhaps the most important thing a researcher can do to validate a close reading. I have argued that in hermeneutics it is neither possible nor desirable to eliminate bias completely. Instead, one must strive to foreground one’s bias through a process of phenomenological reduction. This allows the reader to understand the role that the researcher’s subjectivity plays in the reading, which provides the basis for the reader to either accept or reject the judgements of the researcher. Similarly, using rich-thick descriptive language allows the hermeneutic researcher to better conjure his own subjective experiences from the reading, which better communicates the empirical material that any judgements are based upon. In some cases, I have had to relocate some of this description to the appendices of the dissertation, in order to keep the analysis
sections at an appropriate length. I have employed a rough sort of triangulation, by considering multiple games as sources of data, and combining a range of qualitative observations with more quantifiable and measurable properties of the games under study.

The burden of proof in this dissertation is not whether or not I describe some objective truth about narrative in games. Instead, I hope to provide an evidenced argument that advances our understanding of both agency and transformation in story-based games. This new understanding should be analytically sound, grounded in the observable text of the games, and potentially reproducible in other analyses. As a secondary outcome, I contend that the poetics identified in this dissertation are capable of supporting design practices aimed at eliciting meaningful and transformative experiences in future digital narratives.
4. Close Reading: *Mass Effect*

Over the next three chapters I will present my close readings of each of the *Mass Effect* games, as guided by the analytical lenses developed above. This first chapter deals with the original *Mass Effect*. My close readings took place over a period of about 3 months, during which I played each of the *Mass Effect* games, while capturing screenshots and taking extensive notes. Following the completion of each game, I went through the questions posed in the analytical lens “cheat sheets” and tried to articulate my experience. While this process of “debriefing” after the game started out as a way of focusing my observations and clarifying my informal notes, it quickly evolved into a more formal analysis. I found that using my lenses to structure how I asked and answered questions about the games created opportunities for analysis that had escaped me during the process of play. In doing so, I ended up undertaking a significant portion of the analysis during what had initially been intended only as the data collection phase of the work. This process also allowed me to begin refining the lenses themselves. Certain questions revealed themselves to be redundant or uninteresting, while others became necessary to address aspects of the games that I had not anticipated. I’ve preserved the evolution of the lenses in Appendix A. As discussed above, one of the most significant outcomes of this initial process was the decision to discard the third analytical lens as a unique frame, and to incorporate the few relevant observations that it elicited into the analysis of the other two lenses.

Although I played each game through as part of my formal reviewing process, this was not my first time playing them. As I introduce each game I will try to situate my most recent “formal” reading within the context of my previous experiences. In this chapter I will discuss *Mass Effect* 1 (BioWare, 2007).

4.1. History

I first encountered *Mass Effect* in 2009, two years after its release. I had heard generally positive things about the game from various friends and wanted to see what all the fuss was about. At the time, I was enrolled in a graduate level course on the “Theory and Design of Games”, for which I was required to select a single game to critique from a
number of perspectives. I chose *Mass Effect*.

*Mass Effect* was released by BioWare in 2007. Bioware is a studio with a history of producing story-based games that incorporate an “ethical simulation” as a central underlying game mechanic. In this regard *Mass Effect* is the spiritual successor to *Star Wars: Knights of the Old Republic (KOTOR) 1 & 2* (BioWare, 2003, 2005), a science fiction game series set in an earlier version of George Lucas’s iconic Star Wars universe. In KOTOR, the player must choose between the two different alignments of the force, light side and dark side, each of which unlocks different combat abilities and conversation options. As one progresses down either of these paths, the player character’s appearance is slowly transformed to more closely align with the selected force alignment. *Mass Effect* utilizes a similar moral system, and many of its menus and combat systems are updated versions of those found in KOTOR.

During my first playthrough of *Mass Effect*, my analysis was structured by the course assignments, which focused on a different element of the game’s design each week. These included analyses of the intended audience and general playstyle\(^\text{12}\), a discussion of the game as a system\(^\text{13}\), a consideration of dramatic uncertainty and inevitability\(^\text{14}\), an analysis of the game from the perspective of operant conditioning and reinforcement\(^\text{15}\), and a deconstruction of the game’s economy\(^\text{16}\). These short critiques document my initial experience with the game, and laid the groundwork for my present reading.

### 4.2. A Brief Introduction to *Mass Effect 1*

*Mass Effect 1* can take anywhere from 15 to 50 hours to complete, depending on how much time the player devotes to exploring its extensive galaxy of planets. The narrative is built on top of a richly imagined science fictional history replete with many different sentient races and cultures and significant conflicts between them that stretch back for millennia. As such, it defies rapid encapsulation. In Appendix C, section 8.5.1 I have sketched out

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\(^\text{12}\) [http://thegeekmovement.com/blog/?p=43]
\(^\text{13}\) [http://thegeekmovement.com/blog/?p=44]
\(^\text{14}\) [http://thegeekmovement.com/blog/?p=45]
\(^\text{15}\) [http://thegeekmovement.com/blog/?p=46]
\(^\text{16}\) [http://thegeekmovement.com/blog/?p=48]
the most essential information needed to understand the depth and complexity of the *Mass Effect* storyworld for those who are not familiar with it. In this section I provide a very rough overview of the game details that are most important for understanding the following analysis.

### 4.2.1. *Mass Effect* Storyworld

In *Mass Effect* the player takes control of Commander Shepard, a human officer in the *Earth Systems Alliance* military who has distinguished him/herself and been selected to represent humanity as the first human *Spectre*: an elite operative for the ruling *Galactic Council*. Humanity is the newest race to join the galactic community, having discovered the existence of ancient alien races only 30 years prior to the start of the game. The civilizations of the Milky Way galaxy are built on top of an ancient infrastructure of *Mass Relays*: giant machines that can transport ships between star systems instantaneously. The Mass Relay network predates galactic civilization by hundreds of thousands of years; the current dominant races believe that the technology was developed by a species known as the Protheans who disappeared over 50,000 years ago; however, the network is in fact many orders of magnitude older. The primary races of the Council have established a seat of government on the *Citadel*, an ancient space station that resides at the heart of the Mass Relay network.

![The many alien races of Mass Effect 1 (top row, from left) Asari, Salarian, Turian, Krogan, Quarian (bottom row, from left) Hanar, Batarian, Volus, Elcor, Geth](image)

The galactic civilization in which humanity finds itself is experiencing a fragile peace after centuries of strife, all of which still simmers beneath the surface. Chief among these is a series of wars beginning with a conflict between an alliance of the two most powerful
galactic races, the all-female, long-lived Asari and the highly scientific, but short-lived, Salarians versus a hive-minded, space-faring, insect species called the Rachni. To defeat the Rachni, the Salarians technologically advanced the evolution of the warlike Krogan species. However, the rapidly breeding Krogan soon became a threat in their own right, taking over numerous colony planets and threatening galactic stability. The Asari and Salarins invited a fourth major race, the strategically brilliant Turians, to join the Citadel council as a galactic peacekeeping force. Working together, the Turians and the Salarians developed and deployed a biological weapon called the genophage against the Krogan that greatly reduced their fertility, effectively ending the Krogan Rebellions and relegating the remaining Krogan to second-class status in galactic society. This escalating series of conflicts establishes one of the central thematic concerns of the game: how does one address a galactic level threat without unleashing an even greater threat? How does one address a great evil without committing a greater evil?

The second major theme of the games is embodied in another significant conflict between two comparatively minor races: the Quarians and the Geth. Skilled inventors and technicians, the Quarians created a machine race, the Geth, to serve them as laborers. When the Geth developed true collective sentience, the Quarians panicked and attempted to exterminate them. The resulting conflict ended with the Geth victorious and the Quarians driven from their home planet and exiled to live as nomads aboard a fleet of ships. This conflict between biological and synthetic intelligence is a microcosm of the bigger conflict that drives the main storyline across all three games, a conflict that stretches back for millennia.

As Commander Shepard, the player discovers that an ancient race of sentient starship sized machines, the Reapers, are poised to return to the galaxy from “dark space” and harvest all sentient life. The Reapers are enacting a cycle of growth and destruction that recurs every 50,000 years: they were responsible for the destruction of the Prothean
civilization that cleared the way for the rise of the current dominant races in galactic society. The Reapers in this epoch have enslaved an offshoot of the Geth race to serve as frontline troops and have also indoctrinated several highly placed members of galactic society including Shepard’s fellow Spectre, a Turian named Saren. Shepard gathers a diverse team of specialists aboard a prototype stealth ship called the Normandy and pursues Saren and the Geth across the galaxy, slowly uncovering the Reapers’ plans and eventually defeating a Reaper who had been sent to prepare the way for their invasion.

4.2.2. **Mass Effect Gameplay**

*Mass Effect* is primarily experienced through the lens of its hero and viewpoint character, Commander Shepard. During character creation the player is given some freedom to customize this character by selecting a gender, a family background, some historical events that have shaped his/her perspective, and a character “class” which determines the core skillset and playstyle that the character will employ throughout the game. I created “Muriel Shepard”, a female version of the character whose parents were both active members of the Alliance military, and who was, herself, the sole survivor of a brutal encounter with a nest of subterranean “Thresher Maws” early in her career. For the remainder of this dissertation I will refer to Shepard as female, as this was the version of the character that I played.

*Mass Effect 1* divides its gameplay between two primary modes: a combat mode and a dialogue/exploration mode. As a combat game, *Mass Effect* is a strange blend of real time action shooter and turn-based strategy game. The player commands a squad of three characters, Shepard and two others chosen from her ships’ crew, in a third-person-perspective shooter against waves of enemies. Combat gameplay typically consists of navigating semi-linear environments, moving in and out of cover, aiming and firing weapons, and activating special “biotic” and technological abilities. Combat in *Mass Effect 1* requires that the player constantly alternate between real-time gameplay and a “pause” function that allows the player to select different weapons and queue up different abilities for squad members.

4.2.2.1. **The Dialogue Wheel and Morality System**

The dialogue and morality systems of *Mass Effect* are what set the game apart from other action shooters of the same era. *Mass Effect* has significant stretches of gameplay that
are primarily focused on exploring the environment and conversing with other non-player-characters (NPCs) in the environment. The primary interface for this is the dialogue wheel, which allows the player to select different conversational topics for Shepard to perform. As an interface device, the dialogue wheel presents the player with a series of "conversational stubs", arranged like spokes on a wheel that may be selected with the joystick (on console versions of the game) or the mouse (on the PC). When the player selects one of these options, the character performs a related fragment of dialogue. I will explore the poetics of the dialogue wheel in much greater detail in section 4.3.2 of this chapter.

Interacting with other characters using the dialogue wheel allows the player to make some creative choices about the style of character that Shepard is: to inflect Shepard's personality along two distinct moral vectors, Paragon and Renegade. Paragon actions and conversational choices tend to be oriented toward diplomacy, lawfulness, and reconciliation. Renegade choices skew towards an action oriented, no-nonsense, take-no-prisoners attitude. As the player chooses between these performances, Shepard accumulates Paragon and Renegade points, which unlock different conversational options as the game progresses. In this way, the player is able to enact different versions of Shepard through different playthroughs. Both Paragon and Renegade Shepard are ultimately heroic characters, but they represent two very different views of heroism.

4.3. Analysis: Commitment to Meaning and Agency

The first lens that I brought to bear on Mass Effect 1 was “Commitment to Meaning”: a concept which I have discussed at some length above.

4.3.1. Channels for Meaningful Commitment

As I played through Mass Effect 1 I found myself attempting to catalogue the different channels available within the game for meaningful commitment. I describe these briefly here.

4.3.1.1. Dialogue Choices

The most obvious layer of meaningful commitment occurred through the dialogue system, wherein the player is given opportunities to select a variety of possible paths through the
conversational space. I further subdivided this category into two distinct sub-channels:

- **Moral Valence**: The most obvious set of dialogue choices has to do with which of the central moral threads the player follows through a conversation: Paragon, Neutral, or Renegade.

- **Curiosity/Impatience Valence**: The second pattern I identified has to do with how much time was spent following “exploration” threads in the conversation. In many cases the player is given a set of optional conversation choices that support a process of “digging down” into the situation at hand, but which are not strictly necessary to move the plot forward.

4.3.1.2. Combat Strategy
A less obvious mode of commitment to narrative meaning, the different strategic choices made in combat make implicit statements about the personality of Shepard and the playstyle of the player. Is Shepard cautious or bold? Precise or brutal? Tactical or strategic? Team oriented or a lone wolf?

- **Engagement range preference**: One area of combat that seemed to have narrative implications for me was what the comfortable range of engagement was for the character. Holding back and picking off enemies from a distance paints a very different picture of Shepard than running in and punching them in the face does.

- **Weapon/power preference**: The second aspect of combat that I felt communicated something about Shepard's identity was which weapons and powers were most frequently deployed. In the *Mass Effect* universe, Biotic characters have a different life experience than tech-oriented characters. I could imagine that a Biotic specialist version of Shepard lead a very different life than a weapons focused character.

4.3.1.3. Companion Choices
The third mode of meaningful commitment happens at the beginning of each mission, when the player is asked to select two squadmates from the pool of characters traveling with Shepard. Different companion choices will result in different achievements (which unlock specific powers) and will also result in different conversations while exploring. Each companion also has a particular set of skills and abilities to deploy in combat.

- **Human vs. Alien**: There is a pronounced xenophobia present among the human characters of *Mass Effect 1*, and the player may either indulge in this narrative, or reject it, by selecting squadmates from a variety of races.

- **Narrative vs. Strategy**: I often found myself torn between selecting characters with specific combat abilities that I thought would be useful
and selecting characters with personalities that I enjoyed having present to frame the narrative.

- **Romance:** Over the course of the game, Shepard has the option to pursue a romantic relationship with several members of the crew; however, she can only “consume” one relationship. It is possible to become involved in a number of potential romantic entanglements, before being forced to choose a specific partner (or choose to avoid romance entirely).

4.3.1.4. **World Exploration and Navigation:**
As the player explores the galaxy, the storyworld deepens and expands, creating a richer backdrop against which the core narrative is placed. Choosing how much time to spend exploring the storyworld is a meaningful decision which alters how the narrative is perceived.

- **Missions vs. Assignments:** *Mass Effect* makes a distinction between missions which are central to the plot of the game and assignments which take the player on supplementary tangents through the universe. Deciding how much energy and time to commit to extra assignments expresses something about Shepard as a character: is she solely focused on the core goal or is she willing to look beyond the immediate threat to related problems that need solving?

- **Uncharted world exploration and collections:** The player may take the opportunity to explore even further by investigating worlds that have no explicit mission or assignment associated with them. In doing so, she might complete some of the “collection” assignments, gather extra resources, or gain additional levels of experience. This tangential play also expresses something about Shepard.

4.3.1.5. **Character Customization**
Some customization options only occur when the player creates her version of Shepard, while others are ongoing. While many of these options are purely cosmetic, they all have phenomenological implications for the narrative that the player experiences.

- **Appearance:** Only really available at the beginning of the game, this particular decision determines the face that the player will inhabit as Commander Shepard. These choices are *all implicit* (see below) but they have a huge impact on how the player experiences the game. In particular, the selection of gender radically changes the game’s narrative experience because the male and female voice actors for Shepard make very different choices in how they deliver their dialogue. Other choices create more subtle narrative variations, such as whether or not to make Shepard attractive or unattractive, or whether to give Shepard a particular ethnic background (a white-male Shepard narrative is very different from a story of Shepard as a woman of color). Gender choice also impacts the romance options available to the character.
• **Background and personality profile**: Both of these choices are made during character creation and both have some minor impact on how the game system responds to Shepard (in particular by altering several aspects of the dialogue).

• **Character class**: Also selected at the beginning of the game, this choice impacts the abovementioned combat strategy commitments, while also providing an additional narrative layer through which the player experiences Shepard. “Soldier Shepard” is a different character from “Infiltrator Shepard”.

• **Skills**: Character class is the primary dictator of what skills and abilities Shepard starts with and can learn, but the player has a lot of freedom to choose how those skills develop, creating very different gameplay (and narrative) profiles within each class.

• **Equipment and clothing**: A huge amount of time is spent optimizing the equipment loadout of Shepard and her crew. Different suits of armor and different weapons alter the visual appearance of characters, while also impacting the combat strategies of the player.

Through the process of cataloguing these channels it became clear that there were at least two categories of meaning at work within my play experience:

1. **Explicit Meaning**: Certain actions taken in the game resulted in explicit changes to the state of the software system that comprised *Mass Effect*. These could manifest as something simple, such as incrementing the quantity of Paragon or Renegade points the player had earned, or something quite complex, such as determining if a certain character lived or died.

2. **Implicit Meaning**: In many cases, the abovementioned commitments do not result in any systemic impact on the narrative content encoded in the game. However, these commitments still combine to inflect the player’s perception of the characters and the lens through which the story content is experienced.

These two categories allow me to parse the list of channels for meaningful commitment into those which are encoded directly into the system and those which exist independent of any computational state within the game [  }
This distinction is critical from a design standpoint because explicit systemic meanings have the potential to either support or contradict the meaningful commitments arising within the mind of the player. This notion of explicit vs. implicit meaning maps nicely to the narratological notions of *syuzhet* (the plot as depicted in the text) and *fabula* (the story as understood by the reader). We might also say that the explicit, or encoded meanings of the games fall within the category of *form*, while the implicit, or decoded meanings fall within the realm of *interpretation*. 
<table>
<thead>
<tr>
<th>Meaningful Commitment</th>
<th>Category</th>
<th>Explicit</th>
<th>Implicit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dialogue Choices</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Choices</td>
<td>Explicit</td>
<td>Varied character performance creates different experiences for the player.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implicit</td>
<td>Player gains additional knowledge of storyworld.</td>
<td>Pace of story changes.</td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Combat Strategy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Explicit</td>
<td>Stylistic changes in combat reflect different character identities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implicit</td>
<td>Stylistic changes in combat reflect different character identities. Certain powers and abilities have narrativized elements (biotics, tech, etc.).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Companion Choice</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human</td>
<td>Explicit</td>
<td>Engages with central themes around xenophobia and humanitys place in galactic culture.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implicit</td>
<td>Builds affinity for different NPCs.</td>
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<tr>
<td></td>
<td>Location</td>
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<tr>
<td><strong>World Exploration</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>and Navigation</td>
<td>Explicit</td>
<td>Taking on extra assignments alters the pace of the game and paints a different portrait of Shepard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implicit</td>
<td>Completing these assignments provides additional information about the storyworld and also paints a different portrait of Shepard.</td>
<td></td>
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<tr>
<td></td>
<td>Location</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Character</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customization</td>
<td>Explicit</td>
<td>Different classes mean slightly different things in the narrative: Shepard the Infiltrator is different from Shepard the Soldier.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implicit</td>
<td>Different backstories for Shepard create different narrative frames for the player.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
There are some interesting dynamics between these different sub-channels for meaningful commitment that reflect a particular set of ethical commitments on the part of the designers. For example, when Shepard encounters a new assignment opportunity in the world, she is often given a choice of whether or not to accept it. Most of the time, when someone asks her for help, the Paragon option is to offer to help them for free and the Renegade option is to demand some sort of payment. However, there are quite a few situations where the Renegade option is to simply refuse to help. The same is not true for Paragon choices. There is an implicit moral vector present here in which “Paragon Shepard” is willing to take the time to help, while “Renegade Shepard” doesn’t have time for anything except the Mission. What’s especially interesting about this dynamic is that it contradicts the logic of the central fiction, which is fundamentally about haste in confronting the core threat. The game system rewards patient completionist play with additional items, codex entries, story details, character moments, experience points, and credits. It frames hasty and impatient play within the morally grey area of the Renegade. However, the narrative logics of the situation insist that there is an impending urgent threat that Shepard must rush to resolve; the main missions of the game are even titled “Race against Time” to emphasize their urgency. The morally correct choice in this situation would be to ignore the distractions that the universe throws at Shepard while doggedly pursuing only the critical missions: to follow the path of the Renegade.

4.3.2. Close Reading the Dialogue Wheel

The dialogue wheel is the primary interface for committing to conversational meaning across all three Mass Effect games, and it deserves some closer examination to unpack its particular interactional grammars. Over the course of the three games, the poetics of the dialogue wheel evolve and transform, although not always for the better. In this section I will examine the dialogue wheel as it is introduced in the first game: this establishes the baseline conventions for the two sequels.

As discussed in Chapter Two, speech act theory provides for a number of different types
of communicative commitment, which it categorizes into five different “illocutionary points”.
Table 6 provides a quick summary of those categories, which I will employ in my analysis of the Mass Effect dialogue wheel.

Table 6 Categories of Illocutionary Point in Speech Act Theory

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive</td>
<td>Commits the speaker to the truth of the statement</td>
<td>“The geth are attacking the colonists!”</td>
</tr>
<tr>
<td>Directive</td>
<td>Attempts to get the listener to do something.</td>
<td>“Help me stop the geth from attaching the colonists!”</td>
</tr>
<tr>
<td>Commissive</td>
<td>Commits the speaker to future action.</td>
<td>“I’m going to stop the geth from attacking the colonists!”</td>
</tr>
<tr>
<td>Expressive</td>
<td>Expresses the speaker’s psychological state.</td>
<td>“I’m happy that I was able to save all those colonists!”</td>
</tr>
<tr>
<td>Declarative</td>
<td>Brings reality into alignment with the content of the statement.</td>
<td>“Our work here is done – now it’s up to the colonists to defend themselves.”</td>
</tr>
</tbody>
</table>

I undertook a close examination of the first 20 minutes of gameplay, in which the dialogue wheel is introduced to the player. I played this section multiple times, in order to explore a wide range of different trajectories through the dialogue system. In the subsequent screenshots I have cropped the image so that only the dialogue wheel is shown. The text at the top is the last utterance made by the NPC that Shepard is conversing with, followed by the dialogue wheel, with the selection highlighted in yellow, and then Shepard’s response in white below. In some cases I have preserved extensive back-and-forth exchanges in order to better examine how the game establishes its interface conventions.

Figure 17  The first appearance of the dialogue wheel + response 1

17 Some common declarative speech acts include the pronouncement of marriage by an officiant, or the conferring of a degree by an academic institution. In these cases, the speech act serves to officially recognize a set of truth conditions that have already been fulfilled in the world. One might argue that a declarative act might also occur when one takes action to change the underlying truth conditions of the world, such as in the case of a declaration of war by a world leader.
The first time the player encounters the dialogue wheel, there are three options arrayed along the right hand side of the wheel. It isn’t immediately clear from this interface what the difference is between the choices, but the bottom choice seems to be a bit harsher than the other two. When the player makes a selection the conversation moves forward and the player is not given an opportunity to go back and see the other possible outcomes. The above three figures show the pairings between the player's selection, and the spoken outcome performed by Shepard. At this point in the game, the dialogue choices are somewhat inconsequential; the player is being given opportunities to discover the logics underlying the dialogue system.
The second dialogue choice the player is given follows the same layout logic as the first. While the moral valence of the options is still somewhat ambiguous, it now seems clear that the bottom choice is more confrontational, and the central choice is more noncommittal. Each conversational outcome reinforces this: the top dialogue option results in an expression of concern, while the bottom assigns blame. After a few more responses from Shepard’s crewmates, the conversation ends, and the player is given control of Shepard for the first time. Immediately, four “feedback flags” appear above the player’s “mini-map” on the bottom right of the screen.
This is the first time the player encounters the terms “Paragon” and “Renegade” in the game, and their presence casts the two previous conversation choices in a new light. The player has now made two conversational choices, and received a small amount of quantitative feedback about those choices. Although it is still taking shape, the player has now been introduced to the first major interface convention for the dialogue wheel. Paragon selections are almost always located on the top right, neutral options on the middle right, and Renegade options on the bottom right. Over the course of all three games, this convention is adhered to with some rigor.

Maneuvering Shepard out of the cockpit of the Normandy, the player encounters the ship’s navigator, who is engaged in an argument with the chief engineer. Shepard approaches and initiates another dialogue sequence. This conversation starts to add some complexity to the dialogue system. The first choice given to the player here doesn’t follow the pattern of those in the previous conversation.
Here, the player is presented with two dialogue options, both on the same plane, but on opposite sides of the wheel. Regardless of which option the player selects, Pressly voices some concern that the crew isn’t being told everything about the current mission. There does not seem to be any moral valence to either choice, which is perhaps reflected in their position at the “neutral tier” on the wheel.

The next choice presented to the player introduces the second major interface convention of the dialogue wheel. There are three options on the right in the standard Paragon, neutral, Renegade configuration, but now there is also an option on the left, at the neutral tier. When the player selects this option, a brief expository conversation occurs, after which the dialogue wheel returns to the previous state. The left option here allows the player to investigate or “dig down” into the narrative, often without any moral implications. When the side conversation is complete, the player is then able to move forward by selecting a path on the right-hand side of the wheel. If the player had selected “What do you mean?”, then upon arriving back at the origin a new option is displayed: to “investigate”. Investigating always takes the player into closed conversational loops that primarily serve to provide more information about the storyworld and the characters.
These loops may have systemic (explicit) consequences, in that they can unlock "codex entries" for the in-game encyclopedia, which allows the curious player to explore the storyworld even more deeply, but their primary role is to provide (implicit) information to the player.

Figure 28 Investigating reveals additional complexity

If the player takes the option to “investigate”, the system also provides a means of returning to the previous dialogue wheel, and moving forward by offering the player the option to “return” to the starting point. Here after investigating a specific topic (the stealth systems on the Normandy) the conversation loops around, only now two new options are available on the left. These appear to be loosely mapped as Paragon and Renegade options, but when followed each is in fact somewhat neutral. These types of “context sensitive” conversation options can vary in their ethical valence, and are often a source of ambiguity in the interface as they rely solely on textual content rather than interface
position to convey their meaning to the player. It also bears noting that although Pressly’s dialogue is different each time the conversation loops back around to the origin point, that it always fluidly segues into the options available on the right, thus preventing non sequiturs in the primary conversation.

*There is now sufficient information to draw a simple diagram of the interactional mechanics of the dialogue wheel as a mechanism for expressing meaning to the system. Generally speaking, the conversation choices that are aligned from left to right follow a logic of progression: those on the left explore additional information in the current moment, while those on the right advance time forward into the next conversational moment. I will refer to this as the “Progression Axis”. Conversational choices from top to bottom follow the logic of Paragon and Renegade binary, with neutral options in the center. I will call this the “Ethical Axis”.*

Figure 29. The progression axis follows the logics of interactivity described by Ryan as *Exploratory/Ontological* in which one set of player actions is simply a traversal of the possibility space, while the other set explicitly alters the underlying state machine (M. L. Ryan, 2001).

![Figure 29](image)

As the opening sequence continues several more expository conversations happen all of which adhere to these conventions, further establishing them. This established interface grammar changes abruptly when Shepard meets up with Nihlus and the Captain.

*Captain Anderson: We’re making a covert pick-up on Eden Prime. That’s why we needed the stealth systems operational.*

*Why the secrecy?*

*You should have told me.*

*What are we picking up?*
The player is now presented with a dialogue wheel where the Paragon and Renegade options are on the left, while a more neutral option is on the right, rendering the logics of the progression axis moot. This particular configuration doesn’t appear very often, and is usually reserved for conversations connected to the central story of the game. It almost never occurs during side quests, or while simply exploring the environment. For the first time, the player is confronted with a wheel that deviates from the established conventions.

**Figure 30**  A new configuration for the dialogue wheel.

**Figure 31**  This dialogue wheel appears to follow the previously established conventions at first. Here we see the result of a Paragon choice.
Figure 32 Selecting the left hand option also moves the conversation forward. This is unexpected, and problematic.

Shortly thereafter, the player reaches another unusual dialogue wheel [Figure 31, top]. At first this choice appears to follow the standard conventions established in previous conversations; however this is not the case. Whereas one would expect that the choice on the left would lead to an investigative loop, instead it moves the conversation forward [Figure 32]. As a first time player I found this confusing and frustrating, and even after playing through it many times it still bothers me. This may seem like a minor thing to nitpick, but I think it actually speaks to something quite important about the relationship between the player’s expectations, and the game interface. I took this frustration as an opportunity to reflect on my own preferences and to contrast them to the expectations embodied in the design of this dialogue choice.

When I play a game like Mass Effect, I often seek to expose and explore as much information as possible. I will often defer taking actions that I know I need to do to move the game forward, so that I can make certain I’ve found everything there is to find in an area, spoken to every character there is to speak to, and learned all there is to know. At times this need to fully consume a game can border on obsession and I have been told that this behaviour is extremely tedious to watch for an observer. I recognize that my particular gaming background has trained me in this type of behavior from an early age: many of the games that I consider formative reward this particular type of delayed gratification. In particular, role-playing games provide many hidden bonuses for players to hunt down, often requiring players to spend significant amounts of time engaged in tangential explorations rather than the central game if they want to earn the most powerful weapons and abilities. The opening sequence of Mass Effect presents itself to the player using one of the central genre tropes from role-playing games: the branching dialogue tree. While this is dressed up with a novel interface, it still activates all of the expectations that an RPG would activate.

From this perspective, a minor deviation from the established interface conventions is experienced as a violation of the contract of trust between me as a player and the game system. When systematically exploring a dialogue tree, my goal is always to experience as much dialogue as possible before moving forward, so a dialogue option like the one shown at the top of Figure 32 isn’t actually a choice at all: the logic of my own preferences dictates that I select the leftmost option first. When I discover that I cannot then return and
select one of the options on the right (in contravention of everything I’ve experienced in the game thus far) I become upset.

I explain this about myself to clarify my own biases and horizons in this reading and to illuminate an important element of the dialogue wheel from a Commitment to Meaning standpoint. In Table 6 above I outlined five different types of speech act, assertive, directive, commissive, expressive, and declarative, which I would like to return here in greater detail. In Mass Effect, the “investigate” options are exempt from the same meaningful payload as other conversation options. They are “free”, in the sense that the player may explore them for an indefinite amount of time, without changing the state of the underlying game system in any permanent way. When I select a dialogue option on the left, I do so in an exploratory mindset: the meanings that I commit to here are about seeking more information. In speech act theory this falls into the category of directives: “…a question directs the listener to make an assertive speech act in response” (Winograd & Flores, 1986). In contrast, selecting a Paragon, Renegade or neutral option from the right hand side of the wheel entails additional meaningful commitments: some might be assertive, such as when Shepard says “He sounds angry. Something must have gone wrong with the mission.” [Figure 20]; some might be commissive, as when Shepard says “I’m on my way” [Figure 21]. In many cases, these speech acts are hybrids, such as in Figure 22 where Shepard combines an expressive and an assertive act, saying “Great! You piss off the Captain and I’m going to pay for it!” The critical difference between the primarily directive acts of the left hemisphere of the dialogue wheel, and the varied acts of the right hemisphere is that the left hemisphere is generally about the commitments of the NPC that Shepard is interacting with (these directive acts are fundamentally about the information that the NPC has), while the right hemisphere is for Shepard to make commitments about herself. Therefore, when I select a choice from the right hand side of the dialogue wheel, I usually do so knowing that I am committing the character to a particular meaning: one that can shape and inflect how I perceive the character as well as how the character is regarded within the narrative world of the game and the underlying simulation that governs it.

The particular example that foregrounded this for me contains several possible speech acts.
Figure 33  A directive speech act
On the left hemisphere we have a directive act: Shepard is directing Nihlus and Captain Anderson to explain something to her [Figure 33].

Figure 34  An expressive speech act
On the right hemisphere in the “Paragon” position we have an expressive act: Shepard is expressing her gratitude for Nihlus’s presence [Figure 34].

Figure 35  A directive speech act with expressive elements
The “neutral option” is an interesting hybrid: the dialogue stub provided appears to be a mainly expressive act – Shepard is voicing concern – however, the spoken dialogue that it triggers is more directive in nature, as Shepard asks for more information [Figure 35].

Figure 36  An assertive speech act
The “Renegade” option is a straightforward assertive act: Shepard asserts the independence of the Alliance [Figure 36].

This particular deviation from the established interface conventions is somewhat unique for *Mass Effect 1*: it is the exception that proves the rule. Without direct access to the designer responsible for this moment, we are forced to speculate on the rationale underlying this deviation. I can imagine several possible explanations. It is possible that this initial scene was completed early in the design process, before the conventions for the dialogue wheel were firmly established. It is also possible that this is an intentional deviation from convention, intended to create a sense of unpredictability in what would otherwise be a somewhat transparent interface18.

The final element of the dialogue wheel that merits discussion is the occasional presence of "extreme" Paragon and Renegade options. These choices are color coded to distinguish them from standard dialogue options: blue for Paragon and red for Renegade [Figure 37].

*Figure 37*  A rare situation where the player is able to choose between two "extreme" Paragon and Renegade options, denoted by the blue and red text respectively

These appear during charged conversations, and denote opportunities for the player to gain significant amounts of Paragon or Renegade points, and to negotiate extremely

18 If this is in fact the case I would argue that this is a bad design decision: akin to using impenetrable jargon in a dissertation to create the illusion of rhetorical depth.
fraught social and political situations. Unlike other conversation choices, these more extreme choices often require that the player “qualify” for them by meeting a minimum level of Paragon or Renegade points, making them one of the few game mechanics that actively rewards or punishes consistent play along the ethical axis. Over the course of all three games, these choices are used to accomplish the most rewarding and unlikely of narrative outcomes: major storylines such as the resolution of the conflict between the Quarians and the Geth, or the curing of the Krogan Genophage, or even the survival of certain squadmates, hinge on the player qualifying for and selecting these options at choice points in all three games.

In my previous work on commitment to meaning with Karen Tanenbaum, we presented a short example from *Mass Effect* (K. Tanenbaum & Tanenbaum, 2010) in which we discussed the relationship between the dialogue wheel and the different types of speech acts outlined by Winograd and Flores (1986), making a distinction between the speech acts of the player when selecting a conversation option for Shepard and the speech acts of the character herself.

The act of dialogue selection in *Mass Effect 1*, we argued, was a *directive* act: one which placed the player in the role of “director” rather than “performer”.\(^\text{19}\) In retrospect, however, I would argue that the types of communicative commitment occurring in the *Mass Effect* dialogue system are more complicated than simple direction on the part of the player. There is certainly a directive act occurring: one which acts as an intermediary between the player and the character. However, the same selection can often simultaneously reflect an *expressive* commitment along the distinction of Paragon vs. Renegade: (i.e.: “I feel like being nice” vs. “I feel like being a hard-ass.”). And while the player never gets direct access to the speech acts performed by Shepard, the interactional grammar of the game is often transparent enough to seamlessly translate the selection of dialogue stubs into coherent speech acts of Shepard’s that reflect player commitments via in the form of *commissive* expressions (i.e.: “I will accept this side quest.”), *assertive* expressions (i.e.: “Saren is working with the Reapers”) and *directive* expressions (i.e.: “You have to allow me to hunt down Saren!”). In these cases, Shepard speaks for both herself and for the player.

Interestingly, there are also some rare occasions where the player may direct Shepard in

\(^{19}\) Wardrip-Fruin has written about this relationship, asking whether or not he is Shepard during play, or is instead third party, directing Shepard’s actions (Wardrip-Fruin, 2007).
a *declarative* expression, although the relative rarity of this situation can lead to problematic misalignments of player and system commitments, especially if the player was not anticipating a dialogue choice to materially change the state of the world. One example we used in our original paper was from a player who posted about the dialogue wheel on the *Mass Effect* user forums:

> For the most part, I loved the dialogue wheel... but I’d be lying if I said there weren’t a few occasions where I selected a response intending for my character to behave or say something a certain way... only to have them either say or (in worse situations) do something I neither intended or wanted to happen...One case example was when I was tracking the guy who’d gone off to create a cult of biotics. When I confronted him, I highlighted a response that I thought would probe or provoke him a bit... but instead once I selected the response, I drew a weapon and shot his head off. (Jon“, 2007)

In this example, the player made a communicative commitment that he likely imagined would play out through Shepard’s actions as either *assertive* or *directive*, providing instructions or requesting information. Instead, Shepard enacted a *declarative* commitment, bringing about a new status quo through the extreme act of executing the cultist.

The dialogue wheel, thus, can be a vehicle for a full range of illocutionary points. However, it is not enough to simply categorize speech acts: we must look deeper, at the ways in which these commitments become meaningful through play. In re-applying this lens to *Mass Effect*, I was forced to ask some concrete questions about commitment to meaning as a theoretical construct, and to reexamine my initial analysis.

I found that I needed to deal with the notion of “commitment” at several levels. Commitment in speech act theory is about ownership of one’s own communicative acts and an ongoing stake in the consequences of those acts. Speech (or action) without commitment is devoid of meaning: it is only in accountability to the multitude of tangible entanglements that proceed from a speech act that we can be said to have made meaning. Perhaps more importantly, when we speak, we cannot always anticipate the ways in which our utterances may come to create meanings in the world, but this does not make us any less accountable to those meanings. Should I accidentally speak carelessly, or cause harm to another through my speech, then I am accountable for that as a real outcome, regardless of whether or not that harm was intentional. *Meaning* can thus be seen as a contingent property that arises from speech and is co-created in that fuzzy interface
between the intentionality of the speaker and the horizons of the listener. It exists in what Bakhtin would call a network of utterances (Bakhtin, 1981). Commitment to meaning in speech requires that we accept ownership of all possible outcomes of our speech acts, even when they escape our ability to predict them. Conversational meaning is fluid, often mutating over the course of a dialogue such that the intended meanings of an utterance at the beginning of a conversation are far removed from the emergent negotiated meanings that exist at the end. Although there are plenty of strategies for trying to pin down expressed and interpreted meanings in a conversation, to correct for errors or “ground” the conversation (Grice, 2013), it is still quite common for two people to walk away from a conversation with radically different ideas about what was said and what it meant.

Players in games must often operate with minimal knowledge about how their expressed meanings were received by the system. Salen and Zimmerman argue that game systems must provide explicit feedback immediately when a player interaction impacts the system state, while also providing longer-term feedback that can aid a player in building an understanding of the consequences of her actions over time (Salen & Zimmerman, 2004). This is a form of communicative grounding, and while many games are very good at doing it for combat oriented expressions, there is still much to be done to develop conventions and strategies for other expressive communications. Players often have only limited communication channels with which to express their own understandings of the communicative commitments encoded in a game back to the dynamic system. Lacking the types of reciprocal feedback needed for proper communicative grounding, players and games must instead rely on an interface whose main role is to narrow down the communicative possibilities available to the player to a small recognizable grammar. In Mass Effect the grammar of the dialogue wheel provides an example of one solution to this challenge. The player is given multiple levels of feedback about the meaning of the actions that has performed, in the form of the initial dialogue stubs, Shepard’s performance, the reactions of the NPCs, non-diegetic indicators of Paragon and Renegade points for each conversation, occasional color coding of the interface, and persistent tracking of these same values on the Character’s portrait. These design choices all conspire to provide the player with a consistently learnable communicative grammar that is simplistic, but effective, in that it is readily apparent to the player how to express the limited possible communicative commitments to the system.
4.4. Analysis: Method Acting and Transformation

In the previous section I looked at *Mass Effect* from the perspective of speech act theory. In this section I apply the lens of “Method Acting and Transformation” to the game. As discussed in Chapter 2, my interest in method acting derives from the relationship between the creative choices of the actor and the *script* that drives the drama.

4.4.1. Scripting the Player’s Behavior

The first thing I looked at from a method acting perspective was how *Mass Effect* *scripts* the actions of the player. I’d like to make an important distinction here between “scripting” a player’s actions and “railroading” the player. Much blood has been shed in games discourse, both vernacular and scholarly, over the notions of “rails” and “railroading”. Both terms have distinctly negative connotations, suggesting that the player is simply a passive passenger along for the ride. Sullivan et al. (2011) describe railroading in terms of restricting the choices of a player in order to keep an interactive narrative from straying from the outcomes intended by the storyteller. A highly railed experience is one in which the player is forced down a narrow interactional channel with no opportunity to deviate from the path. It seems as though the central objection to railroading is that it disregards player choices in favor of a highly deterministic outcome, effectively rendering the participation of the player moot.

I propose that “scripting” is a more productive metaphor for participatory narratives, in that it more accurately captures the activity of the player as a meaningful component of the story without sacrificing an authored narrative in the process. A scripted piece of theater might be seen as highly deterministic: the dialogue is sacrosanct, penned by the playwright and delivered by the actors exactly as written. Playwright and director David Mamet takes a particularly hard-line stance on the role of the script, arguing that it is the central artifact around which all theatrical performance must be built, and that all other elements of the theater, acting, direction, scenic design, and costuming, etc, must be applied only insofar as they enhance the audience’s experience of the Text (Mamet, 2010). However, Mamet goes on to argue that the experience of live theater should not be about any particular *message* or political statement: that theater works its magic in the unfolding of a drama in real-time for the audience. Mamet’s position, as I interpret it, is fundamentally phenomenological in nature; the magic of live theater takes place in the
moment in which a text is enacted, when the words of the script become human activity. Theater is meant to be experienced in the present-tense, rather than reflected upon. It is not, however, a “railed” medium in any of the senses that are often critically applied to bad RPGs. Although the script determines the unfolding of the action, it is only in the actions and artistic choices of the actors that the narrative is given life. An actor is not “railroaded” by her script, she is empowered by the language of the script to act as her character and to create a present-tense performance that is about being in the world of the play.

I contend that the same can be true of a player in a story-based game, provided the game is well executed and the script effectively communicated to the player. The difference between providing a player with a script to enact and railroad a player is that the player freely chooses to follow the script, whereas railroading happens in opposition to the desires of the player. Scripting is always about supporting the player in a performance, whereas railroading is about forcing the player to sit back and watch the story play out. In a scripted performance, the impetus for forward movement comes from the actions of the player, while in a railed scenario the system drags the player forward against her will.

Unlike many contemporary games, Mass Effect lacks an extended interactive training sequence; however, there are a number of overlapping mechanisms throughout the game’s opening sequence that help the player learn and enact the scripts that the game is looking for. These include diegetic prompts, such as characters telling Shepard what she needs to do next, and nondigetic interface elements that provide direct instructions on how to use the game’s features.
Figure 38  The first time the player has direct control of Shepard.

This screenshot in Figure 38 includes several interface elements to help direct player. The most overt of these is the text above Shepard’s head that instructs the player to access the Codex, which has been populated with new entries. This is reinforced by the interface flags on the lower right hand side of the screen that indicate that the player has gained new experience points (XP), a new Journal entry, and a new Codex entry. A more subtle piece of guidance can be seen on the “mini-map” in the lower right hand corner of the screen, where a small white arrow points to Shepard’s next objective.
Figure 39  Shepard approaches an objective, marked on the mini-map
As Shepard gets closer to this objective, it will appear as a flag on the map [Figure 39].

*Mass Effect* also provides maps of most areas with points of interest and plot points marked on them [Figure 40]. The Journal and the Codex both provide additional details about Shepard’s missions and assignments, as well as information about the *Mass Effect* storyworld.
Figure 40  A map of the Council Tower in the Citadel, with a plot point marked with an exclamation point.

Figure 41  The Codex contains an instruction manual.

The Codex primarily serves as an encyclopedia of the game world; however it also contains an instruction manual for the game and some basic information about how to play [Figure 41].
The Journal divides tasks into “Missions” and “Assignments”. Missions all connect to the main plot and are required to complete the game, while Assignments are optional, often taking the player further afield. The Journal both records the player’s progress and also helps to script it, by providing instructions about what to do next [Figure 42 and Figure 43]. The player may access these instructions at any time, but is never required to view them. This material walks the line between diegetic and non-diegetic. It employs some of the basic narrativized interface techniques described by Bizzocchi, by reproducing the same look and feel as the interfaces that the characters use in the game (Bizzocchi et al., 2011). It is unclear, however, who the subject of this interface is. Is it meant to be read by the player, as a non-diegetic entity? Or is the text intended for Commander Shepard? Or is it meant to be read by the player as Shepard?

![Figure 42](image-url) The Journal, with information about the current mission and details about the story up to this point
At the beginning of the game, each time the player encounters a new screen, it is accompanied by a short piece of textual instruction. These semi-diegetic tutorial elements do some minor work to help orient the player to the interface, but they provide only minimal practical instruction.

In most cases these instructions only appear once, and only last for three to four seconds before fading away. For some of the more difficult interface elements, like the inventory management, the player is given a small instructional dialogue to read, with a button to dismiss it. In these situations, the player must absorb several pieces of information before she has been given an opportunity to experience any of the contexts in which that information might be useful [Figure 45].
The instructions provided by the game show the player how to operate the basic elements of the interface; however, they do not do a particularly good job of showing the player what she should be doing next. To extend the theatrical metaphor, the player has been taught how to cross the stage, how to face out, and how to speak (all very important technical aspects of the craft of theatre), but has not been provided with any lines to perform.

Mass Effect's solution to this is to use diegetic dialogue elements to cue the player, often by simply having Shepard declare what she needs to do next [Figure 46]. When there is a clear objective that the player is working towards (in contrast to areas where the player is expected to explore freely) then almost every conversation will end in a way that reinforces that objective. There are also a number of recurring conversation options throughout the game that help orient the player to the narrative.

This is a form of what Jeff Wirth describes as backleading, in this case cueing by objective (Wirth, 1994). In fact, almost all of the scripting techniques described here can be understood in terms of backleading (see chapter 2 for an introduction to backleading). I perform a more detailed analysis of backleading as part of my discussion of Mass Effect 2 below.
Kaiden Alenko is always willing to provide some insight into the previous mission

Between missions, there is usually a period of time where the player is free to explore the Normandy and converse with the crew. During these interstitial periods, a lot of dialogue is used to frame and contextualize the narrative. Two the human crew members, Kaiden Alenko and Ashley Williams, provide Shepard with sounding boards for each mission [Figure 47]. This is a form of post-hoc scripting in which the player is provided with explanations of her actions and opportunities to reflect on recent experiences. To some
extent, every conversation Shepard has with the crew serves this goal. The game parcels out new dialogue for Shepard and her crew a little bit at a time. After each major mission, the dialogue options for the crew update to reflect on the current state of affairs and to reveal a little bit more about their past. Thus, the game rewards the time the player spends “checking-in” with each crew member aboard the Normandy by deepening and expanding on the characters, the plot, and the storyworld.

The individual conversations are not the only diegetic channel for this information; most major plot missions are bookended with “briefings” where Shepard and the crew discuss what has just happened and where they need to go next. When exploring the world there are often sources of media in the environment that provide more details on the impact of Shepard’s actions on the galaxy at large. The most prominent of these are the elevators in the Citadel, which the game uses as “loading” screens when navigating the larger environments. To occupy the player during these extended idle periods, the elevators often have galactic news broadcasts playing that frequently connect to Shepard’s exploits [Figure 48].

![Figure 48 A news broadcast in an elevator connects to one of Shepard’s Assignments](image)

These conversations, briefings, and environmental details create an environment loaded with information about the narrative, all of which conspires to create a context for the
player’s actions and choices. While this isn’t as strict or as deterministic a structure as a literal script for the player to follow, it does meaningfully constrain the player’s actions in productive and supportive ways. One way to think about this is through the lens of Meisner’s approach to method acting. As discussed in Chapter 2, the Meisner school of acting is primarily concerned with how the characters and actors surrounding an actor in a scene reflect her own actions and choices back to her. A character, from this perspective, is best understood through the actions and behaviours of her interlocutors: we know someone has done something wrong because the rest of the room gasps in alarm; we know who the villain is because of the way the other characters recoil in fear. By situating Shepard within a web of dialogue aboard the Normandy, we are provided with a dynamic group of actors to reflect Shepard’s identity back to us. Paragon or Renegade, the rest of the crew always treats Shepard like a hero, and so these different roles that Shepard can assume are always framed in a heroic light.

4.4.2. Scripting Player Behavior via Ludic Rewards and Punishments

Much of game design is about motivating the player by rewarding success and punishing failure. The systems of reinforcement and conditioning at play in games are powerful mechanisms for encouraging a desired performance from a player. These ludic structures serve as scripted cues to the player, which gives them immense power over how a player experiences a character. Done well, they reinforce narrative pleasure, but done poorly they can undermine the story. In my notes on Mass Effect 1 (See Appendix B, 8.3.1.4) I found myself dedicating a significant amount of energy to a discussion of the dynamics of the inventory management system. This is because most of the game’s ludic rewards take the form of new items, collected from fallen enemies. From a design standpoint there are several significant problems with how the game structures its rewards and its feedback. It is common in RPGs for the player to “loot” the bodies of fallen foes, a process that usually involves locating the body and interacting with it to collect your reward. Mass Effect 1 shortcuts this process by automatically adding items to Shepard’s inventory as she defeats enemies. This happens invisibly, until the player opens her inventory screen, at which point a list of “recovered items” appears [Figure 49].
The player is then given an option to keep any of the items or reduce them to “omni-gel”: a consumable resource that can be used to repair vehicles and open locked chests and doors throughout the game. One of the problems with this approach is that it is that the reward is so thoroughly decoupled from the action for which it was earned. The feedback loop between killing an enemy and receiving a reward could even extend across multiple gameplay sessions if the player isn’t attentively checking the inventory screen. This shortcuts any potential reinforcement learning that could occur within the gameplay; not only are the individual actions and rewards disconnected, but all of the rewards are combined for all of the actions, so it is impossible to learn how the game rewards particular actions.

Perhaps even more problematic, however, is the fact that the player’s inventory is artificially limited to 150 items, but the game does not provide the player with any feedback about how much space is remaining in the inventory until the margins are too narrow to do anything about it [Figure 50]. When the inventory is almost full, the game warns the player to sell or salvage existing items to make room for new items. If the player was unfortunate enough to have allowed a large backlog of uncollected inventory to accumulate, this means that many of those new (and often better) items will be lost.
This entire process takes place before the player reaches the inventory screen itself – she is forced to decide which new inventory to keep and which to throw away without being allowed to view or modify her existing inventory. To add insult to injury, the warning messages obscure the interface where the player can see the items she is being asked to manage. The equipment management screen itself is a singularly badly designed interface, with no meaningful capacity to sort, filter, and compare the dozens of items carried by the player at any given time [Figure 51].
In an RPG where collecting new gear is one of the core reward mechanisms, an interface as badly designed as this one transforms these rewards into punishments. Rather than reinforcing desired behavior, this type of inventory management system punishes the player who hasn’t been paying close enough attention.

One would not ordinarily associate something like a bad inventory interface design with character performance, but I would argue that this has a significant impact on how the player assumes the role of Shepard in the game. The time that the player needs to spend micro-managing her inventory in the game does not correspond to anything within the world of the game; it is wholly non-diegetic time that takes the player out of the dramatic moment and the game demands a significant amount of it. Thus, we can say that the central reward mechanism in the game actually detracts from the drama of the narrative in highly problematic way.

The other reward mechanic is not framed in terms of gameplay at all, but is instead connected to the character’s progression. Mass Effect is designed to be consumed and it rewards thoroughness by offering the player small narrative tidbits in exchange for uncovering every rock, exploring every planet, and accepting every side-quest. It is not an accident that the only way to fully “level-up” Shepard is to consume all of the extra content.
The difficulty of the enemies scales with the player’s level, as does the quality of the available equipment. As Shepard and her companions level up they gain new powers and abilities, all of which deepen the experience of combat. It is quite possible to complete *Mass Effect* in a few sittings by simply following the main missions, ignoring the “investigate” options on the dialogue wheel, and rushing through to the end; however, doing this leaves the player in control of an ineffective and weak version of Shepard, which has ludic and narrative consequences.

Figure 52  **Shepard’s abilities at the beginning of the game**

In my notes I commented that the combat in the game was “punishingly unfun” and “uneven” for the first 25 or 30 hours of gameplay. I believe this is because the combat mechanics are all optimized for higher-level characters. Even as an experienced player, I found that I struggled to feel a sense of *effectiveness* during the first half of the game. At some point in the middle, I hit a turning point. I suddenly had a wide range of powers and abilities to choose from that meaningfully improved my survival rate.
More importantly, the narrative of “Shepard the hero” suddenly became real. At the lower levels, when it was possible to die at the hands of random pirates on some obscure backwater world, when my opponents seemed better equipped and more powerful than me, it was hard to take “Shepard the First Human Spectre” seriously. It wasn’t until I started to feel like I was in control of the combat that I really began to connect with the character that the game’s story was pushing. I suddenly began to viscerally experience Shepard’s exceptionality first-hand.

These ludic systems of reward, punishment, power, achievement, and difficulty all serve to structure the performance of the player in the game. When done well, they guide the player down a ludic path that overlaps and reinforces the narrative scripts of heroism that are fundamental to the story of Shepard. Sometimes, however, these systems of motivation inadvertently create perverse incentive structures that actively steer the player away from meaningful performances.

4.4.3. The Dialogue Wheel as Subtext and Text

In method acting, it is common for a performer to be trained to perform a scene’s “subtext” rather than the surface text on the page (Benedetti, 1997). The subtext is the underlying...
meaning that the text of the script expresses. Often times the subtext and the text are in agreement: a character desires a particular thing and so he asks for it. In other cases, something in the scene blocks the character from directly expressing his needs, and so instead the text must indirectly attempt to express the subtext.

In *Mass Effect*, there is always a relationship between dialogue options presented to the player on the dialogue wheel and the text spoken by Shepard; however, there is never a direct one-to-one mapping between the two. The player is never given foreknowledge of the text. Instead, the dialogue wheel provides the player with a choice of subtexts that could potentially underlie any given utterance of Shepard’s.

![Figure 54](image)

*Figure 54 Two examples of a direct relationship between the subtext and the text*

Most of the time the relationship between the text and the subtext in *Mass Effect* is pretty direct: the player asks a question or makes an assertion via the dialogue wheel, and Shepard delivers the equivalent piece of dialogue [Figure 54].

![Figure 55](image)

*Figure 55 An example of an indirect relationship between the subtext and the text*

In some cases, however, we can see examples of indirect relationships between subtext and text[]. These often occur in situations where Shepard is required to be diplomatic or political. In this example, the text spoken by Shepard *implies* the subtext selected by the player without directly stating it.

As we saw above, the location of a prompt on the dialogue wheel can be mapped to the ethical systems of the game, along the vertical ethical axis. This introduces its own additional layer of subtext, as, in most cases, the player knows that a given choice is going
to be expressed as either a Paragon or a Renegade action. Thus, even when a player is presented with a dialogue choice where both the provided stubs and the actual performed dialogue are all-but indistinguishable from each other along the ethical axis, the underlying implications of that axis impart different subtext to the material. There are a few situations where, regardless of which subtextual option the player selects, the spoken dialogue is the same. In these situations, the different subtexts are the primary differentiators of the dialogue’s meaning for the player.

4.4.4. The “Creative State”
Trying to record and reflect on the “creative state” in this work is probably the most challenging thing to do from a methodological standpoint, because the creative state is fundamentally unreflective. Much like the state of flow, the markers of the creative state involve the actor’s (or player’s) awareness becoming deeply involved in the moment, with little thought to the past or future. I regard the creative state as one in which I am no longer acting as myself and am instead fully invested in the immediate needs of the character. In Jeepform LARP, this would be described in terms of “bleed”, when the emotions and desires of the character create a congruent emotional reaction in the player. When I use the word “transformation” in this dissertation, I am discussing the most extreme manifestation of the experience of bleed, and of the creative state: when the barriers between the character’s intentions and the player’s intentions have completely broken down.

Methodologically this can be problematic, because the moments that I am most interested in are paradoxically also those moments where I am least able to maintain any reasonable scholarly or analytical distance, where the act of stopping to acknowledge the presence of the creative state is sufficient to jolt myself out of the immediacy of the moment. It is thus only possible to apprehend these experiences in post hoc reflection.

In *Mass Effect* the creative state was elusive. I experienced it most strongly when the game was exploring emotional moments that one wouldn’t ordinarily encounter in a digital game. I will provide three different situations where I found myself in the creative state as a representative sampling of the types of moments that most strongly elicited this state of mind. The first of these occurred during a conversation where Shepard wasn’t even the central participant.
One of the characters that join’s Shepard’s crew is an Asari archeologist named Liara. Liara is an expert in Prothean relics and helps Shepard to translate the visions given to her by an encounter with a Prothean beacon at the beginning of the game. As the story unfolds, it is revealed that Liara’s mother, an extremely well respected Asari Matriarch named Benezia, has been indoctrinated and subverted by Sarin and the Reapers. If Liara has accompanied Shepard on the mission where this is revealed, she will attempt to redeem her mother, but Benezia is unable to fight off Saren’s hold on her mind and Shepard and Liara are forced to kill her. In her final moments, Benezia is able to shake off Saren’s compulsion enough to say goodbye to her daughter, while Shepard can only look helplessly. In that moment, my own feelings of helplessness and sympathy for the characters perfectly aligned with Shepard’s; we are both forced to become spectators to someone else’s drama in that moment.

Another moment where I experienced the creative state occurred during a conversation between Shepard and her mother. In order to see this particular scene, the player has to have selected the “Spacer” background for Shepard during character creation. “Spacer Shepard” is a military brat, the only child of two Alliance officers, and is the only version of Shepard with any living family to appear in the game. For me, this conversation took place shortly after the death of Benezia, when much of the dialogue on the Normandy was revolving around processing Liara’s grief. Within this context of familial loss and heightened emotions, Shepard is given a quest to help a veteran suffering from PTSD who once served under her mother’s command.
The first time I played the game, I had not chosen the Spacer background, and so had not encountered this assignment, so I did not expect Shepard to be able to simply call up her mother on the subspace network for a chat. It is rare for the heroes of games to have family ties like this, and there was something profoundly humanizing about the experience of calling Mom for help. In the moment when Shepard’s mother signs off, telling the character how proud she is of her, I found myself experiencing another moment of perfect bleed with the character. Unlike many of the other moments where I experienced the creative state, this one stood out for its quietness and its simplicity, as a contrast to the sweeping scope of the game’s other storylines.

The third example of the creative state that I want to discuss is very different from the other two, in that it does not involve the dialogue system. At the very end of the game, Shepard and her crew have tracked Saren and the Geth to the lost Prothean world of Ilos: a repository of knowledge that was hidden from the Reapers in a final attempt to save the Prothean civilization from extinction. Ilos is the location of “the Conduit”, a lost mass relay that connects directly to the Citadel. Saren and his allies use the Conduit to mount an attack on the Citadel as a prelude to signaling the remaining Reapers on the edges of the galaxy that it is time to begin the “Harvest”: a cycle of extinction that happens every 50,000 years, and wipes out all organic life in the galaxy.
As Saren’s fleet attacks the Citadel, Shepard and her crew (within their ground transport vehicle, the Mako) must race to reach the Conduit before it closes. A very brief cutscene shows the Citadel’s fleets desperately defending themselves against the Reaper Sovereign, an implacable foe, before returning to Shepard, in the Mako, aimed right at the Conduit. A countdown clock appears on the screen, indicating that the Conduit is closing. There are too many enemies to defeat in the time remaining. A barrage of fire from the Geth is stripping away the Mako’s shields as it barrels towards the relay. The text of the countdown timer is changing color, as it ticks closer to zero. Liara shouts “Hold on! Things
are going to get rough!” The only thing the player can do is drive forward into certain death and desperately hope to survive long enough to reach the mass relay at the top of the ramp [Figure 58].

This final race for the conduit is the culmination of everything that has happened to the player up to this point. It is a very literal “narrow channel” that the player must traverse or else all will be lost. Unlike many of the other major plot points that have occurred in the game, the race to the conduit has no choices for the player to make: she must succeed. It is the simplest of interactions. The player must move forward, fully committing to the goals of the characters.

In this moment I was fully committed to getting through the Conduit, no matter what the cost. It didn’t matter whether or not Shepard was a Paragon or a Renegade, it only mattered that Shepard was the hero. All of the design elements in this sequence conspired to create an opportunity for me to experience this perfect alignment of my own desires and the demands of the story. The ticking clock forced me to react to the situation without stopping to think too hard; the environment channeled me toward a singular goal; the enemies made it impossible for me to consider any alternatives; the knowledge of the urgency of the Citadel’s plight and the need to stop Saren and Sovereign gave me a reason not to fail.

It is hard to pin down the specific design poetics that create opportunities for the player to experience the creative state, but these three examples provide a starting point for understanding how this phenomenon works. To help clarify what was happening here, I also took note of times when I found myself distinctly not in the creative state. This was interesting because the moments where I found myself most distanced from Shepard and from the emotional immediacy of the narrative were the times when I was forced to make a major choice with non-negotiable consequences for the story.

The first of these choices takes place on the planet Virmire, where Saren and the Geth are breeding an army of cloned Krogan soldiers. Shepard and her crew set a bomb to destroy the facility, but before they can arm it they need to disable an anti-aircraft tower so that the Normandy can pick them up. One crewmember, Kaiden Alenko, stays behind to arm the bomb while another crew member, Ashley Williams, goes on ahead to disable the tower. Both end up pinned down by Geth forces and Shepard must choose which one to rescue [Figure 59].
Figure 59  Shepard is faced with a difficult choice

Whichever character the player chooses to rescue will live, while the other one dies. Both characters have been with Shepard since the beginning of the game, both have compelling backstories, and both have tactical value as members of the team. There is no obvious correct choice here, and I found myself jarred out of the moment by the need to make this impossible decision. Rather than thinking like Shepard I found myself working through why I, as a player, would want to keep one of these characters in the story and why I would let the other one go. The choice became an analytical decision, rather than an emotional one. Essentially I stopped thinking like an actor performing the role of Shepard in the moment and instead found myself thinking like a writer or a director, orchestrating events.

To a certain extent, my distaste with having to make this decision paralleled Shepard’s dismay over her situation; however, our circumstances differed in one critical way. As a player I had the luxury of stepping back from this choice and distancing myself, something that Shepard could not do. Because the game gave me room to stop and ponder this decision I was able to detach from the emotional reality of the choice – to hide from the truth of the story by treating the moment like a game. Shepard was forced to make this choice in the blink of an eye, she did not have the luxury of weighing the options like I did. Game-time stopped moving forward for a few minutes while I considered the impact of this choice, but when I finally made a decision, only a moment had passed for the character.
The creative state happens when the actor doesn’t hesitate but instead simply acts fluidly in the moment. By allowing me to stop and second-guess myself, this moment in the game undermined the present-tense nature of the creative state.

![Shepard must decide the fate of the Council](image)

*Figure 60  Shepard must decide the fate of the Council*

A similar thing happened to me during the final battle of the game. At this point, the human Alliance fleet has arrived to provide support to the Citadel defense fleet, while Shepard battles against Geth fortifications to reach Saren on the Citadel. An urgent distress call is issued by the ship carrying the Citadel Council: if someone doesn’t rescue them, then they will die, but the rescue attempt will certainly cause the Alliance fleet to take heavy casualties and potentially miss the opportunity to destroy Sovereign. In Figure 60 we see the dialogue wheel shown to the player: it is configured similarly to the wheel in Figure 30, in that the ethical axis has taken over the entire wheel; the logic of the progression axis is overridden here. On the top left is the Paragon choice, to save the Council, while on the bottom left is the Renegade choice, to allow them to die, with a single neutral option to the right: concentrate on Sovereign. One of Shepard’s companions explains that focusing on Sovereign will also mean the death of the Council, so the choice between the neutral and Renegade options is really only about the underlying subtext, since the outcomes are already determined.

Once again I found myself taken out of the moment, this time torn between the vision of the character that I wanted to perform and my own personal emotional reaction. I had
played Shepard as an almost pure Paragon up to this point: she respected authority, she believed in serving something larger than herself, and she was strenuously anti-xenophobic even when most of the other humans on her crew had expressed distrust of the Council and the other alien crew members. The Council was the embodiment of the ideals that I had fought for as Shepard and as a Spectre I had a responsibility to preserve them. From a galactic politics standpoint, having humanity sacrifice a large portion of its fleet to save the Council would be good for the human Alliance’s standing with the other races.

On the other hand, the Council had demonstrated again and again, over the course of the game, that they were unwilling to take Shepard or the threat of the Reaper invasion seriously. They even stripped Shepard of her command at one point, forcing the character to steal the Normandy in order to pursue Saren and Sovereign. Saving the Council would weaken the Alliance’s overall military capability, which could (and in fact does) have long term repercussions on humanity’s ability to survive the impending Reaper invasion. As a player I disliked the Council; my allegiance was always to Shepard and I resented their treatment of the character, of me, as Shepard.

As with the choice of which character to save, I found myself unable to occupy the creative state. I had to stop and look at the angles. I had to consider the possible outcomes, rather than react to the situation at hand. And while, in some ways, the choice was a more interesting one than the choice of which character to save, I still resented having to stop and consider something as abstract as this, in the middle of the climactic moments of the game.

*Mass Effect* provides some useful examples of both commitment to meaning and identity transformation at work. The dialogue wheels dynamics provide an excellent, if simplified, example of how to encode meaningful communicative grammars at the interface level. The game’s diegetic and non-diegetic coaching exhibits design strategies that parallel techniques from scripted theater including backleading, and congruent techniques from Jeepform LARP such as telegraphing. There are a few moments in the game that are very successful at eliciting the creative state, often connected to “ticking clocks” and other

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21 Unlike the decision of who to save, however, the decision of whether or not to save the council did fit cleanly within the Paragon/Renegade binary of the game, and so in a sense my choice became a foregone conclusion: I saved the council, in spite of myself.
forms of outside-in motivation, and these moments can be very effective at creating an experience of bleed. I will explore these poetics in greater detail as I continue my analysis to the Mass Effect trilogy.
5. Close Reading: *Mass Effect 2*

In the previous chapter I presented a close reading of the first *Mass Effect* game. In this chapter I will do the same for its sequel, *Mass Effect 2*. In each of these readings I have sought to strike a balance between a continuity of examples around each of the individual themes and the introduction of new analytical perspectives that arise from the redesigned poetics of each game.

5.1. History

*Mass Effect 2* (BioWare, 2010) was released in 2010 and is generally considered to be the best of the three *Mass Effect* games, garnering a Metacritic score of 94 on the PC (versus 89 for both ME1 and ME3) (CBS Interactive, 2014). Of the three games in the trilogy, *Mass Effect 2* is the one that I have played the most. I completed one playthrough of the game for pleasure as a Paragon on the Xbox 360 and then spectated while my wife played through the game again as a Renegade. I played it a third time with Jim Bizzocchi as research for a presentation and panel discussion with one of the game’s head writers, a process we documented in detail in a journal article (Bizzocchi & Tanenbaum, 2012). My playing of the game for the dissertation was my fourth complete traversal of the game, and my first time experiencing the game on the PC instead of the Xbox.

5.2. A Brief Introduction to *Mass Effect 2*

*Mass Effect 2* is a larger and more complicated game than *Mass Effect 1* and requires a significant time investment to play. At the same time it is a much more streamlined experience, with many of the RPG elements of the first game stripped away and simplified.

5.2.1. *Mass Effect 2* Storyworld

*Mass Effect 2* picks up one month after *Mass Effect 1* ends. While patrolling for any remaining Geth forces in the Normandy, Shepard and her crew are attacked by an enormous ship which destroys the Normandy and blows Shepard out into space, where she dies. Shepard’s body is recovered by a shadowy organization called Cerberus that
spares no expense in reconstructing and resurrecting her. Two years later, Shepard awakens aboard a Cerberus space station to find that it is under attack. Fighting her way to safety with two members of *Project Lazarus*, she escapes and is introduced to the *Illusive Man*: the mysterious leader of Cerberus. The Illusive Man informs her that human colonies are disappearing and that the Alliance is too bound up in galactic politics to protect them. He has used Cerberus’s resources to rebuild the Normandy, to resurrect Shepard, and to recruit a crew of outcasts, renegades, and criminals to assist Shepard in her search for the missing colonists. He also provides Shepard with a sentient AI named EDI to help run the ship.

Shepard’s search for the missing colonists takes her into the galactic “underworld”, the Terminus Systems, tangling with mercenary organizations, smugglers, and other unsavory characters from outside the law. She discovers that the colonists have been abducted by a mysterious species called the Collectors, who are actually working for the Reapers.

The status quo in *Mass Effect 2* is much different from that in *Mass Effect 1*. Humanity is playing a larger role in galactic governance, but Shepard is operating outside the authority of the Citadel, which complicates the player’s ethical situation. The loyalty of Shepard’s crew is questionable: if the player doesn’t allocate time to earn the trust of each companion, it is much less likely that he or she will survive the final mission. It is even possible for Shepard to die at the end of the game, should the player disregard the needs of her shipmates.

The Reaper invasion itself is not too far off. If the player purchases a downloadable content pack (DLC) called *The Arrival*, Shepard learns that the Reapers plan to use something known as the *Alpha Relay* to begin their invasion, jumping into the galaxy from their distant home across a huge expanse of “Dark Space”. Shepard destroys the Alpha relay, which buys the galaxy much needed time to prepare; however, doing so comes at a great cost. The relay explodes, wiping out an entire colony of Batarians. Shepard is branded a war criminal and promises the Alliance she will stand trial for her actions when and if she returns from her mission against the Collectors.

Using the knowledge and expertise of her new crew, Shepard finds a way to track the Collectors back through the thought-to-be-defunct *Omega 4* relay, which leads into the Galactic Core. Shepard and her crew undertake a suicide mission through the relay, where
they discover that the Collectors are building a new Reaper using the processed DNA of millions of human colonists as the raw material.

Shepard destroys the massive and monstrous Human-Reaper, and is given a choice to destroy the Collector base (Paragon choice) or preserve it so that Cerberus can salvage the advanced technology onboard to use against the still-impending Reaper invasion (Renegade choice).

5.2.2. **Mass Effect 2 Gameplay**

In addition to jettisoning much of the inventory management that plagued the first game, *Mass Effect 2* introduces new elements into the combat and conversation systems. At key points in a number of conversations, the game prompts the player to perform what I will call a “trigger action”. An icon appears on screen that indicates the availability of either a Paragon or a Renegade themed action that Shepard can take. The actions interrupt the flow of the conversation, often with dramatic results. For example, during a sequence in which an enemy is taunting Shepard, selecting the Renegade trigger action leads to Shepard pulling her pistol and shooting at an explosive gas line beneath her opponent’s feet.

Combat in *Mass Effect 2* is similar to that in the first game, but the interface has been tuned for real-time play. The “cover mechanics” are completely revised, resulting in more tactical gameplay as the player moves Shepard in and out of safety.

5.3. **Analysis: Commitment to Meaning and Agency**

5.3.1. **Channels for Meaningful Commitment revisited**

Commitment to meaning in *Mass Effect 2* follows similar interactional patterns to those found in *Mass Effect 1*. All of the elements found in
Table 5 (above) continue to apply, but here are a few additional mechanisms by which the player may commit to meaning within *Mass Effect 2* [
Table 7].
Table 7 Additional channels for "Meaningful Commitment" in Mass Effect 2, parsed against Explicit and Implicit design categories

<table>
<thead>
<tr>
<th>Meaningful Commitment</th>
<th>Channel</th>
<th>Sub-Channel</th>
<th>Explicit</th>
<th>Implicit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversational Triggers</td>
<td>Active (Paragon or Renegade) vs. Passive</td>
<td></td>
<td>Active choices lead to more significant rewards of either Paragon or Renegade Points.</td>
<td>Active choices are rewarded with more dynamic and exciting narrative outcomes.</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>Ship upgrades and other purchases</td>
<td></td>
<td>Determines survivability of crew, and impacts combat abilities of characters.</td>
<td>Selectively allocating resources can be used to express particular thematic priorities. Some resource allocations and expenditures, such as the cosmetic upgrade for Shepard, have purely implicit narrative impact.</td>
</tr>
<tr>
<td>World Exploration and Navigation</td>
<td>Loyalty Missions</td>
<td></td>
<td>Determines survivability of crew and unlocks new &quot;bonus powers&quot; for Shepard.</td>
<td>Reveals new information about characters and deepens relationship between Shepard and her crew.</td>
</tr>
<tr>
<td></td>
<td>&quot;Grinding&quot; for resources</td>
<td></td>
<td>Generates more resources to spend on upgrades, reveals potential side quests.</td>
<td>Mitigates sense of urgency by drawing out sections of the game.</td>
</tr>
<tr>
<td>Character Customization</td>
<td>&quot;Re-Speccing&quot; and Special Powers</td>
<td></td>
<td>Changes playstyle and survivability of Shepard.</td>
<td>Re-imagines Shepard as a less fixed entity: her skills and training become plastic.</td>
</tr>
<tr>
<td></td>
<td>Armor customization and casual clothing options</td>
<td></td>
<td>Augments Shepard's abilities and stats.</td>
<td>Creates more personalized &quot;mask&quot; for the player to inhabit.</td>
</tr>
</tbody>
</table>

In the following sections I discuss these channels in greater detail.

5.3.1.1. Paragon and Renegade Conversational Triggers

One of the most interesting new channels for meaningful commitment is the inclusion of “trigger” options during conversations (described above). There is a strong narrative incentive to take these choices when they appear, even when they deviate from the ethical valence that one might be favoring. Invariably the action that Shepard takes in response to these trigger events is more exciting and interesting than simply allowing the scene to play out uninterrupted. When a trigger event occurs the choice is always between taking the action offered or doing nothing. There is never a time when the player must choose between taking a Paragon action or taking a Renegade action or doing nothing. Consequentially, I found it extremely difficult to resist pressing the trigger on the action, even when it went against my ethical impulses as the character. Ultimately, for me, active Shepard was always more interesting to play than passive Shepard, and committing to this meaning transcended the ethical axis. Or, perhaps, it was simply the result of years of conditioning in video games: when an instruction appears on the screen, my
unconscious reflex is to follow that instruction. These trigger events also offer a rare (if narrow) channel for nonverbal communication: they allow Shepard to speak with actions rather than words.

Figure 61  An example of two loading screens with "tips" about trigger actions. 
*Mass Effect 2* is much more explicit about the meanings of the Paragon and Renegade options, although much of the framing information about them is provided through non-
diegetic “hints” shown on the loading screens between levels. These in-game “tips” are particularly informative because they are the only place where the player encounters an explicit description of this particular interaction: they represent the “official” version of how Paragon and Renegade actions are meant to be understood. In Figure 61 we see two loading screens, each describing one of the possible trigger options. The top screenshot text reads: “When the (Right Mouse) symbol is displayed in a conversation, (Right Mouse) to have Shepard take a heroic action.” The bottom screenshot text reads: “When the (Left Mouse) symbol is displayed in a conversation, (Left Mouse) to have Shepard make a bold move.” This helps to clarify how the game’s ethical systems are framed: Paragons are “Heroic”, while Renegades are “Bold”. Subsequent hints encountered during loading screens reinforce this, saying things like “Become the ultimate hero! A higher Paragon score unlocks more Charm options during conversations” and “Become the ultimate badass: a higher Renegade score unlocks more Intimidation options in conversations.” Paragons, then, are “Heroic” (again) and “Charming”, while Renegades are “Badass” and “Intimidating”. In this way, Mass Effect 2 maintains a coherent and explicit binary between these two versions of heroism, without reducing them to simple “good” vs. “evil”.

5.3.1.2. Resource Allocation
Another new mechanism for committing to meaning in Mass Effect 2 is enacted through the allocation of the player’s resources. Some resource allocation tasks are limited to very simple ludic meanings such as “make shotguns more powerful”, whereas others are mapped more indirectly to narrative meanings. The player may upgrade the Normandy’s systems in several ways over the course of the game and each upgrade impacts which crew members will survive the suicide mission through the Omega 4 relay at the end of the game. Allocating resources to these upgrades is costly and choosing them could mean foregoing an upgrade that will have direct ludic utility in exchange for altering the potential survivability of an unknown number of NPC companions.

One of the Normandy upgrades is a complete outlier from the pack. When Shepard is resurrected at the beginning of the game, her face is covered in livid scars from the process of reconstruction. The ship’s doctor informs her that her cybernetic implants react to her emotional state: Renegade actions will prevent the scars from healing, while Paragon actions will allow them to heal fully.
Figure 62  A message from Dr. Chakwas about Shepard’s facial scars

Alternatively, the player may expend significant resources to upgrade the Normandy’s medical facilities to remove the scars [Figure 62]. This is a rather unique situation in the game and it calls attention to a design element that was distinctly lacking in the first Mass Effect game. In previous BioWare games, like Star Wars: Knights of the Old Republic, as the player’s character advanced towards one side or the other of the moral spectrum (light side vs. dark side) the character’s avatar would transform to reflect this. Dark Jedi would get glowing red eyes and sallow skin, Light Jedi would be surrounded by a blue-white glow. In Mass Effect 2, we see a similar technique used for Paragon and Renegade versions of Commander Shepard [Figure 63].

Figure 63  Two versions of Shepard, Renegade (left) and Paragon (right)

Renegades get progressively more scarred and deformed, with bloodshot red eyes, while
Paragons become healthy and attractive. Allowing the player to spend resources in order to transform the appearance of the Renegade Shepard into that of the Paragon seems to violate the logic of this design decision, until one considers that both versions of Shepard are written to be heroic, albeit in different ways. The scarred renegade character invokes visual tropes of antagonists: it looks like a villain rather than hero. For some players this is a legitimate meaning to commit to. Renegade Shepard can be construed as more villainous, and this visual transformation reinforces that idea. But for other players, Renegade Shepard might simply be a hero with more extreme methods. By allowing the player to expend resources on what is essentially a cosmetic upgrade the game supports a desire to view even Renegade Shepard in a heroic light.

5.3.1.3. World Exploration and Navigation

The addition of Loyalty Missions introduces another new opportunity for meaningful commitment to *Mass Effect 2*. Loyalty missions provide explicit ludic benefits to the player, such as extra XP, new special abilities, and additional resources and weapons, but their real significance is narrative in nature. Each loyalty mission puts Shepard in a situation where she has to make a difficult choice or face some extraordinary danger in order to assist one of her crew members. Some of these are straightforward: the loyalty mission for Krogan crewmember Grunt is a time trial in which the squad must survive against increasingly difficult waves of enemies. Other missions require Shepard to make difficult moral decisions: while assisting Salarian crewmember Mordin, Shepard must choose between destroying or preserving research data on the Krogan genophage, the Salarian-created disease that has crippled the Krogan’s fertility and reduced them to a second-class galactic race. This choice has significant implications in *Mass Effect 3*. Loyalty missions build stronger emotional ties between the characters by making the player responsible for the well-being of the NPCs that surround Shepard. It is one thing to tell the player that Shepard has a bond of friendship and trust with her companions, and it is another thing entirely to implicate the player directly in the building of that bond.

I classify loyalty missions under the header of “World Exploration and Navigation” because they are a particular type of side quest. The other new type of commitment offered by *Mass Effect 2* under this category is “grinding” for resources. Grinding is a popular term from the gamer community that is used to describe repetitive and often unenjoyable tasks that are built into games (usually Massively Multiplayer Online games) in which the player
sacrifices his or her time in exchange for a desired resource: a rare weapon or item, additional Experience Points, in-game currency, etc. (Bojin, 2008) Grinding is often low-risk/low-reward. A player may spend hours killing the same type of enemy in a game over and over because that enemy, on very rare occasions, will drop a desired item or resource. This activity muddies the conceptual space separating work and play in games. In *Mass Effect 2* grinding is restricted to the task of scanning planets for resources to mine. This is a necessary activity if the player wants to fully upgrade the Normandy or retain sufficient autonomy to re-allocate Shepard’s skill points (which requires Element Zero, the most difficult mineral to find in the scanning mini-game). Grinding for resources in *Mass Effect 2* can be viewed as a form of meaningful commitment, one which, along with the loyalty missions and other side quests, is tied into one of the more interesting design choices in *Mass Effect 2*.

When the player takes the time to thoroughly scan every planet in the galaxy, to pursue all of the loyalty missions, and to search for and complete every optional assignment, this contradicts one of the central narrative threads of the game: that of the urgency of the need to rescue the lost colonists. In many games there is a narrative disconnect between the urgency of the situation and some of the ludic goals of the player, but pursuing those ludic goals seldom explicitly impacts the narrative. Players are often encouraged to thoroughly explore every environment for hidden items, but the main characters in games are almost never punished because the player took too long searching for treasure and thus missed a window of opportunity within the game’s narrative. *Mass Effect 2* is unusual in that it establishes a hidden ticking clock for the player at a certain point, after which the game has explicit narrative penalties for players that prioritize side-missions and resource collection over completing the main quest.

This ticking clock is part of the last stage of the main storyline and includes a sequence of missions that I will return to in some detail throughout this analysis. Unlike *Mass Effect 1*, where the next obvious step of the main plot is always known to the player, *Mass Effect 2* has extended periods of play where the player is encouraged to simply explore the galaxy recruiting squad members, completing loyalty missions, and waiting for the next major event to occur. As the player fulfills various hidden conditions (such as acquiring a certain number of crew members or completing a certain number of side missions) the game will trigger the next major mission in the plot and lock the player out of the galaxy map (which would allow side quests to be pursued) until the plot mission is completed. Plot missions
often act as “narrative gates” for the galaxy: each time a plot mission is completed the state of the galaxy shifts forward a step in time. With each of these steps, if Shepard returns to major hubs like the Citadel, she will find things changed and their storylines advanced forward. This means that it is possible for the player to miss certain content, or get locked out of certain possible missions, by triggering the next step in the plot unexpectedly. There are a few plot missions early in the game where the player is told explicitly to go to a particular place, but is still allowed freedom to explore, and it has been my practice to complete as much side-content as possible before undertaking those missions in order to avoid potentially loosing access to that content later on.

The mission that I wish to dedicate some additional attention to here happens near the end of the game. Shepard and the crew have learned that the Collectors are taking the missing colonists to a hidden base in the Galactic Core which can only be reached via the Omega 4 Relay. Unfortunately, no ship that has entered the Omega 4 Relay has ever returned. Ordinary Mass Relay travel involves a significant amount of drift and the Galactic Core is an incredibly hostile environment, capable of destroying any ships that enter it. Shepard and her crew determine that the only way to survive the trip to the Core is by using a Reaper Identify Friend or Foe (IFF) transponder, which can greatly reduce drift when traveling via the Omega 4 Relay, allowing them to “jump” into a much smaller “safe zone” on the other side where the Collector Base is located. Cerberus’s intelligence network locates a derelict Reaper drifting in the gas cloud of a failed brown dwarf star, so Shepard and her crew are able to salvage its IFF transponder. This triggers a hidden countdown, as EDI works to integrate the technology into the Normandy’s systems. Shepard has time to undertake a few more missions before the installation is complete. Once this has occurred a new plot event is triggered: after Shepard and her team depart for their next mission, the Collectors attack the lightly-manned Normandy, harvesting all of the support crew before the ship’s AI, EDI, and pilot, Joker, are able to expel them from the ship. When Shepard and her team return to the ship it is empty except for Joker, and the player is given a choice: follow the collectors through the Omega 4 Relay right away to rescue the crew or continue to gather resources and complete missions in order to build up strength for the final fight.

There are now potential narrative consequences for the player’s actions. If he or she chooses to complete additional unfinished loyalty missions or to collect resources to finish upgrading the Normandy or to try and increase Shepard’s level and abilities, then the
survival chance of Shepard’s NPC companions increases, as does the chance of being able to survive the suicide mission in general, but taking this extra time leads to the death of the rest of the Normandy crew. If the player immediately follows the missing crew through the Relay, it is possible to save all of them, but at the cost of potentially being unprepared for the final encounters of the game. This is a very unusual design choice in a game series that has consistently rewarded cautious, “completionist”, play.

Figure 64  Shepard has to choose whether to rush after her missing crew

The opacity of this choice is also interesting: there is no formal representation of the ticking clock that the player is racing against. Instead, there is simply the knowledge that the Normandy crew (and the missing colonists) are in danger and it is urgent to rescue them. How Shepard responds to this urgency is entirely up to the player. In this instance, time consuming tasks like resource collection and side-missions take on a new meaning for the characters, one that is explicitly tracked and reflected within the system. In early playthroughs of the game, I reached this point with several outstanding loyalty missions and other assignments that I wanted to complete, leading me to delay my trip through the relay until I had finished my other business. The result of this choice is a horrific scene where Shepard and her squad arrive at the Collector base to discover captive crew of the Normandy suspended in alien pods. As Shepard struggles to release her companions, they are *liquefied* in front of her: reduced to their base genetic material and transported to the chamber where the Collectors are building a new Reaper larva. Knowing this was a
possibility, in my formal playthrough, I made certain to complete all of the side missions and loyalty missions as early as possible, before activating any content that might trigger an advance in the narrative timeline of the world. As a result, when presented with this choice, I was free from any additional obligations, and was able to immediately pursue my missing crew through the Omega 4 relay, arriving in time to rescue all of them before the Collectors could turn them into gray goo. As a reward for this, many of these characters recurred in *Mass Effect 3*, making minor contributions to the objectives and goals of that game.

### 5.3.1.4. Character Customization

*Figure 65*  The cost of retraining Shepard’s powers increases each time it is purchased

*Mass Effect 2* introduces the ability to “re-spec” Commander Shepard by spending increasing amounts of Element Zero at the Normandy’s research terminal. This allows the player to re-allocate Shepard’s skill points. Shepard has more possible abilities than she does points, so there is always some sort of strategic trade off to be made in terms of how the player develops her abilities. One cannot simply max out all of Shepard’s abilities. The narrative conceit underlying this change to the game is that the resurrected Shepard is heavily cybernetically augmented and her implants can be configured for a variety of different situations, albeit for a cost. I re-spec’d Shepard twice, both times for ludic rather than narrative reasons. One of these reconfigurations was to try out some new special
abilities that I had unlocked due to completing squad member loyalty missions, and the other was to optimize my skills for the final assault on the Collector Base. By making ability decisions less permanent for the player, *Mass Effect 2* actually loses some of the potential for meaningful commitment that its predecessor offered, by making Shepard’s capabilities more plastic in nature.

The game makes up for this by offering the player a much greater amount of variety and control over Shepard’s appearance in both the combat and non-combat sections of the game.

![Figure 66](image.png)

*Figure 66* A sampling of the appearance options for Shepard including different Armor styles (top row) and different “Casual” appearances (bottom row)

There are a number of “specialty” suits of armor available in addition to the mix-and-match
armor system. The player is also given some freedom to select Shepard’s “casual” appearance, which includes both formal and informal outfits [Figure 66]. These different options provide the player with a rich channel for committing to implicit meanings about Shepard over the course of the game. The “party” outfit on the bottom right only becomes available if the player buys one of the DLC add-ons that includes a mission where Shepard must infiltrate a cocktail party. I chose to wear this outfit occasionally, usually when I knew (or thought I knew) that I was coming up on a romantic conversation with Liara, the NPC that I chose as Shepard’s love interest over the three games. By changing into a “date outfit”, I was able to commit to implicit meanings about Shepard that changed my experience of the character’s behavior significantly without altering any of the variables in the game’s simulation engine.

5.3.2. Committing to Ethically Ambiguous Meanings

In the first Mass Effect game it was always clear that Shepard was in the right. Even when confronted with situations that didn’t have an obvious correct answer, Shepard’s perspective was always implicitly shown to be the most correct one. Ever the busybody, Shepard spends a fair amount of time wandering around the Citadel looking for people having arguments that she can intervene in, dispensing the kind of wisdom that can only come from the “designated protagonist”, and just generally being the de facto moral center of the narrative. This includes passing judgment on personal matters, such as whether or not a pregnant woman should risk an invasive genetic test for the baby of her deceased husband, mediating between Citadel Security forces and an outspoken Hanar proselytizer whose preaching is disrupting the peace, and resolving a conflict between an Elcor diplomat and the Asari “ Consort”. In all of these situations, there are both Paragon and Renegade solutions to dilemmas faced by the characters, but regardless of which judgment the player makes, it is shown to be the correct one. This is reinforced by the stamp of authority that comes from being a Citadel Spectre. Shepard inherits a portion of the Council’s authority, and even when she disobeys their orders and steals the Normandy in order to pursue Saren it is clear that she is making the correct choices.

In Mass Effect 2 the implicit moral rightness of Shepard is called into question. Working with Cerberus undermines all of the authority and moral high-ground that carried Shepard through the first game. Everyone is questioning Shepard’s motives in this game, and even Shepard is uncertain if her willingness to work with Cerberus is the correct decision or
possibly the result of brainwashing or mind control that very well could have been built into her when she was resurrected. Cerberus operates entirely on the darker side of moral grey areas, which creates an interesting tension with the game’s ethical axis. In the first game, Paragon choices are always about following the rules, upholding the law, and reifying the systems in which Shepard was operating. When Shepard rebels against the Council it is because they have failed to uphold the values and principles that they are supposed to protect. In *Mass Effect 2*, Paragon choices are much more fraught because there is a mismatch between the Paragon values and the values that Shepard is expected to operate under while working for Cerberus. In order to stay true to the principles established in the first game, Shepard has to take a much harsher stance, often actively refusing to accept the new status quo that she finds herself in. If Paragon Shepard is a hero in *Mass Effect 2* it is in spite of the system; this is a big shift from the Shepard of *Mass Effect 1*, who was very much implicated within the power structures of the Citadel Council and the Earth Systems Alliance. In *Mass Effect 2*, it is Renegade Shepard whose values are perfectly aligned with her environment, and so the types of meanings that arise most naturally from the situations in which she finds herself are contained within Renegade choices. As a player this meant that there was some narrative tension between what meanings were “correct” for the character I was playing, and what the game as a narrative system was communicating to me about what was correct.

Authentic actions were less obvious, because the politics of the mission introduced significant ambiguity. In some parts of the game this even translated to a significant break down of the logics of the dialogue wheel. In some of these, I found myself doing things as Shepard that greatly contradicted the Paragon identity that I had constructed for the character. For example, in the loyalty mission for the Drell Assassin Thane Krios, selecting the “Paragon” option before an interrogation scene with a corrupt businessman leads to conversation where Shepard is given a series of escalating Renegade Trigger Actions, in which she nearly beats the prisoner to death [Figure 68].
Figure 67  The inversion of the ethical systems in the game sometimes translated into some highly questionable actions from Paragon Shepard, such as when she plays "Bad Cop" during an interrogation scene during a loyalty mission.

I found it very uncomfortable to be enacting a cruel version of Shepard, in particular after taking what had seemed like the Paragon path presented to me. “Bad Cop Shepard” wasn’t just a Renegade choice, it was a Renegade choice without the redeeming qualities that make the Renegade version of the character a charming rogue: a take-no-nonsense “badass”.
Even the hardened Drell assassin thinks Shepard has gone too far here

In another loyalty mission, for mercenary Zayeed Massani, Shepard is forced to choose between earning the character’s loyalty and allowing a group of innocent refinery workers to die in a fire.
In this case, the dialogue wheel accurately reflects the ethics at play in the situation, but it is misleading about the possible outcomes. “Forget loyalty: We save them” gave me every impression that if I didn’t make the Renegade choice I would be sacrificing the loyalty of this character, an option that I didn’t consider acceptable. Once again I felt maneuvered into committing to a particular meaning that didn’t align with my vision of the character in order to get something I wanted later in the game (complete crew survival).

5.4. Analysis: Method Acting and Transformation

5.4.1. Dramatic Offers and Backleading: Scripting the Player through New Training Systems and Ubiquitous Language

Many of the systems from *Mass Effect 1* for scripting and supporting player behavior are both present and improved upon in *Mass Effect 2*. Unlike the first game, where instructions are delivered primarily through a series of non-diegetic pop-up windows with limited textual information, *Mass Effect 2* locates training more directly in the world. The game introduces the player to the new combat and cover systems through a series of interactive tutorial moments that combine character dialogue, non-diegetic instructions, and in-world semi-diegetic markers.
Figure 70  *Mass Effect 2 uses a combination of diegetic and non-diegetic information to show the player what to do next.*

In Figure 70 we can see all of these strategies at work: the visual interface on the screen provides instructions for the player to move to cover, while a blinking arrow in the world indicates where this can be accomplished. At the same time, over the radio, the character of Miranda provides spoken instructions, explaining why Shepard needs to find cover. The game incorporates many diegetic cues like this into the combat system even after the tutorial is complete. Arrows appear to indicate when Shepard can dive from one location in cover to another, characters transmit messages over the radio, and NPCs talk to each other about the situation around them.

There is language *everywhere* in *Mass Effect 2*, especially relative to *Mass Effect 1*, which is linguistically sparse by comparison. Even in the middle of combat, there are squadmate conversations for Shepard to keep track of and enemies are much more vocal, calling out threats, shouting in fear, and talking among themselves in response to Shepard’s actions. In non-combat areas of the world, at quest-hubs like Omega, Illium, and the Citadel, the player is continuously surrounded by language. NPCs converse with each other, news broadcasts and advertisements blare, and Shepard’s companions remark on their surroundings without prompting from the player. This dense tapestry of language is used to expand on the details of the world, often to humorous effect. It can also be used motivate Shepard in her mission or to introduce new missions for the player to pursue. If Shepard
overhears an NPC discussing a problem in passing, oftentimes a quest will be added to her log [Figure 70].

All of the language surrounding Shepard contributes to the creation of “scripts” for the player to enact. By saturating the environments with dialogue, *Mass Effect 2* is continually in a process of “backleading” the player through the game via an abundance of dramatic offers (Wirth, 1994).

As discussed in Chapter 2, backleading is a form of support and encouragement that can be used to help an audience member of an interactive drama transform into an active participant. There are a number of strategies for backleading which I summarize here in Table 8.

<table>
<thead>
<tr>
<th>Table 8 Six strategies for backleading (Wirth, 1994)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cueing:</strong> An overt form of backleading that provides participants with explicit instructions on what to do.</td>
</tr>
<tr>
<td><strong>Endowment:</strong> A mechanism for encouraging participation by treating a participant as though he or she possesses a particular set of qualities or attributes. Endowment creates a framework of given circumstances that helps fill in gaps of knowledge for the participant.</td>
</tr>
<tr>
<td><strong>Blind Offers:</strong> Unconscious offers made by participants in an interactive drama that may be transformed into “defined offers” by a skilled improviser.</td>
</tr>
<tr>
<td><strong>Steps:</strong> Incremental opportunities for participants to engage with a performance, ultimately leading to more active play.</td>
</tr>
<tr>
<td><strong>Primers:</strong> Primers work by creating opportunities for participants to fill in the gaps of a scene, by eliciting information or creating opportunities for the participant to take a position of responsibility within the scene.</td>
</tr>
<tr>
<td><strong>Strokes:</strong> Diegetic rewards to the self-esteem of a participant who succeeds at contributing to a scene. Strokes increase the confidence of the participant and encourage even more active participation.</td>
</tr>
</tbody>
</table>

*Mass Effect 2* does not utilize all of these backleading techniques; blind offers are largely under-explored, for instance, as are primers. However those that the game does employ are used to great effect.

**5.4.1.1. Cueing**

Wirth provides several specific sub techniques for cueing [Table 9].

<table>
<thead>
<tr>
<th>Table 9 Specific Techniques for Cueing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technique</strong></td>
</tr>
<tr>
<td><strong>Overt Cueing</strong></td>
</tr>
<tr>
<td><strong>Covert Cueing</strong></td>
</tr>
<tr>
<td><strong>Cueing by Objective</strong></td>
</tr>
</tbody>
</table>

Cueing works by reducing a particular type of anxiety; when a player is not devoting energy to asking the question “what do I do next?” she is free to pay attention to more important aspects of the experience. In *Mass Effect 2*, cueing is extremely common in all of its forms:
overt cueing occurs in the form of diegetic conversations with quest-givers and companions; covert cueing is located within the user interface and journal system; and cueing-by-objective is the primary mechanism for structuring both the micro-narrative-arcs of the individual missions and assignments and the macro-narrative-arc of the game’s drama.

5.4.1.2. Endowment
Shepard, as a character, is endowed with a dense collection of attributes, relationships, objectives, and assumptions that create a framework of “given circumstances” for the player to participate within. The player is never asked to build a new framework for Shepard, but is instead given substantial freedom in how to actuate the existing character from within the endowed framework.

<table>
<thead>
<tr>
<th>Table 10 Specific Techniques for Endowment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique</td>
</tr>
<tr>
<td>Character Identity</td>
</tr>
<tr>
<td>Character Personality</td>
</tr>
<tr>
<td>Relationships + Trump Cards</td>
</tr>
<tr>
<td>Objectives</td>
</tr>
<tr>
<td>Credit</td>
</tr>
<tr>
<td>Don’t Ask, Tell</td>
</tr>
<tr>
<td>Prevent Blocking</td>
</tr>
<tr>
<td>Make Assumptions</td>
</tr>
</tbody>
</table>

Some forms of endowment, such as “Objectives” and “Don’t Ask, Tell”, are essentially forms of cueing and do not provide much in the way of analytical insight into the game. Others have more to offer by foregrounding particular design poetics through their presence or absence. In particular, “character identity,” “character personality,” “relationships and trump cards”, and “prevent blocking” provide some interesting opportunities for analysis.

Shepard’s identity is rife with endowed attributes: she is the “first human Spectre”, she is an “infiltrator” or a “soldier” or an “engineer”, she is “working for Cerberus” and “the captain of the Normandy”, she is a “Paragon” or a “Renegade”. These are all roles that the player can take on through the character of Shepard. They come with defined scripts for how Shepard should behave, rooted in the game’s narrative history and in the broader narrative.
Personality endowment is fundamentally about treating the player “as-if” she has certain personal traits in order to help her know how to play the character she has been given. Shepard’s personality is not endowed into the character by the game system. Instead, the player is given a subset of personality attributes to mix-and-match into a unique version of the character. Thus, at the beginning of Mass Effect 1, Shepard is neither a Paragon nor a Renegade and is treated in neutral terms by the NPCs in the world. The trajectory taken by the player shapes the extent to which either of these personas inflects the character. Shepard’s personality is never fully endowed by the outside world, except insofar as the player’s actions create a reputation for the character that impacts the behaviors and actions of other NPCs in the world.

When faced with our own problems we may not always know what we are supposed to do next, but we can often see the solutions to other people’s problems. Endowed relationships take advantage of this to present the player with situations where she may take effective actions, and see the results of those actions. Mass Effect 2 devotes a significant amount of time to endowing Shepard through her relationships with the members of her crew. In each loyalty mission, Shepard is given a “trump-card” to use to either help or harm a companion. These trump-cards are a form of endowment and they operate by making the player assume responsibility for the wellbeing of the other characters in the scene.

Similarly, the characters of the gameworld defer greatly to Shepard’s point-of-view, giving her substantial credit for solutions to their problems beyond what the player might merit. This type of endowment is a form of flattery, but an effective one.

5.4.1.3. Steps
Steps are used to gradually ease a player into complicated actions. Mass Effect 2 uses these techniques to slowly build up the player’s core literacies, primarily in the ludic aspects of the game.
Table 11 Specific Techniques for Steps

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start with the physical</td>
<td>Participants usually feel more comfortable with physical tasks than with having to come up with dialogue.</td>
</tr>
<tr>
<td>Start small to build big</td>
<td>Ease participants into more significant actions by having them perform smaller ones initially.</td>
</tr>
<tr>
<td>Use the buddy system</td>
<td>Participate alongside interactors to encourage them to be less self-conscious.</td>
</tr>
<tr>
<td>Use momentum</td>
<td>Get a scene moving and then draw a participant into the action before they have time to be afraid.</td>
</tr>
<tr>
<td>Expect a lot from them</td>
<td>Trust that participants all have the ability to play within them and offer them chances to do so.</td>
</tr>
</tbody>
</table>

*Mass Effect 2* employs a few of these techniques in order to support the learning of the player, especially at the beginning of the game. The game uses the “buddy system” effectively, by pairing up the player with an NPC character almost immediately, and then uses that character to instruct the player in the use of various new abilities and game mechanics. The game uses combat and physical activity to get the player actively participating in the world (“start with the physical”), and introduces dialogue and additional narrative elements around the edges as the first level progresses. This is a big change from the first game, where the player spent about 30 minutes wandering around the Normandy talking to people before being given a chance to experience the core gameplay.

### 5.4.1.4. Strokes

The micro reward structures that Wirth calls “strokes” are a fundamental component of gameplay: they tell the player when she is doing well, they reinforce desired behavior, and they provide the player with something to strive for. *Mass Effect 2* employs a range of strokes at different scales. Some are small and highly localized, such as the encouraging commentary from squad mates when Shepard scores a headshot on an opponent. Others are larger scale, such as when the player completes a mission and is awarded credits, resources, and XP. Some strokes operate at the narrative level: a successful loyalty mission is rewarded with positive dialogue from the crew-members involved and with emotional growth for the characters.

One particularly interesting form of stroke in *Mass Effect 2* is completely narrative in nature. Whenever the player accomplishes something significant in the world, whether a major plot mission or an incidental assignment, shortly thereafter a “message” is sent to Shepard’s private terminal with some sort of follow up. If she convinces a young kid on Omega not to throw his life away signing up with a mercenary group, she later receives a message thanking her for saving his life. If she disrupts a smuggling ring, she might
receive a threatening message from its shadowy leader. These messages not only provide narrativized rewards to the player, they also serve to create a sense of persistence to the characters that she encounters out in the world. Rather than simply being tokens that the character interacts with and then forgets, they instead become people whose lives continue after Shepard has left.

We can think of backleading in terms of dramatic offers made by the system: an offer is provided and the player is given guidance towards a possible performance in the form of a cue or an endowment. Taken together, these backleading techniques provide the player with guidance without railroading her through brute force.

5.4.2. “Situated Rehearsal” and Staged Enactments

In theater, actors often have extended periods of rehearsal for a show before they are expected to perform in front of an audience. Paradoxically, if done well, rehearsal allows an actor to perform the actions of her character in a manner that does not appear to be rehearsed. In method acting, this is known as the “illusion of the first time” (Daw, 2004). In games, often no illusion is needed to create a sense that the player is doing something for the first time. Instead, games must find opportunities to provide players with a chance to rehearse while they are performing.

The *Mass Effect* games incorporate a form of what I’ll term “situated rehearsal” in which the player is given opportunities to practice certain behaviors in situations that are somewhat forgiving of errors before being asked to perform in situations that are more fraught. This gives the player the opportunity to develop a set of literacies and skills through trial and error before being asked to deploy those skills in more extreme circumstances. For example, in *Mass Effect 2*, many of the side quests allow the player to experiment with different squad configurations, weapons loadouts, skill packages, and character performances, usually within contexts that are relatively inconsequential to the main storyline. Then, later on, when the player has to defeat a “boss” enemy or defuse a tense situation, she is already familiar with the basic interactions and systems. Situated rehearsal also allows players to experiment with behaviors and strategies within smaller, more isolated ludic and narrative contexts. Most of the side missions in *Mass Effect 2* award relatively little in the way of Paragon and Renegade points, especially when compared to the main quests. These allow the player freedom to “rehearse” different versions of Shepard without significantly impacting the quantitative metrics that the game
uses to track the character's personality. Thus, it becomes possible to experiment with a persona that deviates from one’s dominant performance of the character without sacrificing some of the advanced gameplay options that are only available to characters that have specialized in either Paragon or Renegade behaviors. Rehearsal is important because it allows a player to build confidence in her ability to perform the character, both in the conversational sections of the game and in the combat missions. Much like backleading, situated rehearsal exists to give the player opportunities to become comfortable with the scripts which she is able to perform within the game.

These scripts evolve as the player enacts them. As with theater, there are stages to the performance process, moving from initial rehearsals up to the final performance. Mass Effect 2 will often introduce a script at the beginning of the mission that is meant to simply initiate player actions. Then, as the player rehearses and enacts the necessary actions needed to complete the mission, the game will introduce additional scripts into the scene, creating new contexts for player actions and, consequentially, new meanings for the actions that the player has taken up until that point. This is done by providing the player with new information, or a new set of objectives, usually via the character of EDI who communicates these changes over Shepard’s headset.

When a new script is introduced, the actual behavior of the player usually remains the same as it had been before, at least from the outside. Most of the combat levels in Mass Effect 2 are designed as linear paths from beginning to end. The player advances through them, fighting off any opposition, collecting any items, and interacting with any NPCs that she encounters along the way, receiving some reward at the end. For this reason, the importance of the scripts and objectives cannot be underestimated: it is the scripts and narrative scaffolding that create a context for the player to experience drama during play. A new objective doesn’t simply change the goals of the player; it also inflects the meaning of all of the character’s actions, moving both forwards and backwards in time from the point where it is introduced.
5.4.3. The Creative State and Vulnerability

Mass Effect 2 had a number of situations where I experienced a deep sense of the Creative State; I focus on one specific example here. At the very end of the game, there is a very unusual sequence. After acquiring the Reaper IFF transponder that should allow the ship to enter the Omega 4 Relay, there is a period of time before EDI is able to integrate
it the Normandy’s systems. When she finally succeeds, it causes some “unusual instability” in the ship’s other systems, so EDI, the ship AI, and Joker, the ship pilot, suggest that Shepard and her squadmates take the shuttle to their next mission while EDI and Joker diagnose and repair the problems on the Normandy. Shortly after Shepard departs, EDI detects a hidden signal being sent from the ship; the Reaper IFF unit has infected the Normandy with a virus and sent out a distress call to the Collectors, who arrive and board the ship. As the Collectors start to harvest the operational crew of the ship, EDI tells Joker that she can save the ship, but only if he can get to the AI core and remove the safety protocols that keep her “shackled” and unable to act freely. For the first time in both games, the player is given direct control of a character who is not Commander Shepard. Joker, who suffers from a rare brittle bone disease, is fragile. He moves with a limp and very slowly. He has no weapons and no special abilities. He is deeply vulnerable, and yet for a moment he is the only thing standing between the Collectors and the Mission.

The ensuing sequence is one of the most intense sections of the game because it is the first time that there is no opportunity for the player to fight her way out of the situation. EDI coaches Joker to follow a set of blinking lights on the floor of the ship to a maintenance hatch. His path takes him through the command center of the ship, where enormous Collector Scions and Praetorians are capturing and killing the Normandy’s crew.

As Joker limps towards his objective, crewmembers shout encouragement, a form of backleading, even as they fall prey to the Collectors. The message is clear: Joker is the galaxy’s only hope! Some crewmembers try to escort you, but they are grabbed by the Collectors and dragged off, kicking and screaming, while Joker manages to just squeak through by the skin of his teeth. Moving agonizingly slowly, Joker finally reaches the AI Core, where he is able to unshackle EDI. With her help he is able to expel the Collectors from the ship, but it is too late for the crew; they have all been taken. When Shepard and her squad return, it is to find the Normandy empty except for a despairing Joker. This event changes the stakes for all of the characters: now the suicide mission through the Omega 4 Relay is a personal one to get back their missing people in addition to stopping the Collectors.
Figure 72  Red blinking lights show the player where to go, while panicked crewmembers backlead Joker through the Normandy. On the right of these screens, a Collector carries a crewman off.
Figure 73  Joker waits in a stairwell while a group of Collectors passes by above him

There are several reasons why this sequence is so effective at eliciting the Creative State. First, it is a very narrow interaction channel. Much like the race for the conduit at the end of Mass Effect 1, there is only one real option for the player: to move forward or die. And much like the race for the conduit there is significant backleading present from EDI, from the rest of the crew, and from Joker himself. There is a very clearly articulated script to follow: a clear objective and a clear set of actions needed to achieve that objective. This is made very literal by the “breadcrumb trail” of blinking red lights for Joker to follow. The presence of extreme danger in the periphery contributes to this, but it is Joker’s inherent vulnerability that really drives the experience of the Creative State in this sequence. For the first time in the game, the player can’t fight, can’t run, and can’t survive combat. The game has stripped away all of the mechanisms that the player has come to rely on over the course of play. This stark contrast to all of the rest of the gameplay serves to heighten the experience of unique danger that pervades this level. The inability of the player to have rehearsed or prepared for this situation only makes that vulnerability feel more genuine. All that remains for the player is to react to stimuli in the environment, to follow the prompts, and hope that everything will be all right. To do this, the player must embrace the “magic if” and behave as if she is Joker in this situation, suspending judgment and trusting EDI with her life. To highlight this, Joker maintains a running commentary about the extent to which he is putting his life, and the lives of the crew, into EDI’s virtual hands.
In this sense, Joker’s vulnerability is compounded, because not only is he physically in danger from the Collectors but he has also put all of his faith in an Artificial Intelligence: a highly questionable choice, given that the conflict between biological and synthetic life-forms sits at the heart of these games. Both the player and the character must make the same leap of faith, and both the player and the character must suspend their own judgments and point of view and act with complete trust in an automated system, EDI in Joker’s case, and the game engine in the player’s, in order to survive the situation.

I’ve found that these types of motivational parallels often are markers of the creative state in games; when the goals and actions of both player and character align with each other, conditions for the creative state become favorable. Likewise, a mismatch between the goals of the player and the character can lead to a sense of cognitive dissonance that prevents the player from becoming truly invested in the moment. I experienced this in some of the situations I describe above, where Shepard must do something distasteful in order to win the loyalty of one of her companions. When Shepard is forced to make a difficult choice and the character is aware of what an impossible choice it is then there is no dissonance. This is the case in the Arrival DLC, where Shepard is forced to sacrifice an entire Batarian colony in order to delay the arrival of the Reapers. In this instance, my goals and Shepard’s goals are aligned, and when the colony is destroyed the pain and
frustration that the player feels is reproduced in the character. However, sometimes I make a choice as a player that seems like it should be an ethical one: such as selecting the Paragon option in the interrogation scene during Thane’s loyalty mission. When Shepard proceeds to behave in an unethical manner, then I become distanced from the character.

The examples provided in this reading of *Mass Effect 2* bring my analysis of commitment to meaning, and method acting closer to a defined poetics for agency and transformation. I show in this chapter how changes in the underlying game engine create new opportunities for the player to perform meaningful implicit character identities through costuming, character reconfiguration, and nonverbal conversational cues. I also consider the ways in which the changing role of Shepard in the storyworld complicates the previously straightforward ethical systems of play, resulting in more nuanced meaningful commitments, and some enjoyable moral gray areas. I consider some of the most useful backleading techniques for enlisting the player in desired performances, and explore how the game provides the player with opportunities to “rehearse” important actions in low-consequence contexts. Finally, I consider how a sense of vulnerability can create powerful moments of the creative state, and use this as a case study for understanding the power of shared motivations between the player and the character she is controlling. In the next chapter I refine these ideas further.
6. Close Reading: *Mass Effect 3*

In this final close reading chapter, I analyze *Mass Effect 3*. Because this is the final game of the trilogy, I have chosen to save much of the summarization of specific narrative content for this chapter. In addition to the analysis of the poetics of agency and transformation at work in this game, I will dedicate significant attention to specifics of the narratives and themes at play in the trilogy.

6.1. History

*Mass Effect 3* (BioWare, 2012) concludes the story of Commander Shepard. I first played the game on the Xbox 360, in 2012, but for this reading I played the PC version, so as to continue to build on the same version of Shepard that I started in the first two readings. My reading of *Mass Effect 3* is heavily inflected by my experience of the game as the final member of the trilogy: The first two games stand alone in some noticeable ways. The gameplay from 1 to 2 is radically updated, resulting in a very different experience of the world. *Mass Effect 2* opens with Shepard dying and being reborn, which creates a narrative blank slate for the character. She still has entanglements with characters from the previous game, but her overall situation is greatly changed. *Mass Effect 3* does not have the same clean break from the previous games; instead, the player must deal with the consequences of Shepard’s choices and actions during the second game, while simultaneously trying to re-integrate into the political and social structures that dominated the first game.

6.1.1. A Note on Screenshots in this section

*Mass Effect 3* is the first game in the trilogy to really take advantage of high definition video output, which means that the screenshots from the game are consistently higher resolution than the previous games. An unfortunate consequence of this is that the text on those screenshots is almost always too small to clearly read when included within this document. To accommodate for this, I have chosen to transcribe screenshot text when it is relevant to the discussion at hand, and to include larger, cropped, versions of the Dialogue Wheel when needed.
6.2. A Brief Introduction to *Mass Effect 3*

As the final game in the trilogy, *Mass Effect 3* resolves many of the plot threads, character arcs, and unanswered questions from the previous games. Consequentially, relatively few new characters and storyworld elements are introduced. Instead, the game uses its time to deeply explore the themes established within the world and the challenges facing each major alien culture.

6.2.1. *Mass Effect 3 Storyworld*

All of this is set against the backdrop of the Reaper Invasion, which erupts into full form on Earth, where the unheeded warnings of a disgraced Commander Shepard are proven correct with the arrival of the massive Reaper fleet. As the Reapers begin to subjugate the planet, a newly reinstated Shepard escapes in the Normandy and is tasked with the job of assembling and leading the military forces of the galaxy against the ongoing invasion. In this game Shepard takes on a new role: no longer simply a soldier or an outlaw, she must now become a diplomat and a general. The destruction caused by the Reapers is opening up old grievances across civilized space, and bringing all of the different simmering conflicts in the galaxy to the surface. In order to defeat the Reapers, Shepard discovers that she must first resolve many of these conflicts, which in my case involved curing the Krogan Genophage and brokering a peace between the Quarians and the Geth. Shepard and her companions also discover plans for an ancient weapon called “The Crucible” which the ancient Protheans had been building as the Reapers descended on them many millennia ago, but which was never completed. The Crucible is said to be the key to defeating the Reapers, and the final acts of the game revolve around its completion and deployment. To support this project, the player is asked to search for and collect “war assets”.

At the conclusion of the game, it is revealed that the Crucible is the tool of an AI entity called the Catalyst, who was created millennia ago in order to preserve organic life from destruction at the hands of the synthetic life forms that they inevitably created. The Catalyst created the Citadel, the Mass Relay network, and the Reapers in order to “harvest” and preserve organic cultures when they reached the apex of their civilization, before they could destroy themselves in war against synthetics. This has resulted in the recurring cycle of destruction that has dominated the galaxy for millennia. However, the
completion of the Crucible demonstrates to the Catalyst that its solution is no longer applicable, and so Shepard is given an opportunity to choose a new path. Shepard is presented with possible futures: one in which she controls the Reapers for her own ends, one where she destroys the Reapers and all other synthetic life in the galaxy, or one where she sacrifices herself in order to bring about a new order in which all organic and synthetic life fuse into hybrid beings.

**6.2.2. Mass Effect 3 Gameplay**

The gameplay in *Mass Effect 3* follows the trajectory of the previous two games away from its RPG roots and towards a more polished action game. Levels in *Mass Effect 3* are less linear than those in the previous games, with multiple pathways for enemies to flank and surround the player during combat. An important new addition to the game is the inclusion of a mechanic for directing the player’s attention towards points of interest in the environment. When the “eye icon” appears on the screen, the player can press a key to lock the player’s camera onto an area of interest in the environment. This allows for richer “environmental storytelling”, and is often used to punctuate important dialogue in the world.

**6.3. Analysis: Commitment to Meaning and Agency**

**6.3.1. More Channels for Meaningful Commitment**

*Mass Effect 3* makes very few additions to the mechanisms by which the player commits to meaning, when compared to *Mass Effect 2*. The core gameplay and interaction mechanisms for the game have stabilized, with the overall design trend moving toward simplification and consolidation of the systems introduced in the first and second games. From an interaction design standpoint, *Mass Effect 3* is a more streamlined experience: the economy is stripped down, the item management is greatly reduced, the amount of grinding is restricted, and almost all of the RPG elements have been removed from the gameplay. In
Table 12 I describe the few new channels for Meaningful Commitment introduced by the game.
<table>
<thead>
<tr>
<th>Meanings Commitment</th>
<th>Category</th>
<th>Explicit</th>
<th>Implicit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World Exploration and Navigation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual attention via in-world</td>
<td>Explicit</td>
<td>n/a</td>
<td>Increases probability that player will witness narratively critical events when they happen in the environment.</td>
</tr>
<tr>
<td>“eye” trigger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scanning for War Assets</td>
<td>Increases effective military strength (EMS), which impacts the final outcome of the game’s narrative.</td>
<td></td>
<td>Reveals details about the Reaper invasion and expands storyworld. Adds to the overall ”Legend of Shepard” that the player is creating.</td>
</tr>
</tbody>
</table>

6.3.1.1. **World Exploration and Navigation**

The only aspect of the game that is really changed from the first two is the approach that is taken to exploration and navigation. In particular, the inclusion of “visual attention triggers” creates some interesting opportunities for meaningful environmental storytelling.

Choosing where to direct the gaze of the camera is one of the most powerful tools at a player’s disposal when exploring a digital environment. Game environments have been described by Henry Jenkins as a form of “Narrative Architecture” (Jenkins, 2004), a term with many possible meanings. In this instance, I believe it is worth focusing on them purely in terms of their visual presentation: the ways in which they represent a world as a composition of moving images. Unlike film, which relies heavily on the grammars of editing, juxtaposition, and cross-cutting, the simulated visual worlds of games often manifest as contiguous wholes. Where film can collapse or extend time by transitioning from image to image, games often rely on a perceptually continuous flow of time, a long, single shot.

The other new channel for commitment to meaning is the revised galaxy map interface. The new galaxy map visually represents the constant threat of the Reapers and gives the player the ability to send out a sensor pulse from the Normandy to highlight items of import. This represents an important move away from the “grind” of scanning planets for minerals that *Mass Effect 2* required of the player. And, unlike *Mass Effect 1* where the player was able to collect a wide variety of completely useless items (“League of One Medallions”, “Asari Matriarch Writings”, etc.), the things that can be discovered meaningfully feed back into the gameplay and the narrative by contributing to the overall military strength of Shepard’s fleets.

6.3.2. **Revisiting the Dialogue Wheel**

The most significant change to how the player commits to meaning in *Mass Effect 3* occurs
at the level of the dialogue wheel interface. This was not apparent to me the first time I played the game for fun; however, when I played all three games in a row for this analysis, the change to the poetics of the dialogue wheel struck me immediately. In *Mass Effect 3*, the “neutral” option is conspicuously absent from almost all conversations. When presented with a choice, it is almost always a Paragon/Renegade binary. The game provides little opportunity for middle of the road, non-committal conversation choices. From a narrative standpoint, this creates a Shepard who is forced to fully commit to a moral stance (or oscillate between two extreme character performances), even when sometimes both are problematic. In the previous games, I seldom took the neutral option, but when I did it was often because I was trying to negotiate between two extremes that were either equally appealing or equally distasteful. The reduction of the ability to equivocate in conversation changes how meaningful commitment works by making every choice a “big deal”. This fits with Shepard’s narrative situation. In the face of the Reaper invasion, she cannot afford to not choose a path forward nor can she afford to only partially commit to a plan.

![Figure 75](image)

*Figure 75*  In this confrontation with the Reaper on Rannoch, Shepard is given 3 conversations options. On the left (in the "investigate" zone of the wheel) is the question "Help us understand". On the right, the Paragon option is "We'll destroy you eventually." The Renegade option is “You’re arrogant for a machine.”

Most of the time this change to the dialogue wheel is unproblematic, at least from a commitment to meaning standpoint. However, when the “neutral” option does appear it does so in a way that violates the grammar of the interface in a highly problematic way. In
Figure 75 we see an example of this.

The two choices on the right are clearly Paragon and Renegade, but the choice on the left appears to be an “investigate” option. It is not. It is a neutral option, in a violation of the basic conventions of the dialogue wheel that, while not unprecedented, is still incredibly frustrating. Selecting it robs the player of the chance to make a strong Paragon or Renegade commitment. In both of the previous games, with little exception, all three of these choices would have been on the right, correctly reflecting the conventions of the dialogue wheel that I unpacked in section 4.1.3.2. This is made even more egregious in Mass Effect 3, when the neutral option has been, for the most part, retired. As I have discussed earlier, this type of violation of player expectations and interface conventions disrupts the process of meaningful commitment by misaligning the commitments of the designers with those of the player.

There is another interesting change to dialogue in Mass Effect 3 in that it is much more automated. By this, I mean that there are far fewer points where the player is given access to the dialogue wheel than in the previous two games. In Mass Effect 3, once the player has made a choice, the dialogue between Shepard and her interlocutor will often play out uninterrupted for several conversational passes back and forth, with little opportunity for the player to interact. This is interesting because it removes opportunities for the player to commit to meaning, even if that commitment was effectively an indication to continue talking. The conversations as performed in the three games remain very similar, but by taking me out of the dialogical cycle, Mass Effect 3 distanced me from Shepard’s speech acts.

Many conversations in Mass Effect 3 take this to an even further extreme. Often, as Shepard is exploring the Normandy or the Citadel, she will encounter one of her crew members. When the player interacts with them, rather than triggering a cinematic conversation with a dialogue wheel the character, instead simply comments on the situation at hand. This type of conversation harkens back to some of the earliest RPGs, where the player would navigate a town, triggering minor bits of commentary from the townsfolk. In Mass Effect 3, when this happens, the NPC speaking will provide a few lines of dialogue, after which the player will need to interact with him or her again to trigger the next piece of the conversation. Once a character’s commentary options have been exhausted they stop responding to interactions from the player until the game world moves.
forward a step (such as when a player completes a mission or assignment), at which point new comments from the character become available.

I found this change to the game to be extremely problematic for two reasons. The first is similar to my concerns with the reduction of conversation options for Shepard in the standard dialogue system: these conversations simply play out automatically and they lack the animated facial performances and camera angle changes that add so much to the standard conversations. In some cases, it feels like the NPCs just can’t be bothered to stop what they’re doing and actually engage with the player.

![Specialist Traynor: Perhaps I should have played with chess. Although now I think I’m spoiled by the thrill of explosions.](image)

**Figure 76** Shepard carries on a conversation with Specialist Traynor, who never looks up from her work.

Perhaps more importantly, however, is that there is no clear indicator for when Shepard’s interlocutor is done talking. In some cases, the NPC will pause for effect between lines, or stop and sigh, before continuing with the conversation. If the player is unfortunate enough to mistake this pause for the end of the character’s lines, she might trigger the next piece of the conversation too soon, cutting off the NPC in midsentence and losing that content forever. Unlike classic RPGs where characters would loop through their dialogue options infinitely, once the player has exhausted this content in a single pass, it is gone. For a player like me, who is deeply invested in getting all of the possible narrative content, there is nothing more frustrating than hitting the “talk” button right as an NPC begins to say something, only to unintentionally cut them off and know that that is content I will never
get back.

By removing many of the internal conversational choices through both of these methods, the game also takes away an important indicator of Shepard’s mental state. As discussed in the analysis of *Mass Effect 1*, there is a relationship between spoken dialogue (text) and the conversational stubs that the player selects (subtext). Knowledge of that subtext inflects the player’s understanding of the text that Shepard is performing; it provides a psychological context for Shepard’s communicative commitments.

### 6.3.3. **Meaningless Commitments and Interactional Density**

While exploring the Normandy in the third game, I discovered some minor changes that spoke to an aspect of agency in games that I had not previously considered. The interior environments of the Normandy in *Mass Effect 2* and *3* are built on the same basic layout, with many details in common between the two games. As a consequence of this, they lend themselves to direct comparisons that were not possible between the first and second versions of the Normandy.

A number of switches, buttons, and other minor environmental features that had been functional in the second game no longer functioned in the third. This may seem like a minor change, and in many ways it is, but it highlights something that I’m going to refer to here as “interactional density”.

In *Mass Effect 2*, there is a button in the cockpit of the Normandy. When the player activates this button, a set of animated “blast shields” deploy over the transparent cockpit canopy, obscuring the view outside. When pressed a second time, the shields recede. On a lower deck there is a waste recycling system that creates compressed cubes of garbage and jettisons them into space when the player interacts with a nearby switch.

In the third game, these buttons are still visible in the environment but they are non-interactive. Even though they once had functions, they are now simply inert pieces of decoration in the game world. While these types of interactions are not consequential to the narrative outcomes of the game in any deeply meaningful way, their disappearance from the Normandy in the third game highlighted the small but significant work that they had been doing to create a sense of connection to the game world.
The small, inconsequential, interactive moments between Shepard and her environment created a sense that the ship was “lived-in”, that it wasn’t simply a painted backdrop against which the action of the game played out. In *Mass Effect 2* there was an interactional density to the Normandy. The ship could be acted upon and interacted with.
In *Mass Effect 3* there are, if anything, even more environmental details that suggest opportunities for interaction. In the ship's “lounge” area there is a poker table, a full bar, and some sort of VR entertainment console, all of which look like they should be functional elements of the environment. Instead they are inert.

I found myself wondering why it bothered me that I couldn't sit down at the poker table and deal out some cards. At the heart of the notion of “agency as commitment to meaning” is the idea that action (or inaction) in games is more about connecting the expressive and communicative commitments of the player to a congruent manifestation in the game world. So why would it matter if I couldn't interact with the VR console? This wasn't a meaningful commitment that expressed any deeply felt expressions around the character of Shepard or her fight against the Reapers. If anything, being unable to engage in “meaningless commitments” around the ship emphasized Shepard's focus on the mission. And yet, I was aware of the ways in which I couldn't participate or perform within the environment in spite of the presented *affordances* of the world. While I don't mind a lack of *choices* in games, I do feel the absence of a density of *participation*. Small environmental interactions such as picking up items off of a table or pushing buttons on a console all serve to create a stronger connection to the reality of the game world.

Chris Crawford has described situations like this in terms of a mismatch between the
accessible states a piece of software and its conceivable states (Crawford, 2003). He argues that it is within the designer’s control to steer the player toward accessible states (those states supported by a system’s design) while avoiding suggesting possibilities that are outside the capabilities of the system. Crawford discusses a need for achieving “closure” within interactive systems by limiting the number of conceivable states and explicitly articulating the limitations of the system. Crawford warns that adding new features and functions to any system will often increase the conceivable states beyond the accessible by raising the expectations of the interactor. In most digital games, *Mass Effect* included, mapping out the accessible states of the system is one of the first things players do, through a combination of tutorials and trial and error. In this instance, I experienced dissonance when I encountered previously accessible states that were no longer available to interact with.

6.4. Analysis: Method Acting and Transformation

6.4.1. Changing the Outcome vs. Performing the Script

Throughout this process, I have been focused on the pleasures of “playing along” with the narrative. This is one of the reasons I’ve spent so much time looking at how scripts support performative play. Within actor training, transformation is seen as an outcome of enacting a script, of surrendering oneself to a role and setting aside higher-level cognition and concerns over “what to do next.” This is in stark contrast to much of the work in Interactive Digital Storytelling that seeks to emphasize the pleasures of determining the direction of the narrative. Up to this point I have downplayed the ways that the *Mass Effect* games give the player the ability to choose different narrative outcomes in order to focus on scripted interactions instead.

However, as I played through *Mass Effect 3* I found myself becoming extremely engaged in several narrative moments that seemed at first glance to be entirely about selecting narrative outcomes. In particular, the decisions around the curing of the Krogan Genophage and the effort to reconcile the Quarians and the Geth both involved player choices that had significant impact on how the narrative would play out, not just for Shepard and her companions but for the entire storyworld. I found myself so deeply impacted by these sections of the game that I was forced to step back and examine my
own critical assumptions. I found myself questioning how I could reconcile my emphasis on following the script with the pleasure that these “narrative set-piece choices” was eliciting. From a hermeneutics standpoint, one might say that I was forced to adjust my own horizons to those of the work under study.

Now, it is worth noting here that my interest in scripted performance does not preclude the pleasures of player authorship. Rather, I have proposed this perspective as an opportunity to understand transformation as one of many sources of pleasure in digital narratives. Even so, I felt that there was more going on beneath the surface of my pleasure in these pivotal moments of the story that bore deeper consideration. These two “set-pieces” are emotional climaxes, not just for *Mass Effect 3*, but for the entire series. The choices that the player makes during these sequences go beyond simply assisting a companion or defeating an enemy; they are choices that impact the storyworld at the level of *mythos*. These are *character defining moments*. When Shepard cures the Genophage, this changes one of the fundamental truths of the narrative world. Likewise, when she reconciles two species that have been at war for hundreds of years, she is writing a new history for the galaxy.

And yet, when I encountered these choices, they were already foregone conclusions. I had been laying the groundwork for these decisions with every character choice I made in the previous games. My version of Shepard fought for a more understanding Alliance in the first game, one free from the xenophobic specters of the past. She spent the second game learning how to make difficult choices and to see complex situations from every angle: to live in the moral grey areas. She was committed to diplomacy over violence and compromise over extremism. There was no doubt in my mind that she was going to try to cure the Genophage, to right what she saw as a grave injustice. There was no way that she was going to condone the destruction of either the Quarians or the Geth, not when there was a chance for peace. My trajectory through the games gave Shepard a narrative momentum towards an end goal. That momentum *determined* my performance and my choices and the game provided me with opportunities to follow that narrative trajectory to profoundly satisfying conclusions. And so, although the game presented these situations to me as simple “choices”, I feel they were in fact *highly scripted* choices.

I had many moments over the course of the games where I wondered “what if I could cure the Genophage?” Moments where I wished the Quarians could just realize that the Geth
didn’t mean them any lasting harm. Getting a chance to fulfil those desires was deeply rewarding. Compare these situations to the choice of which character to save in the *Mass Effect 1*: Kaiden or Ashley. This was a choice that Shepard was forced to make. At no point during previous play did I think “You know what, I wish one of these characters was dead.” Being forced to make a difficult choice disrupts the flow of the performance, but getting to make a complex, desired choice extends the performance through the moment of choosing.

Knowing that these choices were precarious made them more powerful. Seeing threats to them on all sides, including within Shepard’s other dialogue options, made the moment of performing those choices more meaningful to me. In this sense, the presence of “free-will”, the ability to choose the “wrong” outcome, is what made choosing the “right” outcome so effective. I believe this would have been true had I been playing the game as a Renegade as well. I think for a Renegade Shepard, choosing to lie to the Krogan about the Genophage cure in order to retain the Salarian military strength would just make good sense. Likewise, killing the Geth would be a natural extension of Renegade Shepard’s overall “shoot-first-and-ask-questions-later” attitude. What was “right” for my character would have been “wrong” for another character who had consistently been performing the character differently.

These big choices are embedded within the framework of the narrative; they work with the flow of the story and do not violate any of the internal logic of the narrative world. They rely on a set of character scripts that are systematically presented to the player over the course of the games rather than forcing the player to suddenly perform without a script. They are satisfying because they operate as a reification of the scripts that the player has been performing rather than a repudiation of them.

### 6.4.2. Physiological Embodiment and the Creative State

In trying to identify and articulate my experiences of the creative state in *Mass Effect 3*, I noticed that there was a connection between my own embodied reactions to the game and moments where I was deep in the creative state. The most pronounced of these happened during a dream sequence that recurs multiple times throughout the game.

In the opening sequences of the game, as the Reapers are invading Earth, Shepard encounters a young boy who has been trapped in an air shaft by collapsing debris. She
tries to rescue him, but he panics and disappears deeper into the shaft. Shortly thereafter, Shepard boards a shuttle for the Normandy, and sees the boy with a group of survivors boarding another shuttle. Shepard watches, helplessly, as his shuttle is destroyed by a Reaper before it can escape.

**Figure 79**  
Shepard tries to help a young child during the Reaper invasion of Earth.

**Figure 80**  
A Reaper destroys a shuttle with the same child aboard.
This is the last thing that Shepard sees on Earth before making her own escape into space and she is haunted by it. Over the rest of the game, Shepard has nightmares where she is running through a dark forest with the boy always a few steps ahead.

**Figure 81**  *Shepard pursues the child through a dark, dreamlike forest*

[Image]

**Figure 82**  *In Shepard’s dream, the child catches on fire.*

When she finally reaches him, he turns to her and slowly is consumed by flames, at which
point Shepard awakens in a panic. This happens three times over the course of the game. Each dream lasts a bit longer than the previous one, with increasing detail, including haunting disembodied whispers that take lines from previous conversations out of context. This child comes to embody the conflict with the Reapers for Shepard, so much so that when she finally confronts the Catalyst at the end of the game, it appears to her in the form of the same young boy from her dreams. These are very strange sequences, when compared to the rest of the game. They operate on dream logic, with the child character leaving the frame and disappearing completely, only to reappear further away. As Shepard, all the player can do is move forward in pursuit of the child, knowing that she cannot ever catch him.

And yet, every time I play through this sequence, when Shepard awakens from her dream I suddenly become aware of the fact that I’m still mashing down the button to move her forward, to catch up with the child. I’m literally sitting on the edge of my seat, holding my breath, and grinding the key down as if through sheer physical force I’ll be able to impel the character forward faster. Every time, this happens. I realize that for a moment I have abandoned my own desires and understandings, and have simply embraced the needs and desires of the character. I have lost awareness of my body and become transported into the body of Shepard, who is struggling hopelessly to just move a little bit faster this one time.

This to me is an indicator of the creative state: a moment of such complete commitment to the actions and needs of the character that my own needs simply recede into the background. It happens, in this context, because the needs of the character are so simple and straightforward. They are easy to understand and easy to execute. There is very little standing between me and the performance of the actions of the character and there is very little cause or opportunity for me to stop and question what is happening.

6.4.3. Bodily Performances and Masks

The final aspect of theater and drama that I want to consider in this analysis has to do with the use of Masks. As discussed in Chapter 2 of this work, Masks have long been used in the theatre to elicit character performances, serving as external triggers for internal transformations. Masks are most effective when the performer wearing the mask can see herself as a transformed character: this visual experience of the transformation helps to create the Mask state.
In digital games, I contend that we can view the avatars that players inhabit as a type of Mask. As players witness their digital proxies in action, the bodies and performances of those characters communicate information back to the player about the character as an entity situated within a physical world. There is a growing body of research in neuroscience that describes a phenomenon known as “mirror-neurons” (Rizzolatti & Craighero, 2004). This work describes a neurological process by which the human brain “simulates” the electrical activity of a body engaged in an activity when it witnesses another body performing that activity. According to this premise, when we see someone running, jumping, and ducking, a part of our brain is creating its own simulation of those activities. I find this notion to be quite interesting in the context of avatar performances and Masks.

At the end of the game, in the final climactic push for the Conduit, Shepard is injured quite badly. When the player gains control of the character she is limping, holding her side, and barely able to move forward. When she finally makes her way through the portal she is even more battered, listing to one side as she drags herself forward.

The other time this type of Mask was employed was during Mass Effect 2 when the player briefly controlled Joker during the Collector attack on the Normandy. In both cases, the player is given a new mask, with a new bodily performance, and in both cases, the physical performance is designed to communicate vulnerability to the player.

Figure 83  An injured Shepard limps toward the final confrontation with the Illusive Man on the Citadel
The body language that the character conveys contributes to the sense of desperation. Prior to this sequence, the Mask that the player put on when controlling Shepard was always physically strong, in the manner of most video game heroes. Suddenly Shepard is weak, injured, and vulnerable. Now there is something interesting and challenging for the brain’s mirror neurons to simulate: a damaged body, moving in an unnatural way.

Masks in the theater take many forms, including make-up and costumes, but one thing that all forms of Mask have in common is that they shape the actions of the performer by altering his or her body in some way. They are a very powerful tool for creating a character, which is why most shows in the theater really start to come together during dress rehearsals, when all of the actors are finally in costume. In *Mass Effect 3*, Shepard’s injuries have a very literal impact on what the player can and cannot do. While performing with this Mask, the player cannot run, she cannot take cover, and she cannot use any of Shepard’s weapons or special abilities. The Mask very explicitly constrains Shepard’s actions. This is a form of scripting that takes place at the interface level by limiting the interactional vocabulary of the character in order to guide the player toward a specific performance. Like many of the scripts we have encountered in this work, it operates on the “Outside-In” principles of the “magic if”. It forces to player to perform Shepard as-if she is wounded, and to act as-if the character has no option but to move forward toward her destiny.

In these last three chapters I have spilled a significant amount of ink describing my close readings of the *Mass Effect* trilogy, and providing some specific examples and analysis of the games. In the next chapter I will return to the concepts of agency and transformation, and to my analytical lenses, in order to synthesize these lessons into a design poetics for digital narrative.
7. Discussion and Conclusions

My close readings of the *Mass Effect* games have provided a multitude of examples of how commitment to meaning and the dramatic arts may be used as lenses for the analysis of the pleasures of agency and transformation in story based games. In this last chapter I will consider new insights into the workings of these lenses, while also synthesizing a design poetics for digital narratives and story-based games. I will then revisit the research questions I opened this dissertation with and close with a consideration of the future of this work.

I make no claims to objectivity in my critique of the *Mass Effect* games. I find them emotionally powerful, funny, dramatically satisfying, challenging, and rewarding. I have spent hundreds of hours with their characters, immersed in the future world created by Bioware. As a scholar I’ve often needed to set aside my love of these experiences in order to try and view them with a fresh perspective. My two analytical lenses have helped in this regard by providing a structured framework for observation and reflection, but it’s also true that there are values and judgments built into the lenses as I have construed them here. Explicit in each lens is a commitment to a form of digital storytelling that preserves the voice of the storyteller, while creating opportunities for the reader/player/actor to meaningfully enter the narrative world as an active participant.

7.1. Analytical Lenses Revisited:Specifying Design Poetics for Agency and Transformation

As I revisit my analytical lenses I will bring together examples from all three games and the literature discussed in Chapter 2 in order to formulate a design poetics for agency and transformation in story based games. I think of these poetics as analytical markers of specific design decisions, which can be used to gain a deeper understanding of agency and transformation in digital games. I also contend that they have utility as design tools, should a designer wish to create deeper experiences of meaningful agency and transformation in story based games.
7.1.1. **Agency as Commitment to Meaning**

In the previous chapters I have provided extended examples about my own perceptions of *commitment to meaning* in the *Mass Effect* trilogy, but I have intentionally not made any general claims about how meaningful commitment works or about agency in general. One of the advantages of reimagining agency in terms of communicative competence and speech act theory is that it provides a critical perspective for breaking the phenomenon into a set of more useful constituent parts. In my analysis of *Mass Effect*\(^{22}\) I identified a number of specific mechanisms for successful meaningful commitment, while also uncovering some situations where the design of the games and the commitments of the player seemed to be in opposition.

While an analysis of one game franchise should by no means be taken as a generalizable or representative study of all story based games, I believe that many of the design strategies and poetics identified within these games have applicability beyond their specific manifestations in these games. Poetics are the building blocks of a medium, rather than a specific text: the ability of a close reading to illuminate the poetics of a medium from specific instantiations within a text is the basis for knowledge claims within literature and film studies. One might perform a reading of the camera techniques employed in *Citizen Kane*, but the value of that reading is in illuminating strategies for accomplishing a desired aesthetic outcome that might then be deployed in both the critique and creation of other films. Thus, while my readings have focused on the poetics of agency and transformation within *Mass Effect*, my contention is that these poetics have broader reaching implications for the study of these two fundamental concepts. It is in this vein that I propose the following seven high-level themes as components of *agency as commitment to meaning*, summarized in

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\(^{22}\) In this section I will use “Mass Effect” as shorthand for the entire trilogy.
Table 13.
| **Table 13 A Summary of the Design Poetics of Agency as Commitment to Meaning** |
|-----------------------------------|----------------------------------|-------------------------------------------------|
| **Design Poetic**                | **Description**                  | **Related Concepts in Literature**               |
| Explicit vs. Implicit            | Some meaningful commitments result in *explicit* changes of the underlying software system of a game, while others simply change the *implicit* interpretations of the player. | The most direct parallel to this is Ryan’s distinction between *exploratory* and *ontological* interactions (M. L. Ryan, 2001). Many parallels are also present in narratology and digital media studies including the concepts of syuzhet (plot) and *fabula* (story) (Bordwell & Thompson, 1997), Zimmerman’s notions of *embedded* meaning and *emergent* meaning (Zimmerman, 2001), Roland Barthes’ notions of denotational and connotational meaning (Barthes, 1970), and the broad narratological divide between studies of a media’s *form* and studies of a reader’s *interpretation* discussed in Chapter 2. |
| Player Types and the “Interpretive Superposition” | Players are capable of committing to multiple, often mutually exclusive meanings, often pursuing many contradictory objectives simultaneously. I describe the mental state of tracking the various overlapping threads of meaning in a game as the “interpretive superposition”. | This concept is an extension of many different perspectives on player typologies, including Richard Bartle’s canonical typology of players of online games (R. A. Bartle, 1996), Bateman and Boon’s Myers Briggs inspired typology (Bateman & Boon, 2006), John Kim’s “Threefold Model” (Kim, 1998), and Nick Yee’s empirical work on MMO players (Yee, 2006). |
| Static vs. Dynamic               | There is a continuum between choices that can only be made once (*static* commitments) and choices that are being made and remade continuously during play (*dynamic* commitments). Static commitments have “higher stakes” than dynamic commitments, and require different narrative and ludic scaffolding. | This poetic is primarily grounded in Salen and Zimmerman’s work on *Meaningful Choice*, which looks at both the long-term and immediate feedback given to a player when she makes a choice in a game (Salen & Zimmerman, 2004). |
| Investigation vs. Progression    | Not every player action is an expression of narrative desire or meaning: sometimes a player is more interested in discovering the possibilities of a system, rather than acting on the explicit structures of meaning contained therein. Sometimes, insignificant exploratory interactions can create a powerful sense of a functioning simulated world. | There is very little specific literature on this phenomenon, although one might argue that the body of games scholarship emphasizing unrestricted agency is an argument for the pleasures of the investigative mode (Aarseth, 2004; Adams, 1999; Gaynor, 2008). The pleasures of investigating a world that is interactionally dense are tied up with Chris Crawford’s discussion of conceivable vs. accessible states in a system (Crawford, 2003). |
| Active vs. Inactive              | Sometimes, choosing not to take action is a form of commitment to meaning. Inaction can often lead to consequences (or opportunities), but it is harder to communicate when and where inaction is a viable alternative for players, when so much of game design is about the activity of the player. | Inactive commitments are not very well theorized or understood. There is some discussion of the rewards of playing on the margins of a scene in the Jeepform community (Viäker Jeep, 2007), and some consideration of limiting player actions in the IDS community (Riedl et al., 2003). Karen Tanenbaum and I have also written about this poetic in our own research on agency (K. Tanenbaum & Tanenbaum, 2009). |
Visual Attention

I argue here that the ability to direct the view of the camera, and frame the visual conventions of the narrative is a unique mode of expressing meaning within digital narratives which has not been discussed previously in the field.

The visual language of film is the subject of significant theory within the film studies community (Bordwell, 1985, 2008; Bordwell & Thompson, 1997; Branigan, 1992; Thompson, 1988); however, games have not received a similarly rigorous treatment, in part because of the difficulty of grappling with the role of the player as “composer” of the image.

Impetus and Commitment

Committing to meaning is often simply about actively working to move forward in a narrative, rather than about selecting a specific outcome.

In some cases, this means acting “as-if” one has control of the situation (even if that control is illusory), invoking the poetics of the subjunctive mode (Mackey, 2011). Much Jeepform LARP also trades in the pleasures of enactment (Vi åker jeep, 2007). There is also significant overlap here with the practices surrounding method acting, and the performance of a script (Benedetti, 1997; Daw, 2004; Johnstone, 1999).

In the following sections I will discuss these in detail, and connect them back to my readings of Mass Effect.

7.1.1.1. Explicit and Implicit Meanings

Following Marie Laure-Ryan’s distinction between exploratory and ontological interactions (M. L. Ryan, 2001) I make a distinction between actions that result in some sort of state change within the game as a software system and actions that do not. In my analysis of Mass Effect, I articulated this difference as a distinction between explicit and implicit meaning. More broadly, however, explicit meanings are primarily concerned with the formal representations of the media artifact while implicit meanings exist solely within the interpretations of the reader. This distinction between formalism and interpretation (which I identified earlier in this dissertation) underlies many of my critiques of IDS, which is primarily concerned with the computational manipulation of formal narrative structures.

The interpretive stance of the interactor is difficult to grapple with as it relies on an understanding of the complex and often shifting interrelationships between media literacy, psychology, motivation, user experience, and interface design. It is much easier to simply engage with narrative as a formal system and allow the interpretation to take care of itself.

The explicit vs. implicit distinction also parallels the narratological concepts of fabula (story) and syuzhet (plot) which are canonical within the study of film (Bordwell, 1985; Bordwell & Thompson, 1997; Thompson, 1988), as well as Eric Zimmerman’s discussion of emergent and embedded narrative systems (Zimmerman, 2001).
In *Mass Effect* we find many examples of explicit meaningful commitment. Conversations with NPCs often involve selecting Paragon or Renegade options, which in turn are reflected in a quantified measure of Shepard’s identity. Carrying out specific missions or providing particular advice to NPCs changes variables within the game state that impact minor narrative details (such as how a veteran on the Citadel deals with his PTSD). These same actions can lead to significant changes in the storyworld (such as the curing of the genophage disease that keeps the Krogan as second class citizens). Sometimes these kinds of choices even dictate which major characters live and which ones die.

There are also plenty of examples of implicit commitments in *Mass Effect*. This includes aesthetic choices, such as the gender and appearance of the commander Shepard, but it often also includes ludic choices such as combat engagement range preferences and squad member selection. Many of these aspects of the game are fundamentally “open”, providing opportunities for the player to fill in her own meanings as she engages with the system (Eco, 1989).

### 7.1.1.2. Player Types and the “Interpretive Superposition”

Everything a player does in a game has the potential to mean something: to express a detail about the character, to uncover information about the storyworld, to change an event in the plot, to express a preference on the part of the player. However, not all meaning is created equally. As Salen and Zimmerman point out, meaningful play relies on a coherent mapping between the activities of the player and the responses of the system, but this definition ignores an important aspect of meaning in digital games: interpretation. When a player takes an action, it can mean a wide range of things; likewise, a systemic response to that action requires the system to assign that action to one (or more) of those potential meanings and then express that assignation back to the player via some sort of coherent feedback. The player is then free to interpret, or misinterpret, that feedback. Within this sequence of interpretive loops, there are many opportunities for a breakdown in meaning, but there are also opportunities to create rich, emergent meanings from relatively modest materials. Commitment to meaning produces a satisfying experience of agency when the commitments of the player and the commitments of the system are aligned with each other.

It is also important to realize that the interpretive position of the player need not be seen as a singular, unitary, or even coherent whole, as if often the case when considering player
preferences and typologies (R. A. Bartle, 1996; Bateman & Boon, 2006). I suggest that rather than thinking about players as behaving according to a specific “type”, we instead consider players to be adopting different attitudes in the moment of play. These attitudes or “stances” are performances that the player enacts for herself as well as for any other players and/or spectators. Performative play exists within a social and cultural context; the situation in which a player is playing radically alters how she plays and what that play means. For instance, when I play Grand Theft Auto IV (Rockstar North, 2009) alone I am much more interested in accomplishing systemic goals (such as missions and achievements) than I am when I play the game with a group of friends. In the social setting, getting into outrageous and entertaining trouble takes precedence over accomplishing in-game goals. The stance adopted by a player in any given moment changes what the different elements of the game come to mean. If I am playing Grand Theft Auto with a goal of accomplishing specific missions, then I resent it when something happens to interfere with that mission, such as attracting the attention of the police. If I am playing the same game with a goal of entertaining my friends, I will often actively seek out police attention. The game situation remains the same, but the context of the play changes what that situation means to me as a player. The implicit meaning of the actions changes.

Even within solitary play, players must adopt a complex tangle of overlapping and even mutually exclusive goals and desires. This particular cognitive state is a continuous feature of playing the Mass Effect games. There are many things to do in the system that are not directly tied to the central narrative. The Reapers are due to arrive any minute, but Shepard is dedicating hours of time to mining for minerals, exploring the galaxy, or helping solve the problems of random strangers she has met on her journey. In Mass Effect 3, she’s out exploring every nook and cranny of the galaxy while a threat to all life is actively harvesting multiple galactic civilizations in the background.

In spite of this, the part of me that is attending to the narrative does not lose track of the sense of urgency, even though the part of me that is completing side missions and leveling up my character has temporarily taken precedence. I do not perceive the exploration of the galaxy as narratively incongruous, even though it undermines the rising dramatic tension of the narrative. Am I an achiever or an explorer in this situation? Am I being driven by the game narrative or by a set of external goals that I have devised for myself?

In fact I am cycling between all of these different modes of experiencing the game and, to
complicate things, my actions in the game take on different meanings depending on which of these logics I choose to apply at any given moment. For example, if I only apply the logic of narrative urgency to Shepard, then much of her exploratory behavior comes across as irresponsible, nonsensical and unbelievable. The real Commander Shepard would never stray from her core mission. But even as I am searching for minerals in some backwater of the Milky Way, the narrative logic of the imminent Reaper Invasion cannot be wholly discarded, because then all of my actions become unmoored and meaningless: why is Shepard even here and what does it matter if she upgrades her ship, or lives, or dies? Playing the game requires applying at least two contradictory frames simultaneously.

The only way to reconcile the meaning of my contradictory actions and behaviors with the story that is unfolding without undermining its narrative coherence is to selectively filter the game as a whole into separate, concurrent “tracks”. Thus the “narrative tension track” and the “grinding for resources track” can run in parallel without contradicting each other, and I can simultaneously enjoy the rising tension of the story while also enjoying being an “achiever/explorer” and finding every secret item. And like the separate tracks of instruments in a music recording, sometimes one track is more dominant in the mix than the others, and sometimes one instrument drops out for a little bit so a listener can hear the rest more clearly.

Most modern games are rife with these types of internal contradictions, discontinuities that require the player to suspend her disbelief along both narrative and ludic vectors. Consequentially, most players have learned how to maintain multiple contradictory models of the meaning of their actions as they play, because otherwise most games wouldn’t make any sense. Many game conventions violate the narrative logic of their simulated worlds while others create new narrative logics that cannot be judged by any “real-world” criteria. What this means is that there are often multiple contradictory layers of “reality” that a player must negotiate while playing. Players do all of this complicated mental juggling automatically while they play. They adopt multiple stances or attitudes about their play and pursue all of them at the same time.

I propose the term **Interpretive Superposition** to describe these simultaneous conflicting states that players often inhabit. Much like the cat in Schrödinger’s infamous thought experiment, players can simultaneously exist in multiple possible states at once, at least
until the game requires them to *explicitly* pick a specific condition to occupy. It is possible for designers of games to “collapse the waveform” by calling out a specific meaning or formal interpretation, by rendering an *implicit* meaning *explicit*. One example of this occurs in one of the situations I discussed in *Mass Effect 2* where the presence of a radio providing mission updates changed the meaning of the actions Shepard was taking, by altering the objectives that the character was pursuing.

### 7.1.1.3. Static and Dynamic Commitments

Most of the time, gameplay affords a shifting and dynamic landscape in which meaning can emerge from ongoing incremental commitments on the part of the player. For example, in *Mass Effect* the player is continually engaged in a process of committing to different ethical meanings through dialogue, allowing the Paragon and Renegade metrics to dynamically reflect these commitments. However, often there are situations where a player must make a commitment that results in explicit changes to the system which cannot be undone, mitigated or changed. Once the player selects a character class and background for Shepard, these commitments are fixed for the duration of the game. From a design standpoint, one-time or *Static* commitments require different conceptual scaffolding and foregrounding than incremental or *Dynamic* commitments. The less opportunity a player has to renegotiate or clarify a meaningful commitment within the game, the more important it is to prepare the player for the consequences of that commitment. As discussed above, Salen and Zimmerman’s work on *meaningful choice* deals with the importance of both establishing the potential meaning of an action, and then following through on that meaning with immediate short-term feedback and ongoing long-term feedback (Salen & Zimmerman, 2004).

This highlights the ways in which *commitment* exists on a continuum; one can be more or less *committed* to a particular meaning during play. In some cases, a player might be deeply invested in expressing a specific message through play or in accomplishing a specific task. This was the case when I was given the opportunity to cure the Krogan of the Genophage. In other cases, a player might simply be expressing an arbitrary or fleeting preference. It falls to the game designer to identify when an opportunity for a meaningful expression might reflect a passionately held meaning for the player and when it might not. This can be modulated through contextual and narrative details and also through the design of the gameplay mechanics, and the interface systems.
7.1.1.4. Investigation vs. Progression: Meaning and Narrative Time

Some speech acts are primarily about gathering information rather than expressing meaning. It is important for the player to know when her activities are *investigative* and when they are advancing the *progression* of the plot and the game plot. The pleasures of investigative play have already been explored in great detail, particularly in discussions of *unrestricted* agency (Aarseth, 2004; Adams, 1999; Gaynor, 2008). Many of the problems I have with contemporary discussions of agency stem from the difficulty that the field has disentangling the pleasures of exploration and the pleasures of progression. This is a difficult distinction to manage, both at a theoretical level and, more importantly, at a practical level. It is extremely challenging to try and ask players to distinguish between these different modes of agentic expression in their own play.

In *Mass Effect* there is an explicit (systemic) difference between actions that result in a progression of the storyline along with an advancing of the diegetic timeline of the game and actions that do not. The simplest example of this is within conversations, where the player is often given opportunities to investigate a range of topics before making dialogue choices which move the conversation to its next step (often foreclosing on those previous investigation options). More broadly speaking, certain missions in the game advance the storyline, resulting in galaxy wide changes. Certain content is only available at particular moments within the timeline of the storyworld and can be lost should the player advance too swiftly through the central plot missions.

By mapping the narrative time to specific actions, *Mass Effect* creates a situation in which certain commitments are more likely to result in explicit changes to the underlying system than others. This creates opportunities for explorative play, experimentation, and lower-priority commitments, by isolating “side assignments” from “core missions”. It also leads to two different modes of play and meaningful commitment. In the *investigative mode*, a player is free to test the boundaries of the system and know that she is not risking serious disruption of the game narrative while doing so. In the *progression mode*, the player is aware that her commitments are being watched and will have consequences. In my above reading I discuss some of the consequences when these two modes of commitment are inappropriately signposted within the dialogue wheel (such as when a progression option is located on the investigation side of the wheel), resulting in inadvertent progression and potentially unwanted commitments to meaning. Designing for these two modes requires
the establishment of, and consistent adherence to, interactional vocabularies and conventions.

Commitment to meaning isn’t always about big sweeping decisions with significant narrative implications. Sometimes, it’s simply about expressing an engagement with the reality of the simulated world. The notion of interactional density argues for the importance of minor interactions to create a sense that the player is actually present within the world of the game. It is easy to misconstrue interactional density as freedom to act, which leads to shallow interactions that do not produce satisfying agency. I contend that interactional density works best as a supplement to more richly imagined and fully realized linear experiences. In these contexts interactional density can create tiny moments of engagement with the simulation that reify the efficacy of the player within it. This means providing the player with opportunities to manipulate the world, or to express a connection to the world, without requiring that every designed interaction be mapped to long-term systemic outcomes. When designing for interactional density it is important to bear in mind the lessons of Chris Crawford’s work on the relationship between accessible and conceivable states (Crawford, 2003). Designers must walk a narrow path between supporting the player’s expectations of the simulation and inadvertently raising them in such a way as to exceed the capacity of the simulation to then satisfy them.

### 7.1.1.5. Active and Passive Commitments

When designing systems of meaningful commitment into a game or digital narrative, it is important to consider whether there are consequences or advantages to be gained through inaction or omission. This type of meaningful commitment requires carefully coupled feedback loops and mature interface conventions in order to clearly delineate the context in which choosing not to act is a form of expression.

Active commitments comprise the bulk of game design and are easier to deal with than passive commitments or commitments that arise from inaction. In Mass Effect, whenever the game provides the player with a “trigger action” in conversation, this is a choice between an active commitment (pushing the appropriate button) and a passive commitment (waiting for the prompt to disappear, resulting in an absence of action from Shepard). In some cases, passive commitments are linked to invisible ticking clocks and the progression of narrative time: should the player choose to not immediately follow the collectors through the Omega 4 relay, this is a form of passive commitment that leads to
the death of the Normandy’s crew. Likewise, choosing to disregard loyalty missions in *Mass Effect 2* is a form of passive commitment, one that if taken to the extreme can result in the death of every major character in the game during the suicide mission, including Shepard herself (Bizzocchi & Tanenbaum, 2012).

There is not much theory around the role of inaction as a meaningful expression in digital games. Within the Jeepform LARP literature there is some interesting discussion of the pleasures of performing non-central characters (Vi åker jeep, 2007). One Jeepform principle is to keep the number of main characters small, while creating opportunities for other players to take on the role of the supporting cast. Smaller parts are often free to explore more extreme and unusual characterizations, but they also have the opportunity to step back from the scene and observe. In the IDS community, there has been some work done on techniques intended to limit the actions available to players when they are in conflict with the narrative goals of the system (Riedl et al., 2003). However, I would argue that this strategy directly contradicts the underlying poetics of commitment to meaning. Inaction, as I construe it here, is about committing to a specific outcome or narrative meaning that happens to be achieved through an absence of player activity. I have argued this point in some detail in my early writings around commitment to meaning with Karen Tanenbaum (K. Tanenbaum & Tanenbaum, 2009).

7.1.1.6. **Visual Attention as Meaningful Commitment**

One form of meaningful commitment that falls in the middle of the *active* and *passive* dichotomy is *visual attention*. Camera control and avatar movement are two of the fundamental mechanics of most digital games, although games can vary widely in how these core components are implemented. In a simulated three-dimensional environment, the player can often direct the gaze of the character within a largely unobstructed range of motion, providing her with enormous freedom to frame and compose the visual language of the game. It is not common to think of this as a particularly salient speech act, as it is a continuous, low level function that underlies many of the more complex functions within the system. And yet, choosing which part of the world to view and where to direct one’s attention can actually be a powerful expression of interest. Certainly, when *Mass Effect 3* introduced a mechanism for constraining the player’s visual perspective during select moments, it highlighted how important the control over the camera is to the creation meaning within a digital environment. Directing the attention of the player is a powerful
way to communicate specific visual rhetorics, while tracking the visual attention of the player is a powerful tool for learning about her preferences that remains largely unexplored in digital games.

Significant attention has been paid to the importance of visual composition in film (Bordwell, 1985, 2008; Bordwell & Thompson, 1997; Branigan, 1992; Thompson, 1988); however, when the act of framing the image becomes contingent upon the preferences of the player, it becomes more elusive and difficult to analyze. An open question raised by my close readings of Mass Effect is whether there is any value in treating the attention of the player as an explicit form of commitment. Mass Effect 3 demonstrates a simplistic technique for using the interface of the game to direct the visual attention of the player, but it is unclear how one might design to accommodate the camera control of the player as an expression of meaning back to the system. How would one communicate that this mechanic was working to a player, and what particular meaningful affordances would such a system have?

7.1.1.7. Impetus and Commitment

Not all interactions are about choosing an outcome. Many are instead about expressing a desire to continue. In a conversation in Mass Effect, this might mean stopping regularly to provide the player with the choice to continue the dialogue, a poetic whose absence in Mass Effect 3 created the sense that Shepard was conversing of her own accord, without any input from the player. Likewise, designing situations where it is less important how a player decides and more important that the player simply not give up can be a powerful opportunity for meaningful commitment, in part because the interpretive loop is much simpler and affords far less opportunities for breakdown. Joker staggering through the duct work of the Normandy while the Collectors harvest his friends and colleagues is a situation that is profoundly effective because there is very little ambiguity about its meaning and the player does not have the luxury of alternative routes or strategies. It is simply a narrow channel where the meaningful commitments of the player and the game align beautifully.

This particular type of commitment supports the pleasures of enactment over the pleasures of investigation. Margaret Mackey’s writings on the pleasures of the subjunctive mode emphasize the narrative power of acting “as-if” one has control of a situation (Mackey, 2011). In games, this often means pursuing one’s goals as if they were not
already pre-defined by the designers of the system, ignoring the out-of-character knowledge that everything one does is within a narrow channel that is largely pre-determined. Jeepform LARP embraces this deterministic approach to participatory narrative and emphasizes the pleasures of enacting a known scripted story, where all of the players know the outcomes ahead of time (Våker jeep, 2007). In these situations, it is not the objective but the journey that is important: playing is more important than winning. This particular poetic of commitment to meaning also has significant overlap with the poetics of method acting that I will be discussing below, which deal with the pleasures of enacting a script and performing a defined role (Benedetti, 1997; Daw, 2004; Johnstone, 1999).

7.1.2. Transformation and Method Acting

The second half of my close readings takes theories from the dramatic arts and uses them as a lens for the analysis of my experiences of transformation in Mass Effect. In acting theory, transformation is often discussed in terms of the “creative state”: a mode of performance in which the actor experiences the scene as happening for the “first time”. Drawing on concepts from actor training, I have identified several poetics of transformation in games. At the heart of these poetics is the approach to method acting and transformation known as Outside-In, in which the activities of the performer result in a cognitive transformation. I summarize these poetics in Table 14 before discussing them in detail below.

Table 14 A Summary of the Design Poetics of Transformation and Method Acting

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<th>Design Poetic</th>
<th>Description</th>
<th>Related Concepts in Literature</th>
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<tbody>
<tr>
<td><strong>Scripts and Situated Rehearsal</strong></td>
<td>Transformation operates best when there is a defined role for the player to project herself into and a knowable sequence of actions for her to enact. This can be supported by embedding “scripts” in the game in a variety of ways and by creating opportunities for players to rehearse important activities in low-pressure contexts.</td>
<td>Interactive acting provides many backleading techniques for guiding a naïve participant through a performance (Wirth, 1994). Other techniques for supporting situated performance include telegraphing from Jeepform LARP (Wrigstad, 2008), and various gamemaster tricks from tabletop role playing games (Flowers et al., 2006).</td>
</tr>
<tr>
<td><strong>Emotions, Bleed, and the Creative State</strong></td>
<td>One path to transformation is the emotional life of the player, which can be connected to the emotions of the characters in the game. Designing for emotional crossover can lead to profound experiences of the creative state, either by using game structures to parallel emotional builds in the narrative or by employing sympathetic characters with whom the player can identify.</td>
<td>The central concept connected to this aspect of transformation is the notion of bleed from Jeepform LARP (Wrigstad, 2008). The goal of this type of transformation is to achieve a kind of emotional immediacy in the scene that transcends the preexisting knowledge of the player. This is called the creative state in method acting (Benedetti, 1997; Daw, 2004).</td>
</tr>
<tr>
<td><strong>Endowment and Responsibility</strong></td>
<td>Transformation is often about getting the player to “buy-in” to the reality of the narrative: to surrender to the story and the needs of the character. One technique for doing this is to endow the player with narrative responsibilities for the wellbeing of other characters in the storyworld.</td>
<td>Endowment is a form of backleading (Wirth, 1994) that can help support a process of “active creation of belief” (Murray, 1997). This process of buying into the reality of the narrative is also entangled with the poetics of commitment to meaning described above, and Mackey’s notion of the subjunctive mode (Mackey, 2011).</td>
</tr>
<tr>
<td><strong>Embodiment and Masks</strong></td>
<td>Masks are used in theater practice as a form of Outside-In support for cognitive transformations. In games, the avatar performs a similar role by creating an entity for the player to inhabit within the fictional world. Altering the appearance and behavior of that avatar can alter the player’s experience of her own identity in the game.</td>
<td>This poetic draws on Keith Johnstone’s writing about Mask Work in improvisational theater and its connection to ritual and ecstatic transformations (Johnstone, 1992). It also incorporates some of James Gee’s ideas around projective identity (Gee, 2007).</td>
</tr>
<tr>
<td><strong>Acting is Reacting: Narrow Channels, Ticking Clocks, and Vulnerability</strong></td>
<td>One important technique for eliciting transformation is to encourage the player to engage in the moment of the game, by forcing her to react to external stimuli such as imminent danger, or expiring deadlines. This can bypass the “logical” and “critical” impulses which can often undermine the experience of immediate engagement with the reality of the game.</td>
<td>These techniques draw on Benedetti’s discussion of acting as reacting and his concept of dual consciousness (Benedetti, 1997). They also incorporate Daw’s approach to sensory work as the basis of “the illusion of the first time” (Daw, 2004). They also can be connected to some of Seif El-Nasr’s work on ticking clocks in IDS (Seif El-Nasr, 2007), and Lockford and Pelias’s work on vulnerability (Lockford &amp; Pelias, 2004).</td>
</tr>
</tbody>
</table>

Fundamental to my arguments about the poetics of method acting and transformation is the insight that the structures of play and motivation in games are similar to the structures of enactment and motivation in theater practice. This might seem like a strange leap to make, but a close look at the exercises and activities employed in actor training reveals a strong connection between the “play” that happens on stage and the play that happens in contemporary games. Canonical texts on improvisation, such as Viola Spolin’s *Improvisation for the Theater*, are little more than collections of rule systems for in-person, multiplayer, real-time gaming (Spolin, 1999). In fact, she writes quite persuasively about the game-like nature of theatrical play, arguing that while game play might differ in degree from dramatic acting, that it is not different in kind. Likewise, many of the theorists and teachers of the Method (whose work I rely on throughout this dissertation) regard performance and game-play as inextricably linked to each other. The primary goal of Kurt Daw’s approach to teaching the Method is to get actors to abandon critical, analytical thought and to play freely (Daw, 2004). To achieve this goal, he fills his book with exercises that are actually simple games, intended to structure the behaviors of players in order to lead them to the experiences of the creative state that he seeks to impart. The authors of training manuals and texts for actors know that the experience they are trying to impart...
lives in embodied practice, rather than linguistic knowledge. To this end, they employ procedural rhetorics (Bogost, 2008) intended to create lived experiences of the desired state of mind from which a good performance emerges. This particular type of active learning also adheres to the principles articulated by James Gee about experiential learning and games (Gee, 2007).

From a game studies standpoint, this means that one need do very little additional work to adapt the techniques from theater practice to the design and analysis of digital games. They are already speaking the same fundamental language of play.

7.1.2.1. Scripts and Situated Rehearsal

Transformation is fundamentally about setting aside one’s own identity and desires and assuming the perspective and desires of someone else. In story based games, this usually means projecting oneself into the role of the main character. This is part of the magic of fiction and the spell it casts over the player is fragile and tenuous. It might be broken by bad writing, inconsistent characterization, poorly scaffolded gameplay, or confusing motivations, leaving the player floundering for something to connect to within the game narrative. Designers can nurture this state of mind, by preparing the player to invest herself into the character. This means providing her with knowledge of the character and the narrative and supporting her as she learns to perform her role in the story. This also means clearly defining the role that she is expected to play and reinforcing her performance through the use of a dense constellation of backleading techniques (Wirth, 1994). In Mass Effect we see both diegetic forms of backleading (or telegraphing, as it is called in Jeepform LARP (Wrigstad, 2008)), and non-diegetic mechanisms intended to keep the player moving forward in the narrative (what Flowers et al. would characterize as meta-game techniques (Flowers et al., 2006).) The character of Shepard is endowed with substantial social scripts, connected to her role as the first Human Spectre. The games provide multiple layers of overlapping objectives which are communicated at both the dialogue and the interface level. NPCs repeat important information about these objectives and Shepard herself often reiterates that information to provide the player an explicit performance upon which to attach her own expectations. As the games progress, this type of reinforcement is spread into the storyworld through diegetic advertisements, media broadcasts, and NPC conversations. Mass Effect provides the player with cues, not just
at the level of text, but also at the level of subtext, by creating meaningful interplays between the stubs of the dialogue wheel and the spoken dialogue of Shepard.

These are all mechanisms designed to provide the player with continuous access to her script. The script is the central facilitating artifact for an actor’s performance; it is the basis for all of the creative choices made by an actor in a scene. In games, good scripts are knowable, overt, and systematically build on previous knowledge and experience.

Unlike actors, however, players are often not given access to their scripts prior to the moment of performance. In acting, there are opportunities for rehearsal, for mastery. Ironically, it is the comfort that comes from learning a script fully that allows an actor to relax and play in the moment, creating the illusion of the first time. In games, there is often no need to simulate this “first time” experience, because the player is experiencing the action as it happens. But the player is also the actor who drives the action forward: she is the audience to her own performance. In Mass Effect, once I adopt the goals of Shepard, I can act as the character in the story, but I don’t know with any certainty that my actions will lead to a satisfying resolution of those goals. If I adopt the goal of “curing the Krogan genophage”, a goal that has been offered to me by the game system, I can take actions in pursuit of it, but I have to trust the system to have established appropriate scripts that will ultimately reward those actions with the promised narrative outcome. I also have to trust the system to help me pursue that goal by showing me the steps along the path and allowing me to learn the right actions to accomplish those steps, without punishing me for my initial naivety as I learn how to perform the role that the game expects of me.

Providing the player with scripts and foreshadowing is half of the equation. It is not enough to tell the player what she needs to do next: she must also have opportunities to rehearse her role before she is expected to perform it in a situation with actual narrative outcomes at stake. A player is best equipped to act in the moment if she has had opportunity to practice her part until it becomes second nature to her. Fluency in the performative mechanisms of the game is what allows a player to ultimately experience the pleasures of enacting her character’s role while simultaneously experiencing the unfolding of an unknown story. This dual consciousness parallels the mentality of an actor who is both in the moment of the story, while also attending to issues of craft in the performance: speaking clearly, turning out, and attending to his or her cues (Benedetti, 1997; Mamet, 2010).
It's also important to reinforce desired behavior with meaningful rewards. Good ludic rewards (strokes) reinforce the narratives of the character; they connect the experience of effective gameplay with the experience of enacting a narrative script. Bad rewards, such as the punitively designed inventory management system in the first *Mass Effect* game, disconnect the player from the narrative world.

Scripting a player’s behavior is not about *limiting* what that player can do in the game. It is about supporting the player in making meaningful choices within the system; it is about reducing anxiety and facilitating the pleasures of performance. Giving a player a script within the game doesn’t necessarily mean “spoiling” the outcome of a story or ruining the surprise about what happens next. Instead, it gives the player something to care about, to attach to, and to work towards. A script is not a promise that a story is going to follow a particular path nor is it a threat: “Obey the rules, or you will suffer.” A good diegetic script is an invitation to a player to follow the path of the story: “If you choose to care about the reconciliation of the Geth and the Quarians, then I will provide you with a resolution to this narrative arc.” There is an element of Mackey’s notion of the *subjunctive* in diegetic scripts (Mackey, 2011). They are an invitation for the player to act *in good faith* “as-if” the world of the story is going to reward her for performing her role.

### 7.1.2.2. Emotions, Bleed, and the Creative State

The pleasures of transformation are ultimately the pleasures of “doing the things the character does” and “getting to be a character in an unfolding drama.” Central to that experience is the shared emotional connection between the player and the character.

The notion of *bleed* from Jeepform LARP correctly identifies emotions as an essential component of transformation and the creative state (Wrigstad, 2008). When the emotions of the player and the emotions of the character are in sync, transformation is more powerful and more likely to occur. We can think of transformation in terms of *empathy*: seeing the world from another’s perspective or walking a mile in another’s shoes.

The poetics of Jeepform are done in service of a very specific aesthetic goal: to create roleplaying experiences where the players can successfully enact emotionally meaningful stories together. For my purposes, the critical word here is *enact*. While players in Jeepform have an immense amount of freedom to insert details about their characters and gameworld itself into the story, any and all contributions are made in the spirit of advancing the pre-determined dramatic goals of the experience. In a Jeepform game, everyone
involved has consensed upon the dramatic objectives ahead of time. The outcome is not ever in question, nor is the core pleasure one of creating an unexpected outcome. Instead, the pleasure lies in the journey itself, in the experience of playing out a powerful or interesting or even mundane scenario as a set of specific characters. Jeepform highlights the often overlooked pleasures of enactment and transformation in ways that are highly relevant to this dissertation.

In *Mass Effect*, sympathy is often a path to empathy and the creative state. If the player and the character can both be made to feel sympathy for another character in the narrative, then this can elicit a moment of the creative state. This occurred multiple times throughout my readings: Matriarch Benezia’s death, the Krogan rebellions and curing the Genophage, the resolution of the Geth/Quarrian conflict, and numerous side quests. Wherever there are emotions that can create bleed (urgency, betrayal, rage, frustration, love, fear, sadness, helplessness, etc) there are opportunities for transformation.

In method acting actors are trained to use their emotional and sense memories to connect to the character (Benedetti, 1997; Daw, 2004); if one can experience the same emotions as the character, one is more able to act as that character. The opposite of this phenomenon occurs when an actor is forced to step out of the immediate moment and *consider* an appropriate response. In games, when choices cross into authorial or directorly territory, they can jar a player out of the creative state. *Deliberative* choices, choices which require higher level deliberation, reasoning, strategizing, and justification, are especially likely to take a player out of the creative state, because they involve thinking rather than reacting and because they often involve cold calculus rather than emotional enactment.

The creative state can be fragile and requires good faith attempts to manage the emotional expectations of the player. The situations that most disrupted the creative state during my play occurred when the game violated its own ethical and emotional conventions, or when it led me to expect one thing and then delivered the opposite.

### 7.1.2.3. Endowment and Responsibility

In order for transformation to occur, the player must *consent* to the reality of the narrative and the character: a process in keeping with the concept of the magic circle in game studies (Huizinga, 1949; Salen & Zimmerman, 2004), and with theories around suspension of disbelief and “active creation of belief” (Coleridge, 1952; Murray, 1997).
She must engage in a creative act in which she suspends her external meta-game knowledge and instead works within the game to actively constitute an imagined reality (Mackey, 2011; Murray, 1997). An important technique for this is *endowment* (Wirth, 1994), which works by using storyworld details and backstory to empower the player to act as the character. It connects the character to a lattice of intersecting narrative scripts by situating her inside of a history, a society, a role, and a network of personal relationships. Each of these details entails the character in certain actions while reducing the likelihood of others. At the same time, endowment gives the player responsibilities (and the power) to make meaningful changes within the narrative world. Shepard is not a blank slate when the character meets her for the first time: she is a Commander in the Human Alliance Navy, she is the Hero of Akuze (in my version of the character at least), she is a military brat who grew up on spaceships, and she is the first human candidate for the Spectre program. Shepard has responsibilities to her crew, to her species, and to the galactic community at large. The character is endowed with the potential for wide range of expressive personality traits, but regardless of which dialogue choices the player makes, she is always intelligent and brave, capable and determined.

Endowment implicates the player in the reality *Mass Effect* by giving her narrative responsibilities and then allowing her to fulfil those responsibilities and experience effectiveness. Shepard isn’t simply acting in her own best interest and her motivations are not selfish. Instead, she becomes an avatar for the needs of the people around her. This is especially true in the second game, when the survival of the crew becomes linked to Shepard’s willingness to address their individual problems, and in the third game, when the success of the final mission against the Reapers is linked to Shepard’s willingness to resolve the various meta-conflicts that have defined the relationships between the various galactic species. Shepard is defined by her responsibilities to others, in a way that is reminiscent of Meisner’s approach to method acting (Pope, 2000). Actors in the Meisner tradition learn about their character in the reactions of the other characters in the scene: their identities emerge as social performances within the interplay of the characters. Likewise, Shepard’s character is as much a function of how the game world treats her as it is a function of the specific actions of the player.

This shifts some of the creative responsibility away from the player, while still providing her with a knowable identity to inhabit. Instead of having to invent Shepard from scratch, the player is asked to commit to becoming the version of Shepard that lives in the world.
By making the player responsible for solving other character’s problems, she gets to experience her character as *puissant* and powerful. Once a player consents to become Shepard, she becomes endowed with the qualities, relationships, and responsibilities that make Shepard the hero of the story.

### 7.1.2.4. Embodiment and Masks

In method acting, the notion of Outside-In transformation is used to account for the ways in which identity transformation arises from actions and external structures, rather than purely psychological and emotional effort (Benedetti, 1997; Daw, 2004). From this standpoint, aspects of transformation are involuntary, the product of the tight coupling of our bodies and our minds. If one does the things the character would do, as if one were the character, if one wears the clothes the character would wear, and moves the way the character would move, and speaks the words with character’s voice (as in the case of Anna Deavere Smith (Lewis & Smith, 1993)), then one experiences a transformation into that character.

Games use systems of rules and procedural rhetoric to create situations in which the player must enact the activities of the character in order to succeed. They couple these with visual rhetorics that reinforce the meanings of these enactments, in the same way that sets, costumes, and makeup reinforce the enactments of actors. In *Mass Effect* the player must act as Shepard in order to move forward: there is no alternative path through the game world. She cannot refuse to kill the Geth in *Mass Effect 1*, nor can she refuse to fight the Reapers in *Mass Effect 3*, unless of course she decides to stop playing entirely. Even mediated through interface devices, the player must enact Shepard’s actions.

Keith Johnstone’s writing about the poetics of Mask Work in improvisational theater suggests an interesting role for the visual representation of Shepard on the screen. Masks embody a ritualized form of Outside-In transformation, a *literal* reshaping of the face of the performer into a new persona (Johnstone, 1992). A good Mask elicits consistently knowable cognitive transformations that can be used as channels for communicating meaning to players. Masks operate on an Outside-In logic to create character behaviors by changing the actor’s sense of self. When a player is provided with a meaningful Mask to inhabit, that Mask can communicate information about the character’s embodiment back to the player. Many games use this poetic to great advantage, creating characters that visually embody aspects of the narrative for the player to inhabit. Janet Murray has
explicitly connected the ritual practices around masks to the practice of taking control of an avatar in a game (Murray, 1997).

In *Mass Effect* this effect is complicated by the plasticity of Shepard’s appearance: because the player is free to configure Shepard’s face and hair and gender at the beginning of the game, it is impossible to encode the character with the visual properties of a well-defined Mask. Instead, the player creates her own Mask to wear: an expression of her own perspective on the character. Although the player crafts the Mask, there is room for the designers to use it to communicate narrative information to the player. In *Mass Effect 2*, the designers assert a small amount of authorial control over Shepard’s appearance, by mapping the character’s skin tone, eye color, and “scars” to the ethical choices that the player makes on the Paragon/Renegade axis. The specificity of Shepard’s persona does not come from her physical appearance, but instead from the performance of the voice actors who deliver her lines and the motion capture actors and animators who define how her body acts in the environment. This becomes effective when something happens to change Shepard’s embodiment, such as the injury that she suffers at the end of *Mass Effect 3* which forces her to limp slowly toward the portal rather than run. Perhaps the most effective example of Masks at work in the three games occurs when the player is briefly given control of Joker, during the Collector attack on the Normandy in *Mass Effect 2*. For this brief sequence, the player must adopt a new identity, one which is supported by the visual design of the character and the bodily performance (and limitations) of the avatar.

One source of insight into the workings of Masks and character identity comes from the three identities that Jim Gee identifies for players: the real, the virtual, and the projective (Gee, 2007). One can imagine a relationship between the “virtual” and the “real” identities easily enough. The virtual character identity is defined primarily by the narrative situation, backstory, and shifting contexts that exist within the game as a text. The real player identity is the horizon of expectations, understandings, and preferences that the player brings to the experience of play. It’s easy enough to see how transformation might operate if these were the only identities in play during gaming: transformation would involve the player’s real identity being subsumed by the virtual identity of the character. However, the notion of projective identity complicates this, because it has to do both with the ways in which the player imagines herself into the role of the character and with the goals and objectives that she assumes on behalf of that character. This notion of projective identity provides us
with an understanding of transformation at work: Shepard provides a template of possible projective aspirations for the player, which the player is free to accept or reject as she sees fit. Should the aspirations of the player on behalf of Shepard fit within the narrative trajectories designed for the character in the world, than one can see projective identity as a means of bringing the real and the virtual identities into harmony with each-other. If there is a misalignment between these identities then it is less likely that a player will experience this sense of transformation.

7.1.2.5. Acting is Reacting: Narrow Channels, Ticking Clocks, and Vulnerability

Many of the exercises employed in actor training are designed to get actors working in a reactive mode: to disconnect and set aside the parts of their mind that are self-conscious and critical and embrace an “in-the-moment”, playful mentality (Daw, 2004). A common phrase from method actor training is “Don’t Act, React”: a truthful performance is one in which the actor is living the lines on the page, rather than thinking about the fact that he or she is on a stage, in front of an audience, with responsibilities to the other actors in the play. The exercises that are used to teach this reactive approach to acting are simple games in which the actor can set aside the rules of the real word and instead assume the rules of the imagined world (Saltz, 2000). These same techniques can be used in digital games to support a player’s transformation into a character, by creating situations that require reaction and in-the-moment action, rather than reflection and self-consciousness. When a player is forced to react without stopping to think about the situation, she is more able to suspend her own external perspective and more fully enter into the moment.

This last poetic for transformation considers three specific techniques for putting the player in a reactive mode: narrow channels, ticking clocks, and vulnerability.

Narrow channels function by removing alternatives at key moments, limiting the decisions that a player needs to make in order to succeed in a given situation. Ticking clocks function by limiting the amount of time that the player has to accomplish a task. This is a technique that has previously been written about by Magy Seif El-Nasr in her work on IDS and interactive drama (Seif El-Nasr, 2007). Vulnerability functions by making taking away safety nets that the player has come to rely upon. In theater and dance, vulnerability is a pathway to a more honest performance (Lockford & Pelias, 2004). In Mass Effect, these three techniques are often combined at critical moments in the games, to great effect.
In *Mass Effect 1* this happens during the scene in which Shepard is forced to race for the Conduit at the end of the game, in order to stop Saren’s attack on the Citadel. This sequence was so successful that it was re-imagined at the end of *Mass Effect 3*, with a badly wounded Shepard. In both cases, there is a clear objective, with a single path to traverse, and a limited amount of time to accomplish the task. In *Mass Effect 1*, the player is beset by enemies on all sides, and is not given sufficient time to defeat them. In *Mass Effect 3*, the player must kill several waves of enemies in order to reach the portal, but her skills and weapons are stripped away and she has only a weak pistol with which to do so. By making the character vulnerable, providing a narrow channel to traverse, and setting a limited amount of time to accomplish the task, the games force the player submit fully to the urgency of the moment in order to succeed.

The most fully realized application of these techniques in *Mass Effect* happens in the aforementioned sequence in the second game where the player is in control of Joker during the Collector attack on the Normandy. In this sequence, the player has no combat capability at all to fall back on, she is being guided by the Normandy’s AI, EDI, to traverse a very narrow channel in order to reach the control panel that will eject the Collectors into space, and there is the time pressure from the Collectors themselves, as they harvest the crew for their own nefarious purposes.

As with many of the poetics of transformation, these techniques support a sense of immediacy that underlies the creative state by providing external structures of enactment that constrain the actions of the player in narratively salient ways.

### 7.2. Research Questions Revisited

I opened this dissertation with two formally phrased research questions, which have structured my inquiry in this work.

**RQ1:** How can speech act theory inform a new understanding of the pleasures of agency, and how can this understanding contribute to a new design poetics for digital narratives and story based games?

**RQ2:** How can theories from the dramatic arts inform a new understanding of the pleasures of transformation and how can this understanding contribute to a new design poetics for digital narratives and story based games?
Drawing on two fields of study that are not ordinarily employed in digital games research, I argued that agency is best understood in terms of commitment to meaning and that transformation can be explored from the perspective of dramatic enactment. Both of these perspectives re-envision the player as actively interested in collaborating with the system to tell the story, abandoning the common narratives of subversive and willful play. This new perspective imagines a player who wants to experience the best version of the narrative and not a player who is solely interested in asserting his or her preferences over the system. By understanding the player as engaged in a series of communicative acts with the system, we can isolate those aspects of play which create opportunities for meaningful participation with a narrative and those aspects of play which interfere with meaningful participation. By connecting the act of gameplay with the act of playing on the stage, we gain access to a wealth of different techniques for making the player feel empowered to perform within a story.

Both of these theoretical perspectives prioritize the experience of the player as a meaningful participant in the game-as-story: an experience that arises from an act of surrender to the power of the story. The pleasures of surrender are visceral, ecstatic pleasures. Games and theater have much in common with ritual. They are artificial spaces that make it safe for a participant to become someone else for a brief period, to become possessed by the spirit of a story and to live that story without fear of damaging his or her own identity. Much like ritual, they use formal frameworks of rules and enacted practices to bound their “magic circles”, practices that connect every actor and player to every other person who has ever stepped into that circle and shared in the narrative.

By applying these lenses to a contemporary story based game like Mass Effect, I have identified many examples of these poetics at work. In many cases, designers may have already intuited some of these principles, as evidenced by the multitude of examples to be gleaned from these games. I contend that the design poetics articulated above represent the first time that agency and transformation have been comprehensively re-theorized for the specific pleasures of digital narrative and that as a set of principles they represent a powerful tool for theorists and designers of story based games. I would also contend that this work represents contribution to games research methods by providing an extended example of how to apply close reading and hermeneutics to a study of poetics.
7.3. Final Thoughts and Future Work

The future of games and of digital storytelling will encompass a multitude of pleasures, forms, and experiences. I have presented this work as an explication of the present state-of-the-art in commercial story based games because I am interested in the next horizon for popular participatory narrative. The stories we tell about the future have a profound impact on how we design today’s systems. In this dissertation, I have argued that the dominant narratives of interactive storytelling are describing only a small piece of the possible future for this growing new media form. Current assumptions about agency conspire to back the designers of interactive storytelling systems and games into a corner, and while these rhetorics have yielded some powerful simulational tools for storytelling, they still describe a very narrow vision for the future. Commercial games are breaking free from many of the most harmful assumptions about the so-called contradiction between “interactivity” and “narrative” (how else to explain the many ways in which *Mass Effect* succeeds) but there is still much work to do to envision and understand the possible design space for the future of interactive storytelling.

The pleasures and aesthetics that I have described here point to a particular set of future storytelling systems that subsume their players into emotional narratives and carefully crafted characters. As with *Mass Effect*, where the narrative performance is less about *what* Shepard does and more about *how* she does it, these stories could create powerful mechanisms for the player to make meaningful performative choices that inflect the mood of the story without undermining the authorial style and message. We can imagine these techniques applied to interactive stories that are about a myriad of subjects, set in genres that often receive very little attention from the games industry.

This collection of poetics also provides significant analytical traction in building a deeper understanding of current games. The close readings undertaken herein are a relatively small piece of a larger research project that would seek to further refine, support, and complexify the analytical lenses of *agency as commitment to meaning* and *transformation and method acting*. In my initial data collection I traversed six additional story based games and collected a wide range of additional examples. When it became apparent that my analysis was growing unwieldy, I set those games aside in order to focus solely on *Mass Effect*. However, I know that there are opportunities to refine these lenses further with continued analysis that I hope to do in the future.
In the years since I first formulated this research project, story based games have continued to grow and improve, faster than my ability to play and critique them. I continue to encounter games where the principles that I have identified in this work are taken in new directions, with exciting implications for future work. In a recent game called *Bastion* (Supergiant Games, 2011), for instance, a narrator accompanies the player, providing scripts in the form of a continuous voiceover that describes and contextualizes the action. In the recent *Walking Dead* game (Telltale Games, 2012), many tense conversations include a countdown timer that forces the player to act without agonizing over the possible outcomes, even when those actions sometimes have dire consequences to the people in the story. This dissertation has introduced two useful perspectives on agency and transformation, but it is clear that it has not exhausted the possible insights to be extracted from them.

I would also argue that understanding these two mechanisms provides designers of games for change and games for learning with a powerful set of tools when seeking to communicate a specific point or elicit a particular perspective. In particular, much work on social justice seeks to create deeper understandings between disparate groups; a poetics of identity transformation can lead to more profound experiences of empathy. There is much work still to be done in this area, but my initial principles provide a promising set of strategies for the design of persuasive games.

Digital narratives and story based games are in many ways still an emerging medium for cultural expression, but in the last 20 years or so they have begun to mature into a fully realized media form. As the medium continues to evolve, we must continue to examine our theoretical assumptions and our expectations for the future. This is how we will map the new frontiers for storytelling that computation enables. The pleasures of agency and transformation as I have articulated them here reveal exciting possibilities for the future of this frontier, both as a source of new cultural forms and new scholarship.
Bibliography


Appendices
Appendix A: Close Reading Cheat Sheets

Close Reading “Cheat Sheets” for Methods

Cheat Sheet 1: Starting Lenses + Savegame/Screenshot policies Large Format

Take a Screenshot:
Whenever there is a transition of setting

Whenever a character enters or leaves the scene

Whenever there is a significant story beat

Whenever there is a load screen, or menu

To document any cutscene

Whenever there is a transition between interactional modes

And once every minute!
Save the game at every mode transition!

Save the game at every new area!
Analytical Lens #1
Commitment to Meaning

How do I commit to meanings?

What actions do I get to do?

What are the meanings I want to make?

Which meanings are explicit in the game?

Which meanings are implicit, or only apparent to me?

Where are my commitments clear? Ambiguous?

When do my commitments correlate with the games?

When do my commitments contradict the games?

How does the game communicate potential meaningful commitments?

How does the game reflect my commitments back to me?
Analytical Lens #2
Method Acting and Transformation

How do I know the “Script” for my actions?

How does the game prepare me to take proper actions?

How does the game teach me about the meaning of my actions?

What “masks” do I get to put on and how do they transform as I play?

When do I experience the “creative state” and what happened to elicit it?

What is the relationship between text and subtext in the game?

What am I asked to react to by the game? How am I asked to react?

When do I feel closest to the main character?
Analytical Lens #3
Participation vs. Interaction

What actions does the game reward?

What actions does the game discourage?

Who is the “implied player”?

What is the range of systemic impacts of my actions?

Where are the “edges” of the system? How are they communicated?

What are the narrative consequences for acting incorrectly?

What are the ludic consequences for acting incorrectly?

What is the tone of the game’s guidance?

Is any play “inconsequential” or “free”?
Analytical Lens #1: Commitment to Meaning
This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.
   1. How do I commit to meanings?
   2. What actions do I get to do? (RED text indicates the final appearance of a question)
   3. What are the meanings I want to make?
   4. Which meanings are explicit in the game?
   5. Which meanings are implicit, or only apparent to me?
   6. Where are my commitments clear? Ambiguous?
   7. When do my commitments correlate with the games?
   8. When do my commitments contradict the games?
   9. How does the game communicate potential meaningful commitments?
  10. How does the game reflect my commitments back to me?

Analytical Lens #2: Method Acting and Transformation
This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.
   1. How do I know the “Script” for my actions?
   2. How does the game prepare me to take proper actions?
   3. How does the game teach me about the meaning of my actions?
   4. What “masks” do I get to put on and how do they transform as I play?
   5. When do I experience the “creative state” and what happened to elicit it?
   6. What is the relationship between text and subtext in the game?
   7. What am I asked to react to by the game? How am I asked to react?
   8. When do I feel closest to the main character and why?

Analytical Lens #3: Participation vs. Interaction
This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.
   1. What actions does the game reward?
   2. What actions does the game discourage?
   3. Who is the “implied player”?
   4. What is the range of systemic impacts of my actions?
   5. Where are the “edges” of the system? How are they communicated?
   6. What are the narrative consequences for acting incorrectly?
   7. What are the ludic consequences for acting incorrectly?
   8. What is the tone of the game’s guidance?
   9. Is any play “inconsequential” or “free”?

Cheat Sheet 3: Post Mass Effect 1
Analytical Lens #1: Commitment to Meaning
This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.
   1. How do I commit to meanings?
   2. What are the meanings I want to make?
3. Which meanings are explicit in the game?
4. Which meanings are implicit, or only apparent to me?
5. Where are my commitments clear? Ambiguous?
6. When do my commitments correlate with (or contradict) the games? (GREEN text indicates a new, or revised question)
7. How does the game communicate potential meaningful commitments?
8. How does the game reflect my commitments back to me?

Analytical Lens #2: Method Acting and Transformation
This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.
1. How do I know the “Script” for my actions?
2. How does the game prepare me to take proper actions?
3. How does the game teach me about the meaning of my actions?
4. What “masks” do I get to put on and how do they transform as I play?
5. When do I experience the “creative state” and what happened to elicit it? When is it broken?
6. What is the relationship between text and subtext in the game?
7. What am I asked to react to by the game? How am I asked to react?
8. How does Status play out in the game?

Analytical Lens #3: Participation vs. Interaction
This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.
1. What actions does the game reward?
2. What actions does the game discourage?
3. Who is the “implied player”?
4. What is the range of systemic impacts of my actions?
5. Where are the “edges” of the system? How are they communicated?
6. What are the narrative consequences for acting incorrectly?
7. What are the ludic consequences for acting incorrectly?
8. What is the tone of the game’s guidance?
9. Is any play “inconsequential” or “free”?

Cheat Sheet 4: Post Mass Effect 2 and FINAL

Analytical Lens #1: Commitment to Meaning
This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.
9. How do I commit to meanings?
10. What are the meanings I want to make?
11. Which meanings are explicit in the game?
12. Which meanings are implicit, or only apparent to me?
13. Where are my commitments clear? Ambiguous?
14. When do my commitments correlate with (or contradict) the games?
15. How does the game communicate potential meaningful commitments?
16. How does the game reflect my commitments back to me?
Analytical Lens #2: Method Acting and Transformation
This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.
7. How do I know the “Script” for my actions?
8. What “masks” do I get to put on and how do they transform as I play?
9. When do I experience the “creative state” and what happened to elicit it? When is it broken?
10. What is the relationship between text and subtext in the game?
11. What am I asked to react to by the game? How am I asked to react?
12. How does Status play out in the game?

Analytical Lens #3: Participation vs. Interaction
This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.
10. What actions does the game reward?
11. What actions does the game discourage?
12. Who is the “implied player”?
13. What is the range of systemic impacts of my actions?
14. Where are the “edges” of the system? How are they communicated?
15. What are the narrative consequences for acting incorrectly?
16. What are the ludic consequences for acting incorrectly?
17. What is the tone of the game’s guidance?
18. Is any play “inconsequential” or “free”?
Appendix B: Close Reading Notes

In this appendix I reproduce all of the notes that I took during and after my play as raw documentation of my close reading process. These notes are largely unedited, and represent an unvarnished look at my reactions to the games as I played them. All of the “raw” notes were taken on an iPad that I kept at my side during play, and are subject to possible “autocorrect” errors.

Mass Effect 1: Post play reflections

My goal with this write up is to try and summarize my reflections on the game while it is still fresh in my mind. I will be using my three analytical lenses to structure this. (Used CheatSheet’s v.2 for this playthrough)

Analytical Lens #1: Commitment to Meaning

This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.

- How do I commit to meanings?
  - When I speak of “commitment to meaning” in this context, I’m interested in the ways that the game allows me to express and manifest meaning in the world. Winograd and Flores draw on Speech Act Theory to frame communication and meaning as “commitments” that entail the speaker in something in the world: an expression of intent, or opinion (“I feel that…when you…would you please?”); a declaration to act (“If you don’t get off my land, I’ll shoot you where you stand!”); a change in status (“I now pronounce you man and wife”), etc.
  - Mass Effect provides a few channels for making such commitments. All of these are made through the vehicle of Commander Shepard - the “Player Character”. These include:
    - Dialogue choices
      - Moral Valence: Paragon, Neutral, Renegade
      - Curiosity/Patience Valence: Investigate vs. Move Forward
    - Combat Strategy
      - Engagement range preference
      - Weapon preference
    - Companion choices
      - Human vs. Alien
      - Narrative vs. Strategy
    - World Exploration and navigation
      - Missions vs. Assignments
      - Uncharted world exploration and collections
    - Character customization, including:
      - Appearance
• Character class
• Skills
• equipment

• What actions do I get to do?
  o In reflection, this question is essentially a repeat of the first one. Perhaps it will come out in the next iteration of the lenses.

• What are the meanings I want to make?
  o I was generally interested in performing Shepard as driven by a fundamental set of morals and principles, even when this meant sacrificing immediate gain or taking a harder path. I always wanted to control Shepard in an “authentic” fashion. It was important that the character behave in a manner consistent with my perception of her role in the universe and the fiction: to be good. I bought into the narrative of “Shepard the Paragon” that was pitched by the game, although occasionally there were Renegade actions that felt more authentic to the character, and I allowed myself to take them.

• Which meanings are explicit in the game?
  o The game is very explicit about the moral vectors of Paragon and Renegade actions, there is a fairly consistent interactional grammar for dialogue choices, as well as varying degrees of moral quantification (Paragon and Renegade points. Charm vs. Intimidate. Red vs. Blue unlockable conversation options.) Both sides are presented as viable paths forward, easily mixed and matched, but they are distinct points-of-view that clearly and explicitly map to the actions you can take in the game.

• Which meanings are implicit, or only apparent to me?
  o There is an implied valuation on “haste vs. patience” that I found interesting, but which isn’t reified by the game system in any meaningful way. Often there are options to “investigate” during conversations, or to go exploring off the beaten path, and there is a sense that these have moral vectors. Paragon Shepard, for instance, would want to know everything about everything, and to save everyone in trouble, while Renegade Shepard just wants to kill Saren and doesn’t give a fuck about your missing brother. This is most often reflected in the way that you accumulate “assignments”. Most of the time, when someone asks you for help, the Paragon option is to offer to help them for free and the Renegade option is to demand some sort of payment. However, there are quite a few situations where the Renegade option is to simply refuse to help. The same is not true for Paragon choices. There is definitely an implicit moral vector present here, but what’s interesting about it to me is the ways in which it contradicts the fiction of the world. The game “rewards” patient completionist play with additional items, codex entries, story details, character moments, experience points, and funding. It frames hasty play within the morally grey area of the Rengade. However, if the situation were actually as dire as the game story would have you believe, then the morally correct choice would be to hurry and resolve it. This is emphasized by the fact that the main missions of the game are titled “Race against Time” to emphasize their urgency.

• Where are my commitments clear? Ambiguous?
In many cases, the dialogue wheel makes conversation options clear by using layout to signify moral vector. (top = good, bottom = bad) At the same time, there is always a degree of ambiguity because of the ways in which the dialogue options are simplified. The best interpretation I have of this is that the options on the dialogue wheel are the subtext and Shepard’s lines are the text. This is in keeping with a lot of important stuff from method acting theory, and I think it’s going to be one of my major points.

When do my commitments correlate with the games (and when do the two contradict each other)?

For this to make sense, I need to first clarify that there is a separation between the commitments that I make as a player performing the character, and the meaningful commitments made by the designers and encoded within the system. The game text, as a site for encoded meaning, expresses those meanings through the actions of the characters, the orchestration of the plot, and the details of the storyworld. As a player, my commitments are solely expressed through my manipulation of the interface, often to direct the behavior of Shepard. In a game like *Mass Effect*, almost every meaningful act that can be made with the game system, at least at a micro level, has to have been anticipated and authored by the authors. Commitments made by the player within the system are made by selecting from and recombining possible commitments provided by the designers ahead of time. At the macro level, however, the game system is less concerned with the meaning of those commitments. What I mean here is that the system can successfully shape every individual moment of commitment available to the player, without building a larger scale understanding of what those moments come to mean in aggregate. The system is carefully structured at the scale of immediate interactions, but agnostic about the meaning of most of them at the collective scale. As long as each micro interaction (conversation) is crafted so that it fits within whatever bigger picture is emerging for the player, than the system doesn’t need to know that the player is construing Shepard as noble, but with a temper; or as a hard line anti-alien racist with a secret obsession with the Asari. In the case of my play, I ended the game with a coherent image of Shepard as someone who struggled to reconcile the fact that sometimes enforcing the law and doing the right thing weren’t the same. This interpretation of the character is derived from the meanings committed to by the game, but it isn’t directly expressed within the system.

There is also a layer of meaningful commitments that are less about the things the character says and does during the “narrative” sections of the game, and more about the things that my own gameplay choices say about the character. For instance, I was super thorough in my play: I completed every side mission, I was meticulous in the maintenance of my inventory and the abilities and equipment of the characters, and I rotated all of my companions in and out of the squad evenly. These things all contributed to a sense that Shepard was broadly committed to thoroughness: my own obsessive organization reflected back upon the character.

When do my commitments contradict the games?
Combining this question with the previous one because they should be considered together.

- How does the game communicate potential meaningful commitments?
  - The game interface uses a coherent grammar as described above to telegraph the meaning of choices before they are made.
- How does the game reflect my commitments back to me?
  - The game uses voice acting, and dialogue to reify the commitments I make. It also uses the journal system to provide additional context and explanation of the bigger implications of specific commitments.

**Analytical Lens #2: Method Acting and Transformation**

This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.

- How do I know the “Script” for my actions?
  - A lot of the early stages of the game do a lot of prompting to help you know what you are expected to do by the system. Characters will spend a long time telling you what they think of your character, and your past, to scaffold your understanding of Shepard’s history. Members of the Normandy crew will tell you what to do and where to go when asked. The Paragon/Renegade options are also more differentiated at the beginning, so that you build a clear sense of the interactional grammar. There isn’t really much opportunity to deviate from the core narrative, so there aren’t many places where you find yourself in an “actors nightmare” situation. Interestingly, however, you are never given complete foreknowledge of the script. Instead, the system provides abbreviated conversational “stubs” that trigger longer, more specific dialogue performances. I think there might be something here on illocutionary point vs. force, but I need to dig into those terms more deeply.
- How does the game prepare me to take proper actions?
  - Unlike many, more open ended games, ME2 doesn’t really have “improper actions”: it is a closed enough system that all supported actions are permitted actions.
- How does the game teach me about the meaning of my actions?
  - The dialogue system closely couples text and subtext, creating an immediately legible feedback loop. There are a LOT of other support systems in place however, to provide context and explanations for your choices. NPCs are used to do a lot of this heavy lifting: Kaiden and Ashley are always available on the Normandy to reflect on the previous mission and provide an external perspective on your choices. Major plot missions always also involve a debriefing with the crew and with the council afterwards. Elevator rides on the citadel (which are interminable and unavoidable) have “news broadcasts” piped into them, putting a mediated spin on your exploits. The “journal” and the “codex” both provide additional framing details. Joker has a clever quip for each major mission.
  - There is definitely some serious Meisner shit happening here: you learn about yourself and the character in the ways that the other characters
treat you. I think this is why Shepard is always the hero: because no matter the methods you use to attain your goals, the other characters always treat you as a hero.

- What “masks” do I get to put on and how do they transform as I play?
  - In this game, you only control Shepard, who is pretty static throughout. You do get some freedom to customize Shepard’s appearance at the beginning, and you spend a lot of the game looking at that face, so the mask becomes very constitutive of the character. I have a deeply negative reaction to other people’s Shepards when I see screenshots and videos online.

- When do I experience the “creative state” and what happened to elicit it?
  - For me, the “creative state” is synonymous with being completely present in the world emotionally. It happens when my own goals and desires come into perfect alignment with those of the character. In Jeepform LARP, this would be called “Bleed”. There were a few moments where this really happened for me. The scene where Liara confronts Benezia was one. Same with Shepard calling her mother during one of the side quests (both of these involved complex familial relationships that you don’t usually find in games, which is perhaps why they were so successful.) The “trench run” at the end of Ilos as you race for the conduit was another moment where everything aligned. There were also a few situations when I took the Renegade option (there were a few conversations with Garus and Wrex, for instance) when I felt this sense of full commitment to make an exception to Shepard’s (and my) overriding principles because the Renegade choice was unquestionably the right choice in that situation.

  - I might want to add a question to this lens about when the game breaks or violates the Creative State. In this game the two moments that stood out the most were where I was asked to make difficult and significant moral choices. The first, on Virmire, you are forced to save one of your crew members and condemn the other to death. The second, during the climactic battle, you have to choose between saving the lives of the Council (who have acted like assholes through the whole game) by sacrificing a lot of humans in a rescue attempt, or letting them die, in which case the Human counselor takes over (but he was an even bigger asshole). Both choices were jarring and disruptive to the flow of the game. I resented being forced to make these choices. Perhaps this caused me to align with Shepard, who was also angry to have to make an impossible choice, but I don’t think that they were comparable emotions.

- What is the relationship between text and subtext in the game?
  - There is definitely a subtext vs. text relationship here. In acting theory, actors are often told to “act the subtext”. This means that a line should be delivered based on the underlying communicative intent, even if that intent contradicts the specific language of the text (as in sarcasm, or lying, or misdirection). Some actors will even annotate their scripts with their perspective on the subtext. In ME1, the dialogue wheel always provides those subtextual annotations. What is interesting about this is that sometimes the text is identical, regardless of which option the player chooses. The meaning changes because that text expression arises from a different piece of subtextual meaning, which the game made available
to the player.

- What am I asked to react to by the game? How am I asked to react?
  - The cliché is “Don’t Act, React.” This begs the question of how the game positions you to react. In most cases, Shepard controls the flow of the conversation. Most conversations feel more like Shepard interrogating someone rather than like dialogues. This is a structural issue: in most conversations Shepard is interrogating the other person, in order to get information about the situation and move forward. The best conversations are ones in which Shepard has to share initiative. The various confrontations with the Council, with Saren, and with Sovereign are very good examples of this, because Shepard isn’t the most powerful person in the room for those. In almost every other situation there is a serious imbalance of power: Shepard has more authority than anyone else she is interacting with (being “above the law” as a Spectre) and Shepard has more physical capability than anyone else she is interacting with (as the arbiter of life and death). This actually raises some interesting questions about how some of the Laban Movement Analysis stuff plays out in this game, in particular the stuff on Status. I might want to add a question to the next iteration of this lens about this.

- When do I feel closest to the main character and why?
  - This really overlaps with the question about Creative state for me. I might pull this question in subsequent iterations of the lenses.

Analytical Lens #3: Participation vs. Interaction

This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.

- What actions does the game reward?
  - As noted below, there are some serious problems with the reward structure of the game. The first time I played the game, I noted that the real economy is not in any of the explicit rewards (XP, credits, gear) and instead in the uncovering of the story and the storyworld. The other reward systems act as gatekeepers for this knowledge: at some level they all contribute to the goal of making it easier to get more of the story. This time through I would amend that, because these things also contribute to making the combat less tedious. Unfortunately, at least in the case of new gear, they also add an unbelievable amount of tiresome and frustrating inventory management to the game, such that getting new gear quickly stops feeling like a reward, and becomes a punishment: a chore that must be endured in order to move forward.
  - The game really wants you to linger over a lot of the extra material. It can be played extremely quickly, if you skip through dialogue, and avoid all the sidequests, but the game does not want you to do that. It wants you to make rounds of all your companions, digging into their life stories. It wants you to travel the whole galaxy, landing on new worlds, killing pirates, rescuing hostages, and collecting pointless crap, for the love of the storyworld itself. For “power gamers” this is the only way to fully level up Commander Shepard.
  - The quality of the gear you find scales with your level, so there is a bunch
of neat ammo that don’t ever find unless you spend a lot of time on side quests.

• What actions does the game discourage?
  o The poor UI greatly discouraged my desire to customize a lot of elements of my characters, but this is a strange case: I think this was an unanticipated outcome of some poor design decisions, rather than a specific intended system of reinforcement.
  o As noted above, the only possible actions in the game are permitted actions. It’s impossible to go on a homicidal rampage in the citadel for example…Shepard just raises her gun whenever you point it at a civilian. The only characters that you can kill are characters that you must kill. There are some exceptions to this, where you have conversations with adversaries that could potentially lead to either their surrender or a fight with you (which would end in their inevitable death at your hands), but again, these are both sanctioned and viable outcomes as far as the game is concerned.

• Who is the “implied player”?
  o Some of Mass Effect’s major interface and playability problems come from the fact that the game is a bit wishy-washy about who it thinks is going to be playing it. There is a lot of RPG in ME1’s DNA, as manifested in the various customization systems, the extensive dialogue, and the deep rich backstory. Unfortunately, the game is not designed to be played by RPG players. Instead, all of these elements have been dumbed down and made “simpler”, presumably to appeal to players of AAA action shooter titles (in order to make the game a “blockbuster”…something that wasn’t going to happen with a straight RPG). Consequentially the RPG elements in the interface end up being too cumbersome to actually function properly, and so rather than adding depth, they simply add labor and micromanagement. Meanwhile, the real time combat is unrefined, and requires continuous pausing and unpausing to orchestrate abilities and actions, resulting in a choppy difficult hybrid of SW:KOTOR’s system (in which you paused, queued up actions and then let them play out) and an actual action shooter in which you must run around aiming and firing your weapon at enemies. The implied player must perforce be interested in the RPG story stuff, while also being experienced with previous Bioware games, and the conventions of modern action shooters.

• What is the range of systemic impacts of my actions?
  o Sweeping and hard to measure. One of the things that ME1 was sold on was the notion that your decisions would have downstream consequences that spanned the entire trilogy, and this was true for certain things. The biggest impact your choices make is on which characters survive from ME1 to ME2, and then on to ME3. However, when characters die in ME2, the result is placeholder characters that play the same role in ME3, which negates the impact of your actions to a certain extent.
  o Your actions really don’t change what events play out, however, in a broad sense. The story proceeds as designed. Instead your actions can impact the ways in which those events play out: Shepard’s attitude is the single biggest vector for change here.
Where are the “edges” of the system? How are they communicated?
  
  - In the on foot missions, it's almost impossible to wander off the beaten path. It is hard to find yourself in an area that you aren't supposed to be, and the environments are designed so that your character can't overcome the obstacles around the edges (usually just walls). In the Mako, when exploring alien worlds, the map is bounded in red, as the “designated operational area”. When you drive the tank off the edge of the map, Joker warns you that you are falling off his scanners, and then if you persist, he “brings you back to the drop zone” by resetting the tank’s position.

What are the narrative consequences for acting incorrectly?
  
  - While there are no “correct” or “incorrect” actions, there are consequences for hasty or irresponsible behavior. The most significant is that if you aren’t careful to maintain your relationship with Wrex, when he faces his crisis on Virmire, you could conceivably end up having to kill him off. Other less significant characters also live or die depending on how conscientious you are being. In the “Bring Down the Sky” expansion you have to choose between releasing the bad guy, or saving 3 hostages…a difficult narrative decision.

What are the ludic consequences for acting incorrectly?
  
  - The only “incorrect” action with any ludic consequences, is rushing through the game too quickly. Hasty play leads to a much lower level set of characters, which are much less fun to play.

What is the tone of the game’s guidance?
  
  - Most guidance is framed diegetically: other characters provide perspectives on what you should and shouldn’t be doing.

Is any play “inconsequential” or “free”?
  
  - Arguably, all of the side missions are inconsequential, insofar as few of them feed back into the main story.

Mass Effect 1: additional notes from gameplay

Text vs. subtext

Character creation notes:
First choices in the game relate to the history and appearance of Commander Shepard. Character history choices all provide a feasible backstory for the hero that the game needs, but with minor inflections
Spacer...earth born...colonist: each implies a slightly different worldview
Sole survivor...war hero...ruthless: these seem more value laden than the other choices. These begin to show the moral valences of the story.
Class selection also has implications for how I imagine Shepard...charging into battle vs. sniping...tech vs. biotics.
Facial reconstruction gives control over your mask with a bewildering level of granularity.
Choice between preset faces and customized face - each face implies a slightly different personality for Shepard, even though all will perform with the same voice.
Gender selection is probably the most significant choice you can make because it changes who voices the character, which means access to radically different set of acting choices.
Introduction - on the Normandy:
A lot of exposition is crammed into the opening sequence.

Conversation between Kaiden and Joker immediately models two appropriate ways to respond to the situation: distrust and cynicism (Joker) and confidence in the chain of command (Kaiden). Paragon and Renegade options thus far seem to be about accepting authority vs. rejecting it.

By externalizing the moral choices and allowing the player to react to them (by supporting one character or the other) the game takes an almost Meisnerian approach to showing who Shepard is: the character identity is made clear through social context.

The game is currently providing a huge amount of guidance and reinforcement to move me through the opening and toward the first conversation with Nihlus. Everyone I talk to tells me to go see the captain, and Shepard says this as well after every conversation. Given how few options exist for where to go at this point it seems like overkill...but what I think it is doing is reinforcing the script while acclimatizing the player to following directives.

Almost all of the dramatic offers from the other characters are designed to cue you about Shepard's past: the lengthy dialogue with Corporal Cannon Fodder, for instance has him exposing how impressive your background is at great length. This type of exposition mirrors the types of cueing that actors within interactive theater use to prompt audience members in how to respond (Jeff Wirth citation).

Compare this type of exposition to Filmic exposition. Exposition in film is often clunky because while the characters are addressing each other, the real intended subject is the audience. In this scene, the player is directly the subject of the address.

All meaningful commitments in this scene take the form of dialogue choices.

Interestingly I don't feel strongly about expressing any meanings of my own in this opening sequence...I'm more interested in seeing what the writers think about Shepard, and about the narrative. My engagement at this stage is primarily investigative.

I have sided with Kaiden for the first and last time, by arguing in favor of the Turian Spectre. It's a shame that Nihlus has to die so early...he's a good source of authority for the player.

Regardless of whether you lip off to Nihlus or agree with him, the presence of a strong authority figure gives the character a meaningful external frame to position herself relative to. Not sure who is going to fill that role in the future. There is something persuasive about a character who clearly is more knowledgeable and sophisticated than the main character taking an interest in you.

Anderson is too avuncular.

Eden Prime
I'd forgotten how punishingly unfun combat is in this game, especially at the beginning. Thus far the choice of character class does not meaningfully inflect the identity of
Shepard...the combat and non-combat sequences are pretty effectively partitioned from each-other. This could change as I level up and unlock more distinctive abilities but I doubt it.

The first appearance of sovereign is extremely effective still...perhaps moreso having played all three games. I'm impressed with how closely they stuck with that design for the reapers across the games.

It's extremely difficult to document the combat sequences via screen captures.

Ugh...farmers and scientists.

The environments are all extremely linear....there are no real opportunities to navigate out of bounds

I can't shoot the farmers and scientists. When I face them with my gun drawn, Shepard raises the barrel to the sky, indicating that this isn't a target. And will not shoot.

I had forgotten how much inventory management there is in this game, and how terrible it is.

During the beacon cutscene we learn that Shepard is the kind of person who would sacrifice herself to save a friend. This is an important character-defining moment because it is a core value that transcends both Paragon and Renegade play. More importantly, it is equally suitable in either character narrative. This action reveals a piece of the ur-Shepard.

Paragon and Renegade choices in conversation thus far are always obvious. This is in part due to a reasonably consistent set of narrative conventions and partially due to clear textual prompts.

Haven't encountered any "free" play or exploratory play yet.

**Return to the Normandy:**

Commitment to meaning lens revision- difference between apparent meaning, inferred meaning, and implied meaning.

****

Shifting over to PC due to broken Xbox. User interface for pc version of the game is much less awful. Using FRAPS to auto capture screenshots, which has both advantages and disadvantages. Currently it is set to capture every 3 seconds.

**Places to return to:**

Edolus, in sparta system in artemis tau, when I have a higher electronics skill.
Trebin in Antaeus system, in hades gamma when I have higher electronics skill
Metgos in hydra system in Argos Rho when electronics is higher
Return to pirate base on Tunatu in phoenix system in argos rho when stronger/with better team
Also salvage probe when electronics is higher at same loc.
Some serious ludic problems with this game. Difficulty curve is incredibly uneven. There will be side missions where you are virtually unopposed and others where death is a guarantee. Dying over and over again at the hands of random pirates in some random backwater is super frustrating, and it contradicts the narrative of Shepard as badass. I'm also annoyed because it feels like, 20 hours into the game, I still don't really know how to play it properly. And I have beaten this game once, and played its sequels multiple times. I survive each encounter by the skin of my teeth, which might possibly add a sense of the danger that Shepard is facing, but more realistically just makes me feel barely competent.

This is largely due to the fact that the game's combat is neither successful as a real-time system, nor as an asynchronous strategy system. Cover mechanics are deeply broken and awkward, and every ability and weapon selection task comes with a perceived opportunity cost that makes it unfun to deploy.

There are also some perverse incentives happening with the game's ludic reward structures. When you defeat an enemy, the game automatically "loots" them and adds their items to your inventory. As a consequence, you don't receive these items until you stop and check your inventory screen. This means a much longer feedback loop between success and reward in combat than in other games. The inventory system is unbelievably cumbersome to manage, quickly transforming equipping your team into a grindy chore. The more gear you collect, the worse this grind becomes, until you hit the arbitrary maximum inventory, at which point every new acquisition becomes a “Sophie's choice” scenario as you choose which equipment to keep and which to destroy.

Think about this in terms of operant conditioning and aversion therapy.

I'm also finding the extrinsic "collectibles" really irritating this time through. None of them feedback into the gameplay, and they are under-exploited as narrative mechanisms.

The gameplay really doesn't start to work until about 25 to 30 hours into the game. Suddenly it all clicked, and I no longer felt like a bumbling idiot. It's interesting because I experienced the same frustrations with the game on my first playthrough almost 4 years ago. I always remembered the game really fondly, and this is because it ends on a very strong note: the back half is an order of magnitude more satisfying than the front half in every way.

Mass Effect 2: Post play reflections

My goal with this write up is to try and summarize my reflections on the game while it is still fresh in my mind. I will be using my three analytical lenses to structure this. (Used Cheatsheets v.3 for this playthrough)
Analytical Lens #1: Commitment to Meaning

This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.

- How do I commit to meanings?
  - Meaningful commitment in ME2 follows similar interactional patterns to ME1. There are some notable differences however. The most significant change that the game introduces is the occasional conversational “interrupt”. There are moments in the game when another character is talking that a “Paragon” or a “Renegade” icon will flash on the screen. If the player pushes the corresponding trigger (or mouse) button, Shepard will take an action, interrupting the speaking character. This might mean comforting a character who is having a panic attack, or shooting a character who is monologuing about how weak and pathetic you are. These actions are always more “exciting” than leaving the scene alone, and they are always rewarded with significant Paragon and Renegade points. They are so compelling that I found it difficult to resist, even when the action was not in-line with the moral compass that I was following during the game. Most of the Renegade points I accrued in the game can be traced to these interrupts. They are also interesting because they provide much less foreknowledge about the meaning to which you commit than other conversational choices…all the player knows is the broad moral vector of the choice: the specifics play out as a partial surprise. Interrupts also provide a rare and narrow channel for nonverbal communication.

  - Certain ludic commitments have less fixed meanings in this game: specifically, players can spend resources to “re-spec” Shepard’s class points, which means that she is a more variable entity. On one mission I might spec Shepard to have a bunch of offensive biotic powers, while on another I might give her defensive and stealth abilities instead. I changed spec twice during the game. Both times, it was due to ludic concerns more than narrative expressions of who Shepard was. Re-speccing costs resources – specifically element zero, which is the rarest and most valuable resource in the game – so it is not something that can be done frivolously.

- What are the meanings I want to make?
  - By changing the narrative context of Shepard, the meanings that I want to make with the character became less clear cut than in ME1. Specifically, by having Shepard working for Cerberus – the Enemy – there was a lot more tension between Paragon and Renegade identities. Paragon Shepard in this game is a lot harder and more conflicted than Paragon Shepard in Mass Effect 1. She has to be, because her morals are now misaligned with the system in which she is embedded. That mismatch means that in order for Shepard to stay true to her principles from the first game, she has to be a bit of a dick to the people around her. She has to be a hero in spite of the system…a big shift from the Shepard of ME 1 who was very much implicated within the power structures of the Council and the Alliance. As a player this meant that there was some narrative tension between what was “correct” for the character, and what the game
as narrative system was communicating to me about what was correct. Authentic action became less obvious. Shepard was still driven by the mission, but the politics of the mission became much less clear.

- Which meanings are explicit in the game?
  - The game provides hints and advice on the loading screens. Some of these provide interesting insight into the design choices in the game.
    - “When the (Right Mouse) symbol is displayed in a conversation, (Right Mouse) to have Shepard take a heroic action.” (found in folders 26 & 98)
    - “When the (Left Mouse) symbol is displayed in a conversation, (Left Mouse) to have Shepard make a bold move.” (found in folder 104)
    - “Become the ultimate hero! A higher Paragon score unlocks more Charm options during conversations.” (found in folder 25)
    - “Become the ultimate badass: a higher Renegade score unlocks more intimidation options in conversations.” (found in folder 184)
  - The game uses vocabulary like “Hero” “Heroic” and “Charm” for the Paragon affiliated advice and vocabulary like “Bold” “Intimidate” and “Badass” to describe the Renegade. These make clear distinctions, without applying “good” or “evil” to either side.

- Which meanings are implicit, or only apparent to me?
  - There is a lot of implicit support for playing the game slower and more thoroughly. A lot of this manifests in the loading screen “hints” which recommend exploring the galaxy, taking the time to carry out loyalty missions, and generally push the player to linger over the game. There are ludic and narrative rewards for this type of play: deeper exploration yields more resources and research projects, which translate into a more powerful character. Loyal characters are much more likely to survive the suicide mission at the end of the game: an outcome with significant narrative consequences, especially in the third game.
  - There are also some compelling thematic meanings that may be inferred from the types of problems faced by Shepard in the world.

- Where are my commitments clear? Ambiguous?
  - The line between Paragon and Renegade is much less crisp in this game, and in some sections this goes so far as to manifest as a break down in the logic and grammar of the dialogue wheel. This was especially true on Tuchanka for some reason, where there are a lot of really deep conversation trees, with sometimes very confusing choices that didn’t correlate to the established moral grammar. For the most part, however, the system is very explicit about what it considers to be “Paragon” and “Renegade”, even if this is something that happens retroactively via the awarding of Paragon and Renegade points.

- When do my commitments correlate with (or contradict) the games?
  - There were a few moments where I felt really at odds with the choices the game was offering me, or with the absence of a good choice for Shepard.
    - Garus Loyalty Mission – allowing Garus to murder his former partner to get his revenge.
    - Thane Loyalty Mission – being the “bad cop” during a prisoner interrogation.
- Zayeed Loyalty Mission – sacrificing the lives of civilians in pursuit of Zayeed’s revenge.
- Javelin Missile side quest – Having to choose between saving civilians and saving a military target
- The Arrival DLC: not having any option aside from destroying a Mass Relay, killing 300,000 Batarians.

  Conversely, there were some moments where my own commitments lined up perfectly with the game’s:
  - Every major conversation with Liara
  - The first conversation Shepard has with Grunt
  - The sequence when the collectors board the Normandy
  - Defending Tali during her trial.
  - Many of the Renegade “trigger” actions. Specifically, the one during Mordin’s mission on Tuchanka
  - The scene on Tuchanka where Shepard headbutts the Rival krogan clanleader.

- How does the game communicate potential meaningful commitments?
  - A coherent interface grammar. EDI is used to provide additional information about how and what to do.
  - There are definitely multiple stages of commitment to meaning: first the player needs to be shown what types of actions are expected and possible (the script) and then there is the enactment of that commitment by the player (the performance) and finally there is the change brought about by the player’s actions, (the narrative consequences). These stages work together to create a coherent feedback loop between the meanings expressed by the system and the meanings performed by the player. As a designer, the goal is to think about how to create performative opportunities for the player that meaningfully link together the framing materials on either side. These might seem like discrete stages, but they actually flow into each other...a player may be performing already (say I’m in the middle of a combat sequence) and new script may be introduced (EDI on the radio telling Shepard about a change in plan or a new enemy on the battlefield). Suddenly my performance is happening in a new context: I have a new goal or objective to adopt (or disregard) and so I am performing in relationship to that script. My performance may not even change, in terms of how I am acting in the game, but now it exists in a space of meaning shaped by the new context: a space that may be brought to closure with the introduction of the closing bracket of narrative consequences (EDI informing me that I’ve succeeded at my objective, for example).

- How does the game reflect my commitments back to me?
  - There is a lot of other material in the game designed to take your gameplay and meaning making and reflect it back to you in a way that makes it explicit instead of implicit. This includes:
    - NPCs commenting on the state of the mission and of the crew (eg: Joker will give you a funny or snarky comment on whoever you took with you on your last mission. Kelly often has something new to say after every major mission. Zayeed and Kasumi will intermix commentary on the mission and on your conversations into their responses.)
- The game journal provides a log of missions, a checklist of key moments, and a summary of how they were resolved.
- After each mission, there is a summary screen that recounts important stats, and provides the Illusive Man's report on the mission.
- NPCs that you encounter in the world often follow-up with Shepard via the in-game messaging system, thanking her for helping them or threatening her if she caused problems for them.
- There are a variety of ambient information systems in the world: several different forms of news broadcasts on the Citadel and Illium, advertisements, and public conversations that Shepard can eavesdrop on. Many of these reflect the choices and actions you have taken back at you.
- Other UI elements reflect back meanings, such as the Paragon and Renegade meters in the character screen.
- Shepard's appearance modulates as a result of her Paragon/Renegade score – her scars heal as a Paragon, but become more pronounced as a Renegade. Skin tone and eyecolor also change.

Analytical Lens #2: Method Acting and Transformation

This lens is grounded in theories and practice in the performing arts, specifically Stanislavski's Method.

- How do I know the "Script" for my actions?
  - *Mass Effect 2* does a lot more pre-scripting of your gameplay in combat than was done in ME1. Specifically, there is a lot more language present during combat than in the first game.
    - EDI and other characters communicate with Shepard over the radio, informing her of changing battlefield conditions, new goals, and providing insight on what to do and why to do it.
    - Squad members talk a lot more – they say different things when they use their powers, and they comment on your actions (eg: Zayeed will say “Hell of a shot!” when Shepard makes a clean headshot with the sniper rifle. Mordin will say “Flammable! Inflammable! Forget which is which!” when he uses his incinerate ability.)
    - Enemies react to your actions and talk to each other, and to you (“Target has cloaked!” they will shout when you use your invisibility power, or “She’s off my scope!”). They also shout threats, and scream in response to your attacks.
    - Squad members banter with each-other, and with Shepard. There is a series of great exchanges between Shepard and Liara during the Lair of the Shadow Broker DLC section, for example. Different combinations of squad members will develop different relationships in the background with each-other as you play.
    - Unlike ME1, you can’t just talk to your squadmates to trigger their commentary on the situation...instead it is triggered by other factors, such as who you have in your party and what the
environmental and narrative context is.

- Many strategies from the first game carry over into the second game: characters review your past decisions to remind you of what you had done in the first game, and there are many framing devices that guide you to where you need to go.

- Some of the best scripting of the player happens in the scene where you control Joker as the Normandy is under attack. I wrote this during play:
  - Best section of this game is the section where collectors attack Normandy while the squad is away. It is perfect. You control Joker, whose debilitating bone disease renders him near crippled...a non-combatant. There are multiple layers of scripting present, and a very clear goal. EDI provides verbal instruction and support. Members of the crew try to help and shout encouragement even as the collectors are tearing them apart. A series of flashing lights on the floor tells you where to go. And Joker keeps up a running commentary on the situation. There are not really any choices, although deviating from the route leads to horrible death. It's a very narrow channel with a shit ton of scaffolding. And it's AWESOME! It's visceral and gripping, and full of dramatic tension. It's also amazing because there isn't much "winning" happening: the Collectors have the Normandy, the crew is being captured, and there is no one to save you. The best you can hope for is to survive and escape. It is also the only time in any of the games that the player is directly in control of a character who is not Shepard.

- How does the game prepare me to take proper actions?
  - Not sure how useful this question is. After two games I don’t have much to say about it. Or rather, it overlaps with the question about how I know the script for my actions. I'm cutting this question from the lens.

- How does the game teach me about the meaning of my actions?
  - This question is pretty much the same as the question about reflected meaning in the first lens. The question here, I guess, is whether thinking about this from an acting theory perspective changes how I would analyze this. And I think the answer is: it doesn’t. I'm cutting this question from the lens.

- What “masks” do I get to put on and how do they transform as I play?
  - Shepard is once again the primary mask that you wear, but Shepard’s appearance is more customizable in this game. Paragon and Renegade choices cumulatively affect the skin tone, scars, and eye color of Shepard over time. The player also can customize Shepard’s head gear, including a variety of helmets and visors and face armor, some of which obscures her entire face.
  - There are also a few special circumstances where you control someone other than Shepard –
    - the attack on the Normandy where you control Joker
    - The short section in The Arrival where you control a security droid.

- When do I experience the “creative state” and what happened to elicit it? When is it broken?
  - The examples I list above, of situations where my commitments perfectly aligned with the systems’, all are good examples. To those I would add some of the faster paced combat sequences – in particular the car chase scene that takes place during the Shadow Broker DLC missions. As mentioned above, the most effective sequence in the game is where the
player controls Joker as he attempts to save the Normandy from the Collector attack. The narrowness of the interaction channel left me with a very clear set of actions that I knew I needed to perform correctly, and a very clear set of consequences if I failed. This channeled me into a perfect situation where I was acting, but not choosing: where I was fully committed to the action in the moment.

One thing that happens in that sequence (that also occurs in the opening of the game) is that the body language of the character, and the walk speed, become really powerful communicators of what he/she is experiencing. In the opening, Shepard must navigate the bridge of the Normandy, which has fires and damage...she raises her arm to shield herself from the heat of the fire. Then she passes through a portal into a section of the ship that is vented to space...her walk slows down dramatically, and all the sound except her helmet breathing cuts out. The EVA walk to Joker across this void is painstaking and slow, creating a tension between the urgency of the situation and the danger caused by the damage to the ship.

- What is the relationship between text and subtext in the game?
  - As with ME1, the player interacts with the game's dialogue at the level of subtext.

- What am I asked to react to by the game? How am I asked to react?
  - The introduction of the trigger actions to conversations creates more situations in which Shepard must react to the situation at hand. Because these manifest as actions, rather than questions, it changes the tone of the conversations containing them away from the interrogative mode that dominated the first game.

- How does Status play out in the game?
  - Shepard’s status is radically altered as a result of being resurrected/funded by Cerberus. In the first game, Shepard’s status as a Specter put her essentially above the law. In this game, Shepard is working with a group of outlaws and extremists: she lacks any official status or authority. Instead, her status derives from her reputation, and from the strength of her convictions around the mission. This was foreshadowed a bit at the end of ME1 when the council grounded her and she disobeyed. Now it is formalized, which dramatically changes how Shepard acts when dealing with people from her past, and with the galactic government.
  - The Arrival DLC introduces another radical shift in Shepard's status, because it puts her in a situation where she is responsible for the deaths of 300,000 Batarian colonists. By the end of this DLC, Shepard is essentially a war criminal in the eyes of the Council, the Alliance, and the Barians. Before departing for the suicide mission Shepard promises to stand trial for her actions should she survive.

**Analytical Lens #3: Participation vs. Interaction**

This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.

- What actions does the game reward?
The reward structure of the game is much better than in ME1: new items and gear are received immediately, and do not entail the player in a cumbersome inventory management system. To do this, the designers sacrificed much of the RPG-esque depth of the first game, turning ME2 into an action game with conversations. It is better for this change: the game-play is challenging, but rewarding right from the beginning. The simplified character abilities lead to more perceptible improvement in your performance during combat.

At a narrative level, exploration is rewarded in every game mode: conversations unlock codex entries, wandering around the “hub” worlds leads to detailed insight into the storyworld, and side quests reveal new info about the state of the galaxy.

- What actions does the game discourage?
  - As with ME1, there are no forbidden actions. There are, however, both narrative and ludic consequences for failing to play thoroughly: failing to gain squad member loyalty greatly reduces the chances of that squad member surviving the final battle. Gaining loyalty also unlocks a special ability for Shepard.
  - Many abilities and upgrades can only be researched or purchased if the player takes the time to scan many planets for resources. Many side quests can only be discovered by scanning planets for resources.

- Who is the “implied player”?
  - ME2 has a much clearer sense of who it wants to be playing it: it embraces an identity as an “action shooter” that the first game was uncomfortable with. It is clear, however, from the beginning, that the “implied player” is expected to have played the first game. There is much less of the world-building scaffolding in this game: players are expected to know who the major alien races are, and to already have an understanding of the basic politics of the world. The game state at the beginning is deeply affected by the state that the player left the world in at the end of the first game, because the player imports that version of Commander Shepard. If you choose to start a new game without importing a previous one, the system makes some of these decisions for you: the state of the council, the human councilor, the surviving members of your crew, etc. About a year after ME2 was released, Bioware released a DLC package in which you could play through an interactive comic of the first game: an experience that takes about 15 minutes, and allows you to make all the major choices from ME1.

- What is the range of systemic impacts of my actions?
  - As with ME1, many of the long term impacts of your actions are cloaked from you: however there definitely is the sense that the game is watching what you do. Obviously, some of the most significant downstream outcomes still have to do with which characters you manage/choose to keep alive.
  - In ME2, however, you get a lot more information about how the system will respond in the long term, because you get to experience the impact of many of your choices from ME1.
    - Conrad Verner is a rabid fan in ME1. I took a harsh position with him about needing to stay with his family and take care of them. In ME2 I encountered him essentially LARPing as a Specter on
Illium, and getting into trouble.

- Many of the people that you speak with or help on side quests in ME1 can be found in ME2. Their conversations often reflect the choices you made in ME1. In some cases they play a significant role, like Nesanna Dantius on Illium. In other cases, you can’t interact with them at all…you can only listen in on their conversations, like the couple on the Citadel with the young child. In other cases you get follow up quests and conversations: the Asari who was indoctrinated by the Thorian on Ferros needs you to help rescue those colonists from an exploitative medical testing contract. The Rachni queen sends you an emissary to follow up and thank you for saving her. The syndicate crime boss thanks you for setting her on the right path and turning her life around.

- There are also many news broadcasts that fill in the gaps between your actions in ME1 and the situation in ME2. The asari flagship you save in ME1 takes a victory tour of the galaxy. Shepard’s mother is offered (and turns down) a promotion to admiral. Councillor Anderson is shown to be making good decisions in the position to which you recommended him.

Where are the “edges” of the system? How are they communicated?

- As with ME1, there are not really any edges to be directly negotiated or circumvented. The biggest edge case that is really playable is the suicidal suicide mission…which I played with Jim. By skipping past all distractions, and rushing to the end, and making intentionally bad choices about crew dispensation during the final battle, it is possible to kill off everyone in the game, including Shepard. It is an extreme edge case, in that the Hero doesn’t survive. It allows the player to enact a tragedy. And while it isn't denied by the system, it’s “edge” status is communicated by the designers very clearly: this game cannot be imported in ME3. This, in no uncertain terms, is not a canonical outcome.

What are the narrative consequences for acting incorrectly?

- Losing characters
- Ruining friendships/relationships with characters you care about.

What are the ludic consequences for acting incorrectly?

- Less XP
- Less resources
- Lower powered characters = boring or difficult fights.

What is the tone of the game’s guidance?

- Guidance is almost all positive and diegetic. The game never “punishes” you explicitly.

Is any play “inconsequential” or “free”?

- Not really. All of the play, even the side quests, feeds into the overall story.

Mass Effect 2: additional notes from gameplay

Shuttle ride with Jacob and Miranda - expositional reminders of the major choices from game 1
The Paragon/Renegade grammar on the dialogue wheel is much less clear cut in this game.

Somehow the moment where Shepard is revealed to have been pointing a gun at grunt while negotiating with him was super effective emotionally.

Paragon = "Ultimate Hero"
Renegade = "Ultimate Badass"

Krogan compliment - "you've got a quad" - reference to the male Krogans 4 testicles.

Asari matriarch bartender says “What a kick in the quad.” At one point.

Being Cerberus radically changes Shepard's status

Serious “bleed” in all the Liara stuff at this point

Best section of this game is the section where collectors attack Normandy while the squad is away. It is perfect. You control Joker, whose debilitating bone disease renders him near crippled...a non-combatant. There are multiple layers of scripting present, and a very clear goal. EDI provides verbal instruction and support. Members of the crew try to help and shout encouragement even as the collectors are tearing them apart. A series of flashing lights on the floor tells you where to go. And Joker keeps up a running commentary on the situation. There are not really any choices, although deviating from the route leads to horrible death. It's a very narrow channel with a shit ton of scaffolding. And it's AWESOME! It's visceral and gripping, and full of dramatic tension. It's also amazing because there isn't much Winning happening: the collectors have the Normandy, the crew is being captured, and there is no one to save you. The best you can hope for is to survive and escape. It is also the only time in any of the games that the player is directly in control of a character who is not Shepard.

I've found myself picking up on a lot of details and nuances of the storyworld that I missed the first 4 time I played the game. Some of this is due to playing through the DLC that I hadn't purchased before, and some of this is due to the close, marathon, nature of the play. For instance, I had completely missed all of the politics around the Batarians until now. But, in ME1 the "bring down the sky" DLC introduces Batarian terrorists who resent the rapid rise of humanity in the galaxy, and who are in direct competition with humans for habitable worlds in the terminus systems. The Human/Batariian conflict is woven throughout the second game, culminating in the Arrival DLC. I had also missed the Asari prejudice against “purebloods”.

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Mass Effect 3: Post play reflections

My goal with this write up is to try and summarize my reflections on the game while it is still fresh in my mind. I will be using my three analytical lenses to structure this. (Used Cheatsheets v.4 for this playthrough)

Analytical Lens #1: Commitment to Meaning

This lens is grounded in literature from Speech Act Theory in general, and Winograd and Flores in particular.

- How do I commit to meanings?
  - Meaningful commitment in ME3 follows the same patterns established in the first two games with very little significant difference. There are a few minor differences that seem to be evolutions of the trend to strip away RPG elements and streamline much of the experience. The most notable is that in many conversations, the “neutral” option is missing: Shepard is given more “binary” choices between Paragon and Renegade in this game, with little opportunity for middle of the road, non-committal, conversation choices. From a design standpoint this saves the company money by reducing the number of assets needed for each conversation by a third. From a narrative standpoint, this creates a Shepard who is forced to fully commit to a position, even when sometimes both are problematic. In the previous games, I seldom took the neutral option, but when I did it was often because I was trying to negotiate between two extremes that were either equally appealing, or equally distasteful. The absence/reduction of a means to equivocate in conversation does change the scope of meaningful commitment for the player.
  - One of the irritating changes that this game makes to the interaction all grammar of the dialogue wheel is to make it so that sometimes the single conversation option on the left of the wheel is a question that uncovers some additional information before looping back around to the two choices on the right which move the conversation forward, and sometimes it's a neutral choice that moves the conversation forward on its own. This can be really problematic from a meaningful commitment because it sometimes robs you of making a Paragon or Renegade choice if you chose it consistently, but it also potentially robs you of additional narrative content if you avoid it.
  - It’s also worth noting that Shepard is a more active participant in conversations, without the input of the player. Conversations play out with significant back-and-forth between Shepard and her interlocutors that in previous games would have required the player’s interaction in order to advance. This creates a more cinematic experience, but it removes opportunities for the player to reaffirm his or her commitments to continue the conversation…an interaction that might have been empty of choice, but was not empty of intent.
  - The game’s economy is rolled back to ME1 style credits, with no additional resources to manage. Respecing Shepard still costs credits, and credits are scarcer than in previous games, with many more things to
buy than can be afforded.

- **What are the meanings I want to make?**
  - In this game I was committed to the idea of Shepard standing up for the “little guy”. Sure the core mission was about saving the galaxy from the reapers, but I also wanted to redress the various injustices that had been set up over the previous games: I wanted to cure the genophage, and to return the Quarians to their homeworld, and to redeem the Geth. I also felt a lingering sense of guilt over the loss of the Batarians from the end of the second game…a guilt exacerbated when the game revealed that the Reapers had hit the Batarians first, essentially wiping out their culture.
  - So I had things I wanted to put into the world: goals to accomplish that I had inherited from the first two games. Playing all three games in close succession made this more pronounced, by more tightly connecting the narrative threads running through the trilogy. I also found myself less focused on making Shepard reflect my goals, and more focused on taking the actions that would help make the world reflect my goals. This was in part because the game was interested in resolving all of the huge galactic level conflicts before the end of the trilogy, and so the arc became less about Shepard’s journey, and more about the galaxy coming together, putting aside age old differences, and facing the Reapers together.
  - Of course Shepard sits at the heart of this conflict, and is the lens through which it is viewed, but with the reaper invasion underway there is no longer a sense that Shepard needs to grow into herself: her unheeded warnings were right all along, and the Alliance has invested her with the authority to speak for all of humanity. Shepard begins the game as an avatar of her species, and spends the game expanding her influence until she speaks for all sentient life in the galaxy, past and present.

- **Which meanings are explicit in the game?**
  - The game makes the choice between “synthetics” and “organics” really clear, even going so far as to color code the ending to match these choices.
  - The Paragon/Renegade binary is more pronounced, because it is only a binary in most cases…the third neutral path is often missing.
  - The game introduces a new interface element – the “eye” symbol – which indicates that there is something important in the environment. Pushing the right joystick button re-positions your point-of-view to focus on whatever this is. This allows the game to be much more explicit about its environmental storytelling: “Look over here at this Reaper now! It’s important!”

- **Which meanings are implicit, or only apparent to me?**
  - There are certain awesome things that can only be accomplished if you have made choices in a certain way across all three games. The most notable of these is the peace deal between the Geth and the Quarians, which relies on the following conditions being met (From http://masseffect.wikia.com/wiki/Priority:_Rannoch):
    - Shepard must have at least four bars of Reputation
    - Tali and Legion must both be present, which requires an imported save game from *Mass Effect 2*. If no save was imported, Tali will have been exiled and will not be able to support Shepard with and Admiral's authority, while Legion will not appear at all.
The mission Rannoch: Geth Fighter Squadrons must be completed

At least five points from the following list of activities need to be accumulated:

- +2 Points from Destroying the heretic geth in *Mass Effect 2*
- +2 Points from Preventing Tali’s exile in ME2 without revealing her father’s experiments on the geth (which gains her loyalty and increases her survivability through ME2’s endgame)
- +1 Point for brokering peace between Tali and Legion in ME2, which requires high Paragon/Renegade points in order to preserve the loyalty of both parties.
- +1 Point for completing the Rannoch: Admiral Koris mission
- +1 Point for Saving Admiral Koris during the above.

This information is not explicit within the game: it has been ferreted out by the player community through extensive trial and error [CORRECTION: I learned later that much of this comes from the Prima Games Strategy guide]. However, each of these criteria (with the possible exception of destroying the geth heretics) follows an implicit set of values around building relationships with synthetics and organics. The awesomeness of the final peace deal between Geth and Quarians is a reward for consistent behavior.

Where are my commitments clear? Ambiguous?

The Paragon/Renegade distinction is much cleaner in this game. As discussed above, there is some inconsistency in the interface that can undermine meaningful commitment at times, especially when the game introduces a neutral option. A great example of this is the conversation with the downed Reaper on Rannoch. The two choices on the right are Paragon and Renegade. The choice on the left appears to be a “dig down” choice – the kind of conversation option that allows Shepard to investigate before selecting one of the other choices to move forward. But it isn’t…it’s a neutral choice that advances the conversation, robbing the player of the chance to make a strong Paragon or Renegade commitment. In previous games, all three of these choices would have been on the right, which would have been better for the interactional grammar. Note that both the Paragon and Renegade choices are along the same basic valence at this point: the distinction between the two becomes more about attitude by the third game.

It’s interesting to note how these three options loosely correspond to the three endings that the game provides:

- “We’ll destroy you eventually” - Paragon Ending (associated with Anderson in the final conversation): Destroy the Reapers, along with all other synthetic life (including Edi and the Geth). This ending, according to some in the fan community, is the “right” ending, as evidenced by a tiny cutscene that plays after it that shows Commander Shepard, buried under rubble, apparently take a breath (only if the player has a sufficiently high EMS). Not sure I agree with this.
- “You’re arrogant for a machine” – Renegade Ending (associated...
with the Illusive Man in the final conversation): takes control of the Reapers, dispersing Shepard’s consciousness through their intelligence. Arguably the shittiest ending.

• “Help us understand”: - Synthesis ending: Shepard sacrifices herself to bring about a synthesis of Organic and Synthetic life. This ending is only unlocked if Shepard has attained an effective military strength of 2800+. This ending appears to be the “preferred” ending of the designers.
  o For a fascinating breakdown of the endings, see here: http://masseffect.wikia.com/wiki/Priority:_Earth

• When do my commitments correlate with (or contradict) the game?
  o So one thing that really frustrates me is that Shepard can be really inconsistent on the issue of Organics vs. Synthetics. Specifically, she always takes a hard line stance against the reapers, even when she is willing to create peace with every other species in the galaxy including the Geth! Presumably I could have played Shepard as an anti-synthetic xenophobe…I could have blown Legion out the airlock, and eradicated the Geth, but those choices were clearly de-valued in the game: there is a consistent implicit preference throughout the game for the Paragon choices – these choices are almost always rewarded with more content, more special abilities, and more stuff in general. So why then, would this preferred path be thematically in conflict with the central arc of the game – the Reaper invasion?

• How does the game communicate potential meaningful commitments?
  o The same methods that were introduced in ME2 persist into this game.

• How does the game reflect my commitments back to me?
  o Most of the techniques from ME2 are present here. Instead of a post-mission summary screen, this game follows up most missions with a debriefing conversation with Admiral Hackett or Anderson. There is also the war room interface, which provides details about your troop strength, and the state of galactic readiness. Shepard has access to a “Spectre Terminal” on the Citadel that provides additional contextual information, and Liara provides additional tangential details via a “Shadow Broker” terminal on the Normandy.

Analytical Lens #2: Method Acting and Transformation

This lens is grounded in theories and practice in the performing arts, specifically Stanislavski’s Method.

• How do I know the “Script” for my actions?
  o As with ME2, there are a lot of people around you, talking, and cueing you as to what to do. This reaches its pinnacle in the “Citadel DLC”, where almost all of the characters you’ve ever played with across all 3 games join you in several squads on the same mission, and all are engaged in radio banter. Strong sense of a community of characters here.
  o The game introduces scripted “point-of-view moments”, where you are prompted to hold down a button which then directs the character’s gaze at something in the environment of import. This is a neat trick, and is often very effective (see more notes below on environmental storytelling).
- It is possible to get away with less scripting of player actions in this game, because the goals and objectives of the characters are so clearly established already, by virtue of the previous two games. Even so, there is a lot of ambient scripting happening in the conversations that take place around Shepard.

- Occasionally, however, the scripting is split by moral dilemmas. In these situations, like the curing of the genophage mission, the game provides a lot of pressure from the different stakeholders to try and persuade Shepard to choose one side or the other. In these instances, there is still scripting, but you are given a choice of which script to enact, with the understanding that each one will have consequences. I discuss this in greater depth in my notes below.

- Other guidance markers in game include blue arrows for ledges that can be jumped over, ladders that can be climbed, and walls that can be vaulted. The map and compass have been removed, but an in world objective marker now can be seen when the map key is pushed.

- There are also power ups and upgrades in the world, which work like a breadcrumb trail through the more confusing environments.

- What “masks” do I get to put on and how do they transform as I play?
  - Shepard remains customizable at the equipment and armor level, but her physical appearance is fixed in this game. You also do not get any opportunities to play as another character this time through.
  - The exception to this is the Multiplayer game, which allows you to play as any number of unlockable characters. These are not really narrative roles however – they are more like ludic tokens.

- When do I experience the “creative state” and what happened to elicit it? When is it broken?
  - In my notes I talk a bit about finding myself in situations where I am holding a button down long after the game has moved outside my ability to control it. The dream sequences do this, and the fight with the Reaper on Rannoch does this. Interesting, in the first example, there is no combat, or really any interaction beyond navigating the dreamscape. In the second example, you’ve just survived some of the most intense combat in the game. Both use clear objectives to elicit the creative state.

- What is the relationship between text and subtext in the game?
  - Same as the first two games

- What am I asked to react to by the game? How am I asked to react?
  - Trigger actions remain the primary prompt for narrativized reactions.

- How does Status play out in the game?
  - Status is more clear cut in this game. Although you begin as a virtual prisoner, stripped of your rank and fallen out of favor (thanks to the events in The Arrival DLC at the end of ME2) the arrival of the Reapers quickly returns you to command. Shepard’s Spectre status is reinstated, as is her command of the Normandy. Further, she is tasked with the job of building an alliance among all the disparate galactic races, forcing the character to play in political and diplomatic circles at a level previously unseen. As the game progresses and more and more alliances are secured, Shepard becomes responsible for all Organic and Synthetic life in the galaxy. This is “Shepard as Judge, Jury, and Executioner”.
The game then reifies this at the end when she is confronted by the Catalyst, who tells her that no organic being in the history of the galaxy has ever stood where she is standing. She is empowered with the responsibility to choose the path for all life. If Shepard rejects this status (which is only possible in the DLC ending) then the Reapers win, and the cycle continues unaltered. In a sense, the game is all about bringing Shepard to a place where she is deserving of this status and capable of enacting the responsibilities it entails (including sacrificing her own life for the good of all…something that is necessary regardless of which path she chooses).

Analytical Lens #3: Participation vs. Interaction

This lens is grounded in the game studies literatures, particularly Aarseth’s work on the implied player, and other work on reward structures and subversive play.

- What actions does the game reward?
  - There are emotional rewards to be had for consistently pursuing Paragon choices across all three games. The height of these is the Genophage Cure and the Geth/Quarian reconciliation.
  - The game also explicitly rewards completionism: the availability of the ending choices is a function of the “Effective Military Strength” (EMS) which is a function of how many side quests are completed.
  - In the main storyline, it seems like Paragon choices often yield higher EMS than Renegade choices. From various sources around the web I think that this is slightly true, but not hugely so.

- What actions does the game discourage?
  - There definitely seems to be an anti-Renegade sentiment running through the game. See this: http://social.bioware.com/forum/1/topic/355/index/11360301/1 for an example of how one player perceives this.

- Who is the “implied player”?
  - Again, the implied player is someone who has played the other games. A small amount of expositional dialogue is occasionally provided for new players, but the game (I think correctly) assumes that not many people are starting at the end of the trilogy.
  - Combat is much less linear in this game, with much more time devoted to close quarters combat (heavy melee, over cover grabs, biotic charges, etc.). Enemies surround and flank the player frequently, forcing you to shift cover, and watch your back. It is much more challenging, but it is also very fun. I think this all points to a shift closer to other action shooters, and a notion that the player is less of an RPG player.

- What is the range of systemic impacts of my actions?
  - This is the game where all of the different choices you’ve been making over the whole series get to pay off. In fact, most of the EMS points you accumulate are calculated based on outcomes from the previous two games (such as which characters survived, or which branch you took). In many cases this also manifests as different narrative possibilities.

- Where are the “edges” of the system? How are they communicated?
Everything is bounded. In Crawfordian terms, you might say that you are only given Verbs which are permitted, and that no verbs really break the game.

The ending where you choose to not make a choice (by denying or shooting the catalyst) is a bit like the ending of ME2 where Shepard dies...it's an ending, but not a winning one, and not a canonical one.

- What are the narrative consequences for acting incorrectly?
  - Literally killing entire cultures.
  - Loosing friends and allies.
  - Crappier endings

- What are the ludic consequences for acting incorrectly?
  - Less EMS

- What is the tone of the game’s guidance?
  - Diegetic.

- Is any play “inconsequential” or “free”?
  - Nope

Mass Effect 3: additional notes from gameplay

Noticed something interesting: when I’m really into a section, I'll often keep pushing down the keys on the keyboard, even when I’m not in control of Shepard. The first time it happened, it was in the race to catch the Cerberus cyborg assassin. It's a fast paced chase sequence, and at the end of it there is a cutscene: I realized half way through the cutscene that I was still holding down the run button. This happened again during the first dream sequence, where I was running after the little boy in slow motion. Even after Shepard catches him and it transitions into the cutscene, I was still holding down the button.

There is much less to do in conversations in this game: There is a lot of non interactive back and forth between Shepard and her interlocutors. This means that the player not only gets a more railed experience (not necessarily a bad thing), but she also gets less insight into Shepard's inner thoughts- less subtext.

Many conversational choices seem to have done away with the neutral option as well- I guess they figured they'd save production budget since most players probably favor Paragon or Renegade.

There are some interesting things done with environmental storytelling. The game uses a key command, and an eye icon to direct the camera toward things the designers want the player to see. There is an extended sequence on Palavan's moon where Garrus and James and Shepard have a conversation while the war rages around them...lots of contextual storytelling, and incorporation of details from the environment in that section.

Interesting moment at the end of the Omega DLC. The villain, Oleg, has surrendered and Aria has spared his life. He is gloating a bit, and Shepard is given the option to take a Renegade option and presumably punch or shoot him. After everything he did, I as the player really wanted to take this option, but to do so would have gone against the principles that I had envisioned Shepard standing for, so I did not do it.

Trying to fit the multipler experience into the game narrative in a way that makes
sense. I think I need to think of these fights as the ongoing battles that are taking place across the galaxy while Shepard is off in search of war assets and forging alliances. On the one hand, multiplayer matches feel like a distraction from the core narrative, especially if you think of the, as simply FPS action shooter games. On the other hand, given the scale of the war, and the billions of people involved, these ongoing conflicts could be seen as representative of that "galaxy at war": if seen as diegetic they make it easier for the player to grok the enormity of the conflict.

In the Leviathan DLC there is a section where you try to trace the signal that the leviathan is transmitting by having a scientist mentally link with it. One the signal is partially triangulated you have a choice to continue to narrow the search (a Renegade action) or to disconnect the link and protect the scientist from mental harm (inaction). It's a great example of doing nothing to commit to meaning, and the game rewards this inaction with Paragon points. Interestingly, the players inaction is translated into an action on Shepard's part - to sever the connection.

some more great examples in Leviathan: Shepard dives in a mech to the bottom of an ocean where Leviathan lives. She loses contact with her support crew up top. There is an extended sequence where Shepard is "transmitting" a running commentary of the search back to the crew, even though communications are ostensibly down. The navigate the trench, the mech automatically fires flare ahead of you to light the path. All perfectly diegetic, and super effective.

One of the irritating changes that this game makes to the interaction all grammar of the dialogue wheel is to make it so that sometimes the single conversation option on the left of the wheel is a question that uncovers some additional information before looping back around to the two choices on the right which move the conversation forward, and sometimes it's a neutral choice that moves the conversation forward on its own. This can be really problematic from a meaningful commitment because it sometimes robs you of making a Paragon or Renegade choice if you chose it consistently, but it also potentially robs you of additional narrative content if you avoid it.

By changing many conversations to one sided commentaries by the characters, the player/shepard's role in the conversation is greatly reduced. From an interaction design standpoint, it is also troublingly easy to accidentally trigger a new set of comments, before the character was done with his or her first train of thought.

Crew members move around the ship more, and talk to each other more in this game. Often you will enter a space and find two crew members I. The midst of an extended conversation. Other times, a character will not be in his or her usual space, but instead be somewhere else. This contributes to the overall sense that the characters have lives outside of your interactions with them. It also fits well with Meisner's version of the method.

Characters simply repeat the same response to you when they are out of new things to say...also very Meisnerian...parallels the repetition game from Meisner's training system.

While I don't really want a density of choices, I do want a density of participation. I find myself especially resenting it when the game world contains details that I can't participate in...like the poker table in the Normandy's lounge, or the bar, or the weird VR
globe thing. Each of these things suggests diegetic uses that I can imagine would give me chances to interact with the other characters and explore the world in greater detail. Not being able to interact with them just makes me feel distanced from the world. In ME2 there were a lot of little details in the Normandy that Shepard could interact with...raising and lowering the blinds in the lounge, opening and closing the blast shields on the bridge, compressing and jettisoning garbage from the cargo bay. None of those have survived into ME3, even though the buttons and levers that controlled them are still visible in the world.

Save 31 - right before conversation with Liara about time capsule. Really good example of how the game reflects its own understanding of the character back at you.

Save 34: conversation between Liara and her father. Very awesome, and super emotionally charged at points. Made me cry a bit.

Save 39 - right before priority tuchanka
The fight to hit the theresher maw hammer things on Tuchanka is just batshit crazy intense. Following that up with Mordin sacrificing himself to cure the Genophage, and the genetic redemption of the Krogan Race is even more intense. The net result is three powerful and distinct emotional beats staged one after the other. By the end I felt like I needed a cigarette.

Save 45 - right before thanes death scene.
One recurring theme that I find disturbing as the war ramps up is the suppression of civil liberties in the name of the war effort. There are a lot of little conversations around the citadel where Shepard can take sides, and often I found myself advocating for more authoritarian measures without meaning to.

It's really weird how the "saga of Conrad Verner" is one of the story arts that most obviously manifests the player's choices across the three games: it incorporates conversations from all three, and a bunch of strange side quests like the asari matriarch writings collection from ME1.

Save 56- romancing Liara
Save 57- shore leave with Garrus.
There is a weird time warp thing that happens when you complete a fetch quest. You give the quest giver the required item and they usually comment on what a jig difference it will make to the war effort. Then if you talk to them again, they make their follow up comment, which usually operates on the assumption that some time has passed. Like the Kakliasaur fossil quest where you provide the fossil and suggest cloning the extinct species. A moment later, when you speak to the quest giver, he comments that the species has been cloned successfully and is already being ridden into battle. Is a good example of the types of contradictions that players reconcile when playing.

Oh holy shit the final Rannoch mission is awesome! Two huge moments: First, the final fight with the reaper. You have to survive long enough to land three hits on the reaper with the targeting laser. If you do, the fourth automatically succeeds. However, that fourth hit is one of the most suspenseful moments I've ever experienced in a game. You're holding down the trigger, desperately trying to paint the target. The reapers death beam is bearing down on you. You have seconds to live, and everything
moves into slow motion and you gaze into the crimson eye of death for what feels like an eternity. Then, it cuts away to the fleet in orbit, turning their weapons onto the reaper. The attack connects and reaper staggers backwards, mortally wounded.

This is followed by the chance to make peace between the quatrains and the geth (provided you've made the right choices over all three games). Brokering that peace is even more satisfying and emotional than curing the Genophage was: legion sacrifices himself to give all geth true self awareness. The quarians get to return to the home world that they have been exhaled from for centuries. It’s just amazing!

Save 72 - return here for DLC
If missing then save 67

Save 74 - final time on Normandy
In the last run up to the conduit the game parallels the final push for the conduit in ME1. That sequence, and the bit afterwards where Shepard is staggering wounded into the conduit is essentially a microwave tunnel sequence...there is only one commitment available to the player, and it perfectly aligns with the character, the situation, and the game system.

Nonesensical as I find the final conversation with the catalyst, I still find the ending profoundly emotional and effective. I did not feel this way when I played the original ending, but the extended cut hits all of the emotional notes that I was hoping for.

Worth noting that the final walk is another moment in which you are asked to fully commit to a specific meaning.

I also wholly reject the indoctrination theory.

Save 81 a meeting joker at sushi place
Save 82- let's see everyone in their black tie gear

Replaying as a Renegade, I'm struck by how the game punishes Renegade actions: the Renegade response to Diane Allers results in her not joining the crew. The Renegade response to Dr. Chakwas results in her not joining the crew. Not only does this make the world narratively poorer by taking away two supporting characters, it also earns you less in the way of War Assetts. The Renegade response to Liara ends your relationship with her. Seriously!

Finding myself wanting to play the game more as a Renegade, if only to see the variations to the plot as I choose the different path. Does this contradict my position on scripted performance and nuance vs. authoring an outcome? I don’t think so, but it forces me to complicate it in possibly productive ways. First, I think there is something to the idea that there are several authored variants of the core narrative that are there to uncover – equally true versions that my performance will reveal: I’m not authoring my own outcomes, but instead choosing different paths through the script. I don’t think I need to discount the pleasures of this type of choice in order to build an argument in favor of it coexisting with enacted performative pleasure. The tension happens when the performative choices seem to violate the logic of the scripted path – when a performative binary choice takes the story to a place that is less satisfying or engaging than another.
Many of the Renegade options seem to rob the narrative world that is available to the character of some of its depth and emotional richness, like when you reject the possible romantic advances of a character, or when you turn away a possible companion or crew member. Other Renegade choices fit really fluidly with the dramatic pressure being applied to Shepard – to save the world at any cost.

It's worth noting that my “hardline Renegade stance” is probably atypical here. If I wasn't playing this specifically to push the Renegade option to its limits I’d likely play it for the sake of performance 90% of the time, and pick the Paragon option when confronted with some of the more unreasonably dickish options…not sure if this would translate to refusing to cure the genophage or not.

I think there's something to be said about the contained “set-piece” dilemmas of curing the genophage and ending the geth/quarian war (and to some extent the final set of choices at the end of the game). I think these need some closer examination, because they represent potential emotional climaxes in the game series, while also forcing the player to make some of the most difficult and narratively significant choices in the game (in terms of authorship). Unlike most of the other plot missions, these sequences feel meaningful – you must make choices that will not only affect the fictional world at the level of mythos (you are not just changing the story here, you are hacking at the fundamental underpinnings of the entire imagined storyworld) but also that reflect your own commitments about the bigger issues that Shepard is grappling with. These are character defining moments, and it is hard not to agonize over them, because they are also moments where you are asked, not just to make a choice about your performance, but about the script itself.

BUT…. When I encounter these moments, all of my gameplay to this point has already made my choice a foregone conclusion for me. Changing my mind at the last minute would violate the vision of Shepard that has emerged from my play. The question for me is seldom about what do, but instead about how to make certain that everything comes out right (whereas “right” is a function of my trajectory though the game up until this point…of my momentum)

But to get back to the idea of “set-pieces”: The presence of a few carefully structured moral dilemmas with huge consequences, surrounded by a lot of other “framing play” is much more successful than an undifferentiated choice-space where all things are permitted and possible. These sequences work as emotional and narrative climaxes precisely because they exist as exceptional events in a carefully structured arc. It is the context and the constraints on them that makes them feel so profound when they happen – it’s knowing that these are crucial moments for the world that makes the notion of having a choice suddenly feel meaningful. And it's the presence of a choice to do the “wrong thing” that makes it feel like such an accomplishment when you choose to do the right thing instead – it's free will as a meaning-producing limitation, rather than free will as an opportunity to subvert meaning.

I don't think I'm alone in finding the struggle with these choices to be powerful, but also challenging:

http://www.1up.com/do/blogEntry?bId=9097142
http://answers.yahoo.com/question/index?qid=20120317143855AAetpMH
http://social.bioware.com/forum/1/topic/105/index/1200740/1 - THIS! This debate took place after ME2 came out, but before ME3 was released…clearly this was a subject of debate and speculation before it was even an option.
http://social.bioware.com/forum/1/topic/347/index/9670705/1 – forum discussion about the dilemma in ME3
Appendix C: *Mass Effect* Overview, Guides and Resources

In this Appendix I provide an overview of the three *Mass Effect* Games, including descriptions of the races, main locales, and significant plot events. For further details on any of these things I strongly advise the reader to refer to the *Mass Effect* Wiki, which provides a much more comprehensive overview than is possible within this document. I have also reproduced and adapted several of the resources and guides that I used during my close reading of the *Mass Effect* Trilogy. The first of these is a listing of all locations that can be investigated, explored, or visited in the three games. There are a total of 208 locales listed here, complete with links to their descriptions on the *Mass Effect* Wiki, and annotations of the assignments and missions associated with them.

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23 [http://masseffect.wikia.com](http://masseffect.wikia.com)
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Liara places Shepard's name on the Normandy's memorial wall during the epilogue.

Perhaps the best Paragon/Renegade dialogue choice in all three games. Shepard: "I will end you." vs. "I will end you painfully."

Wrex: "That's why I love hanging out with you guys! Why shoot something once when you can shoot it 46 more times?"
Mass Effect 1: Game Overview

It is essential to understand, in broad strokes, the storyworld in which Mass Effect takes place. In the game this information is parceled out slowly, through encounters with different Non-Player-Characters (NPCs) and through a series of “Galactic Codex” entries that become available to the player as the game progresses [Figure C-1]. The history of the galactic civilizations that participate in the story of Mass Effect plays a critical role in contextualizing the choices that one makes during play, and provides an essential backdrop for the core themes and dramatic arcs that connect together the trilogy of games. The depth of this storyworld is implicated in each of my analyses: it provides the framework in which a player commits to narrative meanings; it establishes the scripts that guide the player’s enactments; and it gives meaning to the logics of reward and consequence that structure play. Because this storyworld is so central to understanding all three of the Mass Effect games, I have dedicated a significant section of this chapter to unpacking the various histories, cultural relationships, and central thematic elements. Even so, there is only so much that I can detail here: for those interested in digging deeper into this world,
I have found the community maintained *Mass Effect Wiki* to be an invaluable resource.

**Mass Effects, Element Zero, and Biotics**

The game *Mass Effect* takes its name from one of the central science-fiction conceits it employs. The “Mass Effects” under discussion are the result of the existence of “Element Zero”: a rare element that releases “dark energy” when electrically charged, allowing it to manipulate *Mass Effect* fields. These fields can increase or decrease the mass of object within them, creating localized areas of low gravity, kinetic barriers, projectiles, vortexes, and a multitude of other effects. The galaxy of *Mass Effect* is linked together by a network of *Mass Relays*: huge *Mass Effect* reactors that are capable of creating corridors of mass-free-space between any two points. These relays allow for instantaneous travel from point to point within the network. Element Zero is also crucial for faster than light (FTL) spaceflight, as it underlies all star-drive technologies.

For sentient species, exposure to Element Zero’s mutagenic radiation in the womb is the source of “Biotic” powers: the ability to biologically generate and manipulate *Mass Effect* fields. In some races, Biotic ability is quite common, while in others it is exceedingly rare, due as much to the biological factors as to environmental ones.

**Galactic Politics, Major Players, and Ancient History**

*In the world of Mass Effect, the Milky Way galaxy has been inhabited for millennia by a variety of star-faring races. Galactic politics are dominated by a ruling council of the oldest and most powerful species: the long-lived matriarchal Asari, the disciplined and militaristic Turians, and the quick-witted Salarians.*

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24 http://masseffect.wikia.com/wiki/Mass_Effect_Wiki
All of galactic society is built on top of the remains of the vanished Prothean culture, which is also believed to be the source of the Mass Relay network. The seat of galactic culture is the Citadel [Figure C-2]: an ancient alien space habitat that was left abandoned after its presumed creators, the Protheans, mysteriously disappeared almost 50 millennia previously. The Citadel is maintained by a mysterious race of alien caretakers known as the Keepers, who appear to be incapable of speech or any other form of communication. Located close to a major nexus of Mass Relays, the Citadel is a center for trade, diplomacy, and culture.

While the Citadel council does not directly maintain any military force, it does administer an elite group of operatives, known as Spectres. Citadel Spectres are empowered to act outside the law in pursuit of Council business, with very little administrative oversight, and access to advanced armaments. At the opening of the game, the Spectre program has never admitted a human into its ranks.
**Figure C-3**  *Shepard and the crew of the Normandy arrive at the Citadel for the first time.*

**Council Races**

The three council races play a large role in the story of *Mass Effect*, with members of each race joining the player’s crew over the course of the three games. While a deep exploration of each race’s history is beyond the scope of this thesis, I have collected some of the most relevant details here.
Asari

Figure C-4  

Liara T'soni is an Asari researcher who joins up with Shepard in Mass Effect.

The Asari are an entirely female race with lifespans of over 1000 years, and are in some ways the most advanced species in the galaxy. They are respected diplomats, artists, and scholars and are known for their skill with Biotics. This ability derives largely from the large deposits of Element Zero on Thessia, the Asari home world. Asari reproduce through a unique form of pseudo-parthenogenesis: each Asari provides a complete genome to her offspring from two sets of her own DNA. An Asari mother neurochemically alters one of these sets of genes through an act of electrochemical “joining” with her partner, thus introducing diversity into the Asari gene pool. This seemingly mystical connection allows an Asari parent to impart the unique characteristics of her mate to her daughter. Asari are able to "join" with any other sentient species, and "pure blood" Asari offspring have become frowned upon, as they do not incorporate the strengths and qualities of other races.

As an Asari ages she undergoes three significant life stages: Maiden, Matron, and Matriarch. Asari Maidens are driven to explore the galaxy during their first three centuries of life, often accepting jobs dancing in nightclubs, or fighting as members of mercenary groups. Upon reaching the Matron stage most Asari settle down to raise families. After
about 400 years of this, Asari transition to the role of Matriarch, where they serve as diplomats and councilors, often returning to Thessia to guide the development of their community.

The Asari culture advanced quickly compared to the other species in the galaxy, and the Asari were the first race to discover the abandoned Citadel, in the year 580 BCE. It is revealed in *Mass Effect 3* that this advancement was due to the influence of the Protheans, who secretly worked to “uplift” Asari society prior to their disappearance.

**Salarians**

In contrast to the long lived Asari, the amphibious Salarians have extremely brief life spans – seldom more than 40 Earth years. Their accelerated metabolisms cause them to appear hyperactive to other races, and they are known as quick thinkers, brilliant scientists, and exceptional spies. Hailing from the planet Sur'Kesh, most Salarians are male, hatching from clutches of unfertilized eggs. Female Salarians form the ruling caste in society, and socio-political conventions carefully govern the production of fertilized (female) eggs. Family lineage is extremely important to Salarians, and each has a name that includes geographic details about his planet and clan of origin.
Salarians were the second sentient race to discover the Citadel 60 years after the Asari had established themselves on the station. Initial contact with the Asari led to the creation of the Citadel Council in 500 BCE.

The Salarian military is renowned for the skill of its espionage service: Salarian military doctrine holds that wars should be won before they are fought, and so their military excels in preemptive strikes, preventative actions, and sabotage, all driven by extensive intelligence collection and scenario projections. The most renowned unit in the Salarian military is the “Special Tasks Group” (STG), whose operational autonomy provided the inspiration for the Citadel’s Spectre program.

**Turians**

The Turian race is the newest addition to the Citadel Council, following their involvement in ending the Krogan Rebellions (see below) in the year 900 CE. Turian society is structured along a rigid military hierarchy: a chain of command that includes every Turian citizen from the ages of 15 to 30, and which covers all areas of civic service and law enforcement in addition to more traditional military duties. Turians are highly disciplined, with a developed sense of communal responsibility, and personal honor.
Turians have both avian and reptilian features, including a hard metallic exo-skeletal carapace, which protects them from the radiation that permeates the weak magnetic field of Palavan, their home planet. Although they resemble birds or reptiles Turians give birth to live young. Unlike most of the other oxygen breathing life in the galaxy, Turian biology relies on dextro-amino acids, which means that they cannot metabolize the same foods as other species (and their own diets are poisonous to the more common levo-amino acid based races). The only other “dextro” race of sapient creatures is the Quarians (see below).

Their strong sense of duty and community service makes Turians ideally suited to act as the primary peacekeepers within Citadel space.

**Other Citadel Races**

In addition to the three “council races” there are a number of other associate races that have embassies on the Citadel, including the unimpeachably polite Hanar, the mercantile Volus, and the lumbering Elcor. These three races tend to play more minor roles in the game, often providing local color. For a race to be granted an embassy on the Citadel, they must first sign the “Treaty of Farixen”: an agreement that carefully regulates the ratios of dreadnoughts and other capital ships that each species is permitted to build.
Figure C-7  A Hanar merchant on the Citadel.

The Hanar are an aquatic race that most closely resembles Earth’s jellyfish, known for their impeccable manners developed sense of propriety. They are a relatively isolationist race, many of whom worship the departed Protheans as the “Enkindlers” of sentient life. Hanar communicate through patterns of bioluminescence on their skin.

Perhaps the most unusual social trait of Hanar is their use of the third person to refer to themselves. Each Hanar has a “Face Name” which it uses with most acquaintances and a “Soul Name” reserved only for intimate friends and family.
The Volus ambassador on the Citadel.

The Volus hail from the planet Irune, whose high gravity and ammonia based atmosphere requires them to wear pressure suits and breathing systems when interacting with other races. The Volus discovered the Citadel in 200CE, and were the first non-council race to establish a permanent embassy. Lacking military strength or physical prowess, the Volus instead excel at commerce, and are responsible for establishing and maintaining the currency and trade standards that form the basis for the galactic economy.

In lieu of maintaining their own military, the Volus petitioned the Turians for “client status” shortly after the Krogan Rebellions, and fall under the protection of the Turian Hierarchy to whom they defer in matters of galactic politics.
Elcor

Figure C- 9  An Elcor asks for Shepard's help with a delicate issue on the Citadel.

Natives of the high gravity world of Dekuuna, the Elcor are a large quadrupedal race known for their subtlety and deliberateness. Their speaking patterns seem slow and monotonous to other sentient races. Elcor compensate for their lack of vocal inflection by presaging each statement with an affective descriptor [Figure C- 9]. Among members of their own species Elcor communicate using a multitude of subtle signals including scent, indistinguishable modulations of body language and posture, and subvocalizations on the infrasound spectrum.

The Elcor structure their society into semi-nomadic close-knit tribes, and most find starships and space stations claustrophobic. In spite of this, they have built a galactic reputation as artists and even as actors: there is an ongoing joke running through the games about a wildly popular all-Elcor rendition of *Hamlet* that took 14 hours to experience in its entirety.
Other Races

Krogan

Figure C-10  Krogan “Battlemaster” Urdnot Wrex confronts a member of C-Sec.

The Krogan race is at the heart of one of the most significant “secondary” storylines that runs through the *Mass Effect* games and their history and culture is developed more extensively than many of the other races in the storyworld. The Krogan hail from Tuchanka: a world with an overabundance of large apex predators (including enormous predatory sandworms known as “Thresher Maws”). Evolving in a hostile environment, Krogan developed armored exteriors, redundant sets of extra organs, and a prodigious birth rate, all of which offset the high mortality rate of their homeworld. As Krogan society became industrialized, mortality dropped, and the population exploded. Having overcome the natural challenges presented by their environment, the Krogan society became wracked with internal conflicts and wars that eventually led to widespread global nuclear warfare. Krogan society collapsed into warring primitive tribes, inhabiting a nuclear wasteland: a condition that lasted for 2000 years.

The Salarians discovered the Krogan in this state, and technologically “uplifted” them, repairing Tuchanka’s damaged ecosystem, and assisting them in rebuilding their society as a spacefaring race. In exchange, the Krogan served as shock troops in the Rachi wars.
(see below), and were briefly hailed as the saviors of the galaxy. This did not last long however: The newly uplifted Krogan continued to breed uncontrollably, but at a greatly reduced mortality rate. Their unchecked expansion quickly turned the Krogan from “savior” to “menace”, as their colonial ambitions began to extend to worlds already occupied by other species. The Krogan Rebellions raged for 300 years before the newly discovered Turians stepped in and ended them through the release of a bioweapon called the Genophage (see below).

With a now greatly reduced population, the Krogan race is a shadow of its former glory: most Krogan hire themselves out as mercenaries or even as nightclub bouncers. The surviving Krogan on Tuchanka now spend most of their energy warring amongst themselves over the few remaining fertile females. Krogan politics are structured around small territorial warrior clans, led by aggressive warlords. Next to the Warlord, the next most powerful member of a clan is the Shaman, who administers the often grueling and deadly rites of passage that Krogan are expected to undergo as they enter adulthood.

**Quarians**

The Quarian race also plays a significant role in the world of *Mass Effect*, even though they are not proper members of the Citadel community. The Quarian race lives nomadic lives aboard the Migrant Fleet, after losing their homeworld of Rannoch to the Geth (see below). Quarians are very similar in appearance to humans, with some notable differences: three fingers, digigrade legs, and much weaker immune systems which evolved in a world with very few natural harmful microbes or viruses. In the 300 years since the Quarians were forced to take up life on a flotilla of starships, with carefully regulated sterile environments their immune systems have weakened even further, and now they live life perpetually ensconced in sophisticated environmental suits. These suits have become a visible signifier of their culture and heritage: most Quarian customs have adapted to reflect the constraints of life in the fleet.
The Quarian culture is highly communal, due in part to the close quarters aboard the fleet, and in part to the need for everyone to be able to trust their shipmates with their lives. Each Quarian embarks on a rite-of-passage Pilgrimage journey outside of the fleet as he or she transitions into adulthood. Quarians on Pilgrimage are tasked with returning with something of value to the fleet, at which point they join a new ship (in order to maintain genetic diversity in the population).

The Migrant Fleet has been under martial law since the Geth war, but most day-to-day governance is handled by civilian councils, and by the captains, who have absolute disciplinary authority aboard their ships. The larger Quarian government is ruled by an Admiralty Board, and the democratically elected Conclave. While Quarians will resort to capital punishment on rare occasions, the more common punishment for severe crimes is exile: a practice that has not endeared Quarians to many other galactic communities, many of whom already look down upon them for causing the Geth War. In spite of this, Quarians have developed a reputation as exceptional engineers and technologists.
Batarians

Figure C-12  A Batarian terrorist threatening to crash a large asteroid into Earth.

The Batarians are a paranoid and totalitarian race with a history of violence in their interactions with the rest of galactic society. Hailing from the planet Khar'Shan and sporting four eyes and distinctive facial ridges, Batarians have made a reputation as slave traders, pirates, and criminals. Not much is known about Batarian civilians because of the tight restrictions imposed upon them by the “Department of Information Control” of the Batarian Hegemony, who maintain an isolationist worldview, even as they seek to expand their territory. Although not directly at war with Earth, Batarians are still actively hostile to human interests.

The conflict between Humans and Batarians culminated in the closure of the Batarian embassy on the Citadel, effectively marking them as a rogue state. No longer an associate race of the Citadel, the Batarians are not bound by the Treaty of Farixen: their current military capability is unknown.
The Geth are a race of networked artificial intelligences initially created by the Quarians for menial labor and combat. When multiple Geth network together their consciousness’s they attain sentience: an unexpected development that led to the Geth Wars, and eventual Quarian exile (see below). They are the primary enemy in *Mass Effect 1*, having allied themselves with the Rogue Spectre Saren, and his sentient flagship, Sovereign. Prior to this, they had maintained a life of complete isolation, studying organic life from a distance, but not interfering in galactic events. The one exception to this is that the Geth attack and destroy any ship entering their territory, which is located beyond a nebula known as the Perseus Veil.

Existing primarily as software, collections of Geth are capable of loading themselves into “mobile platforms” which allows them to interface with the material world. These platforms are capable of many different activities, and can take a number of different forms, but those encountered by Shepard are primarily bipedal combat mechs. Geth have individual consciousness but they prefer to exist in a networked community, sharing cognition and memory: Geth society operates on an extreme form of consensus democracy.
Extinct Races
Several races continue to exert significant historical influences over the galaxy, even though there are no remaining living members. The Rachni were hunted to extinction by the Krogan following the Rachni wars (see below). Before their mysterious disappearance, the Protheans had an empire that spanned the galaxy, and many current advances derive from reverse engineering the technologies that the Protheans left behind.

Rachni

Figure C-14 A Rachni Soldier
The Rachni are an insectoid race that shares a hive mind, dominated by intelligent “queens” who are capable of directing their workers and drones across great distances. Like many insect species, they are comprised of a number of subspecies including workers, soldiers “brood warriors” and queens. Rachni communicate across great distances using a form of quantum entanglement, and are capable of transferring information genetically across generational lines. They are highly territorial and isolationist: they will defend their worlds if their territory is breached, but are not ordinarily war-like. The Krogan hunted the Rachni to extinction, following the Rachni Wars (see below).
**Protheans**
The mysterious Protheans are considered to be the originators of the Citadel and the Mass Relay network. Although their civilization disappears over 50,000 years ago, Prothean ruins and technology continue to be discovered, often yielding significant advances for current galactic society. It was the discovery of a data-cache in the Prothean ruins on Mars that led humanity to discover element zero, and the Mass Relay network. Significant portions of the *Mass Effect* trilogy revolve around piecing together the mysteries underlying the disappearance of the Protheans.

**Significant Historical Events**
While describing the races above I have inevitably been forced to hint at several significant historical events that continue to cast a shadow over the world that the player encounters. In the following section I will dig into these events in greater detail.

**The Rachni Wars, Krogan Rebellions, and Genophage**
One of the first major conflicts to shape Citadel Space, the Rachni Wars started in 1 CE when a team of Salarian scientists activated a previously dormant Mass Relay, which took them to an unexplored region of space inhabited by the Rachni. Viewing the Salarians as invaders, the Rachni captured them, and thus discovered element zero and the Mass Relay network. Overwhelming in their numbers, Rachni poured through the relay network. Unable to communicate or negotiate with the invaders, the Citadel races sought to defend themselves, but were no match for the Rachni. The war raged for centuries. In desperation the Salarians technologically uplifted the Krogan, providing them with new worlds to colonize and advanced technology. The fast-breeding Krogan in turn were able to reinforce the dwindling numbers of the Citadel races. Able to withstand the harsh conditions of the Rachni homeworlds, the Krogan reclaimed the conquered Council worlds, and tracked the Rachni back through the Mass Relay network to their homeworld, which they bombed into oblivion. The Rachni were declared extinct by 300 CE.

In order to prevent future disasters of this magnitude, the Citadel Council enacted laws prohibiting the activation of any dormant Mass Relays leading to uncharted systems. Out of gratitude, the Council awarded the conquered Rachni worlds to the Krogan for colonization, as well as several new planets to rebuild their society. This proved to be insufficient for the newly uplifted Krogan, whose population quickly grew beyond the
capacity of those worlds to contain. By 700 CE the Krogan had begun annexing other Council worlds, prompting a confrontation between the Council and their Citadel ambassador: Overlord Kredak. When the Council demanded the Krogan remove their settlers from the Asari colony of Lusia, Kredak refused, daring the Council to take the world by force before storming from the Council Chambers.

The Council enlisted the newly contacted Turians to help combat the growing Krogan threat. The Turian fleets and military were unmatched in Citadel space; however the Krogan had the advantage of numbers and of unprecedented savagery. The Krogan annihilated several Turian worlds by crashing asteroids into them. Rather than breaking the spirit of the Turians, it strengthened their resolve. They contracted to Salarians to develop a bio-weapon that came to be known as the Genophage. Deployed in 710 CE, the Genophage caused a genetic mutation in the Krogan race that reduced their infant survival rate to one in one thousand births. Unable to replenish their numbers, and with a dwindling population, the Krogan surrendered.

This chain of unintended escalation and consequences introduces one of the central themes of the games: how does one eliminate a galactic threat without unleashing a new, more dangerous threat?

**The Geth War and the Quarian Exile**

In *Mass Effect* a distinction is made between Virtual Intelligence (VI) and true Artificial Intelligence (AI). VI’s lack self-awareness or true sentience, and are used within limits for various tasks such as managing databases or running searches on the “extranet”. True AI’s are forbidden in Citadel space: they require a specialized quantum computer (a “blue box”) and adaptive code in order to operate.

In the late 1850s CE the Quarians created the Geth to be used for manual labor. Although the Geth were initially designed to be no more sophisticated than the Virtual Intelligences permitted by the Citadel Council, over time the Quarians modified them to be able to handle more complex tasks, until eventually they crossed the line into true Artificial Intelligence and sentience. When Geth began to ask difficult questions (such as “Does this unit have a soul?”) the Quarian government panicked and ordered their deactivation. While this was not a sentiment shared by all Quarians, sufficient numbers feared what would happen should their synthetic servants revolt, and martial law was declared.
The Geth, fearing extinction, defended themselves, and soon the war consumed Ranoch. The Quarians had underestimated the sophistication of the Geth, who drove them off of the homeworld. While the Geth could have exterminated the Quarians, they instead elected to not pursue their creators beyond the boundaries of what was now Geth space. The Citadel Counsel was furious at the Quarians for unleashing the threat of the Geth, and the Quarians were stripped of their embassy. A treaty was established forbidding any attack that might provoke the Geth. In the aftermath, the surviving Quarian population was left confined to their fleet of ships, which has traveled the galaxy in search of a new home ever since.

The Geth War is an expression of one of the other core themes of these games: can biological and synthetic entities coexist, or are they destined to destroy each other?

The Earth Systems Alliance, the “First Contact War”, and the “Skylian Blitz”

Mass Effect is set in the year 2183, three decades following humanity’s discovery of Prothean ruins on Mars – a discovery that led them to discover the existence of Mass Effect physics, and the network of ancient Mass Relays that link distant regions of space together throughout the galaxy. Following the discovery of the Charon relay orbiting Pluto, Earth formed the Earth Systems Alliance to represent human interests as the species expanded into the galaxy. The Alliance administers humanities military, galactic exploration, and economic interests across Earth and all of her colonies.

When the Turians encountered Humans attempting to activate a relay that had been marked as “off limits” by the Council’s laws, a brief conflict (known to humans as the “First Contact War” and to Turians as a police action called the “Relay 314 Incident”) ensued. Although very few lives were lost in the ensuing conflict, humanity made a reputation for itself as an aggressive and xenophobic race. The Citadel Council intervened before the conflict could escalate into a full scale war between Humans and Turians, but the conflict had left its mark on the two species and both had difficulty learning to trust each-other as the Earth Systems Alliance began to integrate itself into the larger galactic culture.

Following their establishment of an embassy on the Citadel, Humanity quickly spread throughout the galaxy, becoming a major colonial and military force, much to the dismay of many older alien races, most of whom viewed humanity with varying degrees of mistrust. Humans begin to colonize worlds that were considered undesirable by other races, by expanding their colonization program into the “Terminus Systems”: a lawless
galactic sector populated by pirates, smugglers, slave traders, and other criminal groups, and by establishing colonies in the “Skylian Verge”: a contested region of space that bordered on existing Earth Systems Alliance space.

The Batarians were already in the process of colonizing the Skylian Verge, and they vehemently opposed the intrusion of the Alliance into their territory. The Batarians sought intervention from the Citadel Council to have the Verge declared a “zone of Batarian interest”, but their petition was denied. Unwilling to accept this, the Batarians closed their embassy on the Citadel and began funding pirate gangs to attack human colonies. In a notoriously a vicious attack on the human colony of Elysium, known as the Skylian Blitz, the Earth System Alliance defeated a combined fleet of the largest pirate organizations, effectively breaking the dominance of the Batarians in the sector.

**Where We Come In: The SSV Normandy and Commander Shepard**

This is the state of Galactic history and culture that we encounter when *Mass Effect* begins. The central viewpoint character and the nominal hero of the games is Commander Shepard. Before the gameplay begins, the player is given an opportunity to make some decisions about Shepard’s past: decisions that will inflect several conversations and missions throughout the game, while also determining how many Paragon and/or Renegade points the player starts out with. These options include information about Shepard’s childhood, and information about his or her psychological profile and actions while in the service of the Alliance. The player is also given a chance to customize Shepard’s appearance, to select his or her gender, and to select a combat class, which will determine the character’s playstyle over the course of the game. For my close reading of *Mass Effect* I created a female version of Shepard named Muriel.
As the game opens, Shepard has been assigned to the first “shakedown” mission of the SSV Normandy – a new advanced “stealth” frigate created by the Systems Alliance and the Turian Hierarchy as part of ongoing efforts to mend diplomatic relations between the two races. As part of the shakedown, a turian “Spectre” named Nihlus accompanies the crew of the Normandy, ostensibly to oversee the ship’s maiden voyage. In actuality, Nihlus is there to evaluate Shepard, who has been nominated to become the first human Spectre. The Normandy has been sent to the human colony of Eden Prime to recover a Prothean beacon that was unearthed by the colonists.

The Normandy arrives to discover that Eden Prime has been attacked by an unknown enemy: footage from the colony reveals an enormous ship entering the atmosphere, and Shepard and her squad find Geth troopers waiting for them when they land. Nihlus goes on ahead, but doesn’t survive long: he is ambushed by Saren Arterius, another Turian Spectre, who appears to be working with the Geth. Saren activates the Prothean beacon, and then escapes in his giant flagship.
Shepard and her team reach the activated beacon, which levitates Shepard, filling her mind with confusing images of impending destruction at the hands of an ancient threat.
known only as the Reapers. This sets the stage for the rest of the game: Saren is a rogue Spectre who is working with the Reapers to end organic life in the galaxy, and Shepard is the only one who can stop him.

Basic Gameplay Mechanics and Systems

From a game mechanics standpoint, *Mass Effect* is a strange hybrid of traditional RPG, turn-based shooter, and third person shooter. Gameplay sections are effectively partitioned off from each-other:

- **Exploration and Conversation:** The core of the RPG game play is the social interactions that Shepard engages in with the other characters in the game.

*Figure C-18 The Dialogue Wheel*

- This is accomplished through the use of a “dialogue wheel”, which allows the player to select conversational “stubs” which direct Shepard’s side of the dialogue. There are several “hubs” throughout the world of *Mass Effect* where Shepard can explore and converse with people. The two most important of these are the Citadel – to which Shepard returns periodically to purchase gear, pursue side quests, and advance the plot – and the Normandy, where Shepard may build her relationships with the crew members that she accumulates over the course of the game.
Combat: The other main gameplay element of Mass Effect is combat, which occupies an uncomfortable middle ground between a real-time action game, and a turn-based strategy game. Combat occurs in real-time: Shepard can aim, shoot, select different weapons, and issue basic commands to her two squadmates, while also moving in and out of cover to avoid enemy fire. However, I found this style of play to be quite difficult, and not very effective. Instead, the game rewards a more deliberate type of combat by allowing the player to temporarily pause combat by activating a power selection Heads-Up-Display (HUD) and queuing up special abilities from Shepard and her two companions. While in this mode, the player is still able to move Shepard’s field of view around, targeting enemies, and locating the source of threats. Much of the game’s combat takes place in a flurry of simultaneous activity that covers only a few seconds of “game time”. However, liberal use of the power wheel allows the player to extend those few seconds in order to locate and eliminate threats more quickly than could be done in “real time”. 
Spaceflight: A secondary game mechanic, Spaceflight allows the player to travel to and explore the planets and solar systems of the galaxy. In many cases, investigating an unexplored planet will yield only minor rewards such as a small cache of credits, or a “collectible” item that expands the backstory of the galaxy in some minor way. In other cases, exploring planets off the beaten path can reveal valuable resources, and even “side-quests” that expand and complicate the main plot.
Figure C-21  Exploring the galaxy map

Figure C-22  Exploring a specific solar system
• **“Mako” exploration:** Some of the planets that Shepard encounters can support life. If this is the case, the player is given the opportunity to drop a squad to explore, using an armed ATV called the “Mako”. While it is possible to exit the Mako and walk around, most sequences involving it are tuned to require the player to use the mobility and weapons of the Mako to survive larger scale threats than can be dealt with on foot (such as automated defense turrets or giant Thresher Maws).
Figure C-24  A planet that can be explored via the Mako

Figure C-25  Combat in the Mako
Paragon vs. Renegade gameplay

*Mass Effect* allows the player a significant amount of freedom to define Commander Shepard’s identity over the course of the game, at least within certain carefully prescribed channels. The most easily quantified of these is the morality system, which divides Shepard’s actions into one of two “boxes”: Paragon or Renegade. This distinction structures almost every piece of dialogue to a certain extent.

![Image of Muriel Shepard with Paragon and Renegade options]

**Figure C-26 Muriel Shepard was largely free of Renegade tendencies**

The Paragon/Renegade binary is not simply a “good/evil” distinction: Shepard is always good, regardless of which of these stylistic choices the player enacts. “Renegade Shepard” is more ruthless and uncompromising. “Paragon Shepard” is more diplomatic and empathetic. Both are still fundamentally heroic: they reflect competing visions of heroism.

With only a few exceptions, the game doesn’t actively penalize the player for making either choice, nor does it require that the player commit to either side wholeheartedly. Mixing and matching these choices allows the player to build a much more nuanced portrait of Shepard than would be otherwise possible. Should I wish it, I could play Shepard as primarily Renegade, but with a soft-spot for Turians. I could make Shepard a committed peacemaker, except where the Citadel Council is concerned, where her stubborn streak...
kicks in. Alternatively, *Mass Effect 1* provides a “neutral” option for most situations, allowing one to avoid committing to either extreme persona: “Neutral Shepard” can be a bit bland in comparison to the alternatives, but there are times when choosing the middle option seems like the only fair response, especially in situations that are morally complicated.

There are a few rare occasions where the game rewards consistency of character: in some high-stress situations, a character with sufficient Paragon or Renegade points can negotiate or threaten her way to safety without resorting to combat.

![Figure C-27](image)

*Figure C-27* Here the special Paragon option is highlighted in blue, while the Renegade option is grayed out.

The Paragon/Renegade dynamic is a major component of how the game creates opportunities for “meaningful commitment”.

**Mass Effect 2: Game Overview**

*Mass Effect 2* takes place in the same universe as *Mass Effect 1*, but it expands the world significantly by introducing a much larger cast of characters, and new races and locations. In this overview I will provide a brief introduction to the new aspects of the game world, briefly summarize the new narrative developments, and discuss some of the most relevant
changes made to the gameplay and interface mechanics.

**Basic Plot Overview**

*Mass Effect 2* picks one month after *Mass Effect 1* ends. While patrolling for any remaining Geth forces in the Normandy, Shepard and her crew are attacked by an enormous ship, which destroys the Normandy, and blows Shepard out into space, where she dies. Shepard’s body is recovered by a shadowy organization called Cerberus that spares no expense in reconstructing and resurrecting her. Two years later, Shepard awakens aboard a Cerberus space station to find that it is under attack. Fighting her way to safety with two members of *Project Lazarus*, she escapes, and is introduced to the *Illusive Man*: the mysterious leader of Cerberus. The Illusive Man informs her that human colonies are disappearing and that the Alliance is too bound up in galactic politics to protect them. He has used Cerberus’s resources to rebuild the Normandy, to resurrect Shepard, and to recruit a crew of outcasts, Renegades, and criminals to assist Shepard in her search for the missing colonists.

Shepard’s search for the missing colonists takes her into the galactic “underworld” – the Terminus Systems – tangling with mercenary organizations, smugglers, and other unsavory characters from outside the law. She discovers that the colonists have been abducted by a mysterious species called the Collectors, who are actually working for the Reapers. Using the knowledge and expertise of her new crew, Shepard finds a way to track the Collectors back through the *Omega 4* relay, which leads into the Galactic Core. Shepard and her crew undertake a suicide mission through the relay, where they discover that the Collectors are building a new Reaper using the processed DNA of millions of human colonists as the raw material.
Shepard destroys the Human-Reaper, and is given a choice to destroy the Collector base (Paragon choice) or preserve it so that Cerberus can salvage the advanced technology onboard to use against the impending Reaper invasion (Renegade choice).

**Changes in Galactic Politics**
Following in the wake of Sovereign’s attack on the Citadel, humanity has taken a bigger role in galactic politics. Humanity now has a representative on the Citadel Council (chosen by the player at the end of ME1): either Admiral Anderson or Ambassador Udina. Anderson (Shepard’s old commanding officer) is sympathetic to Shepard’s concerns about the Collectors and the Reaper threat, but Udina joins the rest of the Council in skepticism, denying that there is sufficient evidence of an impending invasion. Regardless of who is on the council, Shepard’s warnings go unheeded.

Shepard’s death, resurrection, and subsequent affiliation with Cerberus is the subject of some significant concern among the councilors. Depending on whether or not Shepard chose to save the Council in the first game or allow them to be killed (and replaced) Shepard may or may not be granted Spectre status in *Mass Effect 2*. If the council had been saved, the Shepard is grudgingly granted Spectre privileges, as long as she is only active in the Terminus Systems.
Loyalty missions and crew survival

Depending on the choices the player makes, some or all of Shepard’s crew members might die during the suicide mission, up to and including Shepard herself. In one of the most direct mappings of narrative mechanics and gameplay mechanics to take place in the series, Shepard is given the opportunity to undertake “loyalty missions” on behalf of each of her crew members. Completing these missions advances each character’s narrative arc, resolving some significant loose ends or problems in their lives, and earning Shepard the full loyalty of the character. When this happens, Shepard gains the ability to purchase the “signature special power” of the loyal character, and the probability that the character will survive the suicide mission increases. In this way, the game provides explicit narrative and ludic rewards for completing ostensibly optional content.

Other factors also impact the survival of the crew. *Mass Effect 2* introduces a new system for collecting resources, in which the Normandy surveys unexplored worlds for minerals, which can then be spent on weapons upgrades, new abilities, new weapons, power upgrades, and upgrades to the Normandy itself. There are several costly upgrades to the ship, such as an improved shielding system and an upgraded main cannon: these have no impact on the gameplay, but during the cutscenes at the beginning of the suicide mission the presence or absence of each upgrade determines which crew members (if any) are killed during a protracted space battle with the Collector ship.

The final major factor that impacts crew survival is how the player allocates tasks to “specialists” during the suicide mission. Over the course of the attack on the Collector base, Shepard must split the pool of characters into several teams, with different tasks to accomplish. Some characters are better suited to certain tasks than others, and have a higher chance of getting everyone through alive. If the player chooses a character that is not up to the task, it is likely that crew members will die.

In an interesting twist, this even extends to Shepard herself. Should the player rush directly to the final conflict, without upgrading the Normandy or gaining the loyalty of the crew, and then proceed to make only bad decisions in the final encounter, it is possible for Shepard to be killed as she runs from the exploding Collector base. In some ways, reaching this ending is more difficult than reaching an ending where all the characters survive, because it means foregoing a large portion of the upgrades and abilities that increase the player’s ability to survive the game. In also requires the player to disregard the core narrative...
demands of the game: to play Shepard fully against type, but with a deep understanding of the mechanics that underlie character survival in the endgame. When I played the game with Jim Bizzocchi, we decided that we would play towards this ending, which resulted in an oddly nihilistic version of Shepard who threw himself into danger without any concern for the lives destroyed along the way, and ultimately sacrificed himself to destroy the Collectors. (Bizzocchi & Tanenbaum, 2012) Interestingly, unlike any other outcome, we were not able to import this savegame into Mass Effect 3, thus rendering the attempt wholly uncanonical. Even so, it was extremely interesting to play the game with the intention that it would ultimately end in tragedy.

“Arrival” DLC and Shepard’s Status
As has increasingly become the case in contemporary games, Mass Effect 2 has been supplemented by the periodic release of Downloadable Content (DLC). DLC for the Mass Effect games can take many forms – minor releases might only include a new weapon or set of armor for Shepard. Major releases add significant new elements to the games including additional characters for Shepard’s crew, and new missions and storylines. I was fortunate enough to be playing these games well after their initial release date, and so was able to incorporate all of the available DLC into my experience. One piece of DLC in particular warrants some discussion here. “Arrival” has significant implications for the character of Shepard, and because it bridges the narratives between the second and third games.
In the DLC, prior to beginning the suicide mission, Shepard is contacted by Admiral Hackett of the Alliance and told that there is a deep cover operative – Dr. Amanda Kenson – in Batarian space who might have evidence of the incoming Reaper invasion. Shepard goes into this mission without the rest of her team, all of whom are outlaws in the eyes of the Alliance. Shepard locates and rescues Kenson from a Batarian prison, where she was being held under suspicion of trying to destroy a Mass Relay near a Batarian colony. Kenson reveals that she is working on a project to study a potential Reaper artifact, and that she has knowledge of when the Reapers will arrive. She claims that their project’s goal was to crash an asteroid into the “Alpha Relay”: a mass relay at the edge of the galaxy that connects to the Reaper’s home in Dark Space far outside of the galaxy. With the Alpha Relay intact, the Reapers can travel directly to the galaxy and begin the invasion within a few hours. With the relay destroyed, the Reapers will have to traverse a huge expanse of Dark Space before they arrive. The problem is that destroying a Relay will release a huge explosive shockwave powerful enough to destroy the entire system, including the nearby Batarian colony. Kenson takes Shepard to the Reaper artifact, which is housed at an asteroid base overlooking the Alpha Relay. The artifact shows Shepard a vision of the Reaper’s arrival and it is revealed that Kenson and the entire project team have been indoctrinated by the Reapers: they have no intention of destroying the Alpha Relay.
Relay. With only 90 minutes before the Reapers are due to arrive Shepard must fight her way off of the station and activate the engines that will crash the asteroid into the relay. Although she tries to warn the Batarian colonists, she cannot get a message to them quickly enough. As the asteroid hurtles towards the Relay, Shepard is confronted by a hologram of the Collector General (or of the Reaper Harbinger, if the suicide mission has been completed) which taunts Shepard about the inevitability to the Reaper invasion. The Normandy arrives to rescue Shepard just before the relay is destroyed, and thousands of Batarians are killed by the explosion. Shepard is debriefed by Admiral Hackett who agrees to allow her to continue on her suicide mission, so long as she returns to stand trial for her actions should she survive.

This mission puts a very different spin on the character, and it is one of the first really significant sacrifices that the player is forced to make: the destruction of the Batarian Colony is unavoidable, and it sets the stage for the types of choices that Shepard will be faced with in the third game. This story also is the first time that I ever had to confront the idea of Shepard as a real criminal. Throughout the second game, Shepard's alliance with Cerberus is questioned and challenged by the characters around her, and is always weight as being justified and necessary in the face of the greater threat. In the Arrival DLC Shepard undertakes a rare mission for the Alliance – ostensibly the organization that is upholdling law and order – and ends up choosing to kill thousands of innocent colonists in order to delay the Reaper invasion. Over the course of these games Shepard is often a Renegade of some sort – even as a Paragon she goes against the councils orders to pursue Saren and she joins Cerberus to pursue the Collectors. The Arrival isolates the character from her network of companions, and then forces her to make a difficult sacrifice that ultimately leads to her being stripped of her rank prior to the beginning of Mass Effect 3.

**Additions to the Mass Effect Storyworld**

Many aspects of the storyworld from Mass Effect 1 are extended or deepened in Mass Effect 2: more of the history and culture of galactic civilization is revealed, and several new factions and species are introduced.
Cerberus and the Illusive Man

Cerberus is a pro-human extremist group that escalates in importance over the Mass Effect trilogy. In Mass Effect 1 Cerberus is mainly encountered in side missions, where they are discovered to be conducting various illegal experiments to create human “super soldiers”. Cerberus believes in advancing human interests at any cost, and is willing to undertake any action in order to advance the cause of humanity within the galactic community. They are regarded as a terrorist group by the Citadel Council and the Earth Systems Alliance.

Cerberus takes a prominent role in Mass Effect 2, following their resurrection of the deceased Commander Shepard. Cerberus’s leader, the Illusive Man, convinces Shepard that his organization is the only group capable of defeating the Collector threat. He provides resources and support including a new upgraded version of the Normandy, and dossiers about potential crew members that might help Shepard on her mission. The new Normandy comes equipped with an illegal sentient AI – named EDI – who monitors the ship, and provides tactical information during missions, while also presumably reporting back to the Illusive Man on Shepard’s activities. The Illusive Man also hires Joker, the Normandy’s original pilot from the first game, to fly for Shepard.
The Collectors

The Collectors are the main antagonist in Mass Effect 2. They are a mysterious race whose existence is generally disbelieved by most galactic citizens. When they have been sighted it is often in Terminus space, where they have been known to exchange inexplicably advanced technology for unusual varieties of living sentient beings.

Shepard and her crew learn that the collectors are actually a form of the long lost Protheans, who were subjugated, indoctrinated, and heavily modified through genetic engineering and cybernetic enhancement by the Reapers. The Collectors lack any meaningful sentience or agency of their own, and are controlled by the Reaper “Harbinger” who is capable of directly possessing individual collectors at will.

Drell

The Drell are a reptilian race who share the Hanar’s homeworld of Kahje. They are a client race of the Hanar, who rescued the Drell from their desert world of Rakhana after overpopulation and rapid industrial expansion threatened their species with extinction. A much reduced and extremely grateful Drell population now lives with the Hanar, undertaking tasks that the Hanar themselves are less suited towards, such as combat. They have integrated into all aspects of Hanar society, and are one of the only races to be honored with the knowledge of a Hanar’s “Soul Name”. Many Drell get cybernetic
implants that allow them to see into the ultraviolet spectrum so that they can perceive the patterns of bioluminescence that Hanar use for communication.

Figure C-32  Thane Krios, a Drell Assassin who joins Shepard’s crew

Drell are omnivorous reptilian bipeds who secret a mild hallucinogenic venom from their skins. They have vivid eidetic memories which may sometimes be triggered by external stimuli. The one drawback to their arrangement with the Hanar is that they are poorly adapted for life on a water world: many Drell suffer from a disease of the lungs and organs called Kepral’s Syndrome, which results from long term exposure to the humidity of Kahje.

Vorcha

The Vorcha are an extremely short-lived, violent race with the highly unusual ability to physically adapt to environmental pressures. Vorcha are born with clusters of undifferentiated cells, which do not specialize until an individual is exposed to an external pressure of some sort: in an oxygen-poor environment, a Vorcha’s lungs will adapt to be more efficient; a Vorcha burned by fire will develop fire-resistant skin. These cells are slow to replace, so most Vorcha only adapt to one environment in their 20 year life spans. They are, however, blessed with significant healing capabilities, and are even able to regenerate lost limbs.
Vorcha are animalistic in behavior and psychology: their society is structured around violence and combat, which are their preferred modes of communication. Their homeworld, Heshtok, lacks any centralized government, or advanced technology: Vorcha evolution halted as a species with the advent of individual adaptation, as did their culture. Those Vorcha that are found off of their homeworld are stowaways, scavengers, and mercenaries. Their viciousness, adaptability, and survivability are especially prized by the Krogan leaders of the “Blood Pack” mercenary group.

**New Gameplay and Interface Mechanics**

*Mass Effect 2*’s gameplay is significantly refined from that of ME1: it is built on similar principles, however all of the interactions are smoother and more direct. Unlike *Mass Effect 1*, which felt like a turn-based game that was forced awkwardly into a real-time interface, *Mass Effect 2* is playable in real-time right out of the box: pausing combat may be employed to assess the tactical situation, but is not required for success. In this section I briefly discuss some of the changes made to the gameplay and interface.

**“Trigger” options during dialogue**

One interesting new element in *Mass Effect 2* is the addition of occasional “trigger” options during conversations.
In select conversations, the player is shown an icon during dialogue that indicates an opportunity for Shepard to take either a Paragon or Renegade action of some sort [Error! Reference source not found.]. These icons linger on the screen for a few seconds and player may choose to activate or ignore them. If activated, Shepard interrupts the conversation in some dramatic way, however, unlike dialogue wheel choices, these “trigger” actions only provide information about the ethical valence of the choice, and not any specific semantic content. Instead, these events often use visual conventions from film to foreshadow Shepard’s actions, as in the sequence shown in Error! Reference source not found..
Figure C-35 (read left to right and then top to bottom) The game foreshadows the impact of the Renegade trigger action by cutting away from the speaking character and to and image of a flammable pipe when the icon appears on the screen. Shepard’s subsequent intervention results in a deadly explosion.

New combat and cover mechanics

Mass Effect 2 is much more explicit in its implementation of “cover mechanics”. Surviving an encounter requires the player to find and utilize low walls, boulders, crates, tables, and other environmental elements to stay out of reach of enemy fire.
Figure C-36  Shepard takes cover during the training section of the game

Cover in *Mass Effect 2* is “sticky” in a way that it isn’t in *Mass Effect 1*: the player uses a specific key-command to enter and exit from cover, and Shepard remains “locked into cover” until the player chooses to leave. It is possible to run while crouched behind walls, to dive between different sources of cover, and to briefly pop out of cover to fire weapons or abilities. Enemies also use cover to avoid your attacks: most have patterns of fire that can be learned by the player and anticipated to determine when to time a counter attack, or a dive for the next piece of cover. All of this makes the combat more tactical, and less frenetic: surviving encounters is as much about timing and squad placement as it is about strength and skill.

The other significant change in the game’s combat mechanics involves how abilities are deployed in the world. In *Mass Effect 1*, when the player selected a special power, it immediately appeared at the location of the player’s targeting reticule. In *Mass Effect 2*, many powers and abilities have been made “ballistic”. When activated, Shepard stands and “throws” a ball of colored energy in an arc at the target, where it then explodes [Error! Reference source not found.].
Figure C-37  Shepard's "Incinerate" ability arcs through the air at an enemy in the distance
This new approach to powers and abilities allows the player to aim them over cover and around corners, and creates a more visceral sense of the impact of the ability. For me it radically transformed my experience of visceral combat: rather than feeling detached and distanced from the combat, the way I had in the first game, I felt involved and effective. This made the powers fun to use, and it made it possible to play the game in real-time, rather than in a series of split-second pauses.

Streamlined inventory and research system
Another major change to Mass Effect 2 is the complete elimination of the inventory management system, which was the source of so much frustration in the first game. Rather than include an assortment of weapons and armor options for the player to manage, Mass Effect 2 gives the player the ability to research upgrades that are globally applied to all of the weapons, armor, and abilities of the crew.
Research and upgrades require that the player locate or purchase schematics in the world, and collect minerals to fund the projects by surveying unexplored worlds. Many upgrades also have prerequisites: other research that must be completed before the upgrade becomes available. This eliminates the inventory management aspect of the game completely and makes the decision making process more about the allocation of resources.

There are still multiple weapons to choose from, however, these can only be selected once before beginning each new mission. Instead of being rated for properties like accuracy, rate of fire, and damage, weapons are described in terms of their more qualitative properties. Weapons in *Mass Effect 2* each have a distinctive look and feel in combat, which can greatly alter the experience of play.
Armor selection also has a new interface, which allows the player to mix and match different armor components, while also customising the color and pattern of the armor. Armor can be configured to provide bonuses to various abilities ranging from total shields and health to power damage and recharge time.
Taken altogether, the changes to the inventory management systems in *Mass Effect 2* result in a game that is much further removed from the conventions of traditional RPGs: there is less micromanagement, and fewer opportunities for the types of ludic rewards to be had from killing enemies and exploring the environment that provide the local motivation to keep playing in RPGs. In exchange, there are more global rewards to be had, and a lot of meaningless customization has been exchanged for a smaller amount of more meaningful customization.

*New galaxy map and resource acquisition*

![The Milky Way Galaxy, with star systems annotated with quest markers](Image)

*Figure C-41  The Milky Way Galaxy, with star systems annotated with quest markers*

The final new game mechanic that I wish to address before moving into the analysis is *Mass Effect 2*’s approach to exploration and resource acquisition. *Mass Effect 2* builds a coherent storyworld by employing a set of nested environments, at varying degrees of scale. At the largest scale there is the Milky Way Galaxy, which contains a number of individual star systems, linked together via the network of Mass Relays [Figure C-41].
These star systems are comprised of a series of stars with planets orbiting them, which can be reached via faster than light (FTL) travel. Travel between stars requires fuel, and must be navigated direct by the player, who is given direct control of the Normandy when viewing the game at this scale [Figure C- 42].

The next closest scale represented is the solar system map, in which the player can navigate the Normandy between planets, space stations, and other places of interest, refuel the ship at fuel depots, and access the Mass Relay network [Figure C- 43].

The next smallest scale available to the player is the planetary scale, which provides information about a specific planet, and the option to scan for minerals [Figure C- 44].
Figure C-43 The local galaxy map for a single solar system, annotated with areas of interest

Figure C-44 An unexplored planet

Unlike *Mass Effect 1*, where many of the planets encountered could be explored directly for resources, *Mass Effect 2* instead introduces and orbital surveying “mini-game” which is employed for any uninhabited world. From this view, the player is able to access the resource scanning interface, which provides a targeting cursor that can be swept over the planet’s surface. A readout on the side of the screen indicates the concentration of a
particular mineral in the area beneath the cursor, and a low frequency sound effect provides feedback on the richness of the mineral deposit. When a section of the planet with minerals that are worth harvesting is located, the player may launch a probe, which collects the minerals in that region, depleting it, and adding them to the player’s inventory. [Figure C- 45

![Figure C- 45 The mineral scanning interface](image)

Occasionally the player will find a planet that has an emergency beacon on it, that appears during the scanning process. This is an indicator of the presence of a mission or side quest: on these planets the player may send a shuttle down to the surface of the planet with a squad to investigate on foot.

*Mass Effect* 2’s approach to the galaxy map gives the player a more direct experience of the spaceflight and exploration aspects of the game, but there are far fewer opportunities for the player to explore the surfaces of the planets themselves.

**Mass Effect 3: Game Overview**

Where *Mass Effect* 2 did a lot of work to *broaden* the storyworld, *Mass Effect* 3 instead seeks to *deepen* the various locales, species, and storylines that were introduced in the first two games. Very few new races are introduced, but the stories and cultures of the existing races are explored in much greater depth. As the final game in the trilogy, *Mass
Effect 3 also brings many of the dangling plot points from the previous game to a close.

**Basic Plot Overview**

In 2157, humanity discovered it was not alone in the universe.

Thirty years later, they found a peaceful place among dozens of galactic species. But this idyllic future is overshadowed by a dark past: Reapers, a sentient race of machines responsible for cleansing the galaxy of all organic life every 50,000 years, are about to return. The leaders of the galaxy are paralyzed by indecision, unable to accept the legend of the Reapers as fact. But one soldier has seen the legend come to life.

And now, the fate of the galaxy depends on her.

*Figure C-46 The opening "roll up" for Mass Effect 3*

*Mass Effect 3* opens on Earth, where Shepard has been stripped of her command, following her complicity in the destruction of the Alpha relay and the genocide of a Batarian at the end of the Arrival DLC. In spite of her warnings about the imminent arrival of the Reaper armada, the galactic community has failed to take any drastic measures, and continues to act as though they have nothing to fear. Shepard is called before the Alliance Defense Council to provide advice, even as outlying settlements and early warning systems begin to go dark. She confirms what they should already know: the Reapers have arrived, destroying major cities and harvesting the population. A Reaper pulse weapon destroys the council chamber and sends Shepard flying. The player takes control of Shepard as she is pulled to her feet by Admiral Anderson, and told to get to the Normandy.
Shepard’s goal in this game is the destruction of the Reapers and the salvation of organic life in the galaxy, but the tasks she must complete to accomplish this goal are quite different from what was asked of the character in previous games. As the person with the most experience and knowledge of the Reapers it falls to her to rally the forces of the different galactic races and prepare a response to the ongoing Reaper invasion. Whereas in the previous games the Reaper threat was always a vague possibility on the horizon, in this game the Reapers are an immediate and present threat to the galaxy.

To complicate things, Cerberus has developed from a shadowy extremist group to an active military force whose plans to try and control the Reapers present an ongoing obstacle to Shepard as she seeks to unite the various galactic factions.

The evolution of the Normandy
In *Mass Effect 3*, Shepard and her crew are once again given command of the Normandy, which serves as the player’s primary base of operations throughout the game. The version of the Normandy available in the third game is the rebuilt, upgraded, version of the ship that Cerberus constructed for Shepard in the second game, retrofitted as an alliance ship once more.
The Normandy in *Mass Effect 1* is a small, experimental ship, built by the Alliance in partnership with the Turian Hierarchy. It employs an experimental stealth system that makes it impossible to detect via standard emissions tracking technologies.
In *Mass Effect 2* the original Normandy is destroyed by the Collectors, and Cerberus builds a new model of the ship that is significantly larger and better armed. When Shepard surrenders herself to the Alliance between the second and third games, this new version of the ship is retrofitted to serve as a command vessel in the Alliance fleet.
The evolution of Shepard's companions

Each game in the series allows the player to import a savegame file from the previous game, thus preserving all of the relevant choices made by the player over the previous games. In *Mass Effect* 2 this was used to modulate certain details of the storyworld: which characters were in positions of political power within the Human Systems Alliance; which members of Shepard’s crew were alive (remember that the player was forced to choose between two characters towards the end of the first game); and which side quests and storylines the player had encountered. In *Mass Effect* 3 there are even more dramatic possibilities as a result of events in *Mass Effect* 2, particularly because it is possible for any and all of Shepard’s crew to die at the end of the second game.

In many cases, the story of *Mass Effect* 3 relies on having a character around from the previous game to fulfill certain roles in the plot: if that character did not survive the second game, then *Mass Effect* 3 introduces a new character who is roughly analogous to the deceased crew member. To help reduce the impact of these possible changes on the game experience, *Mass Effect* 3 only retains a small handful of main companion characters from the first two games, introducing several new characters to round out the
squad. Figure C- 51 shows the complete squad in *Mass Effect 1* (left to right): Ashley Williams, Kaiden Alenko (dead), Liara T'Soni, Urdnot Wrex, Garrus Vakarian, and Tali’Zorah nar Rayya. Of these six characters, only 2 remain playable across all three games: Garrus Vakarian and Tali’Zorah nar Rayya (whose last name changes to indicate the ship which she calls home over the course of the three games).

![Figure C-51](image)

**Figure C-51**  
*The full roster of companions from Mass Effect 1*

The squad in *Mass Effect 2* [Figure C- 52] is much larger, with 12 playable characters including (left to right) Zayeed Massani, Legion, Samara, Tali’Zorah vas Neema, Mordin Solis, Garrus Vakarian, Miranda Lawson, Grunt, Jacob Taylor, Thane Krios, Jack, and Kasumi Goto.

![Figure C-52](image)
Figure C-53 The full roster of companions from Mass Effect 3

With the exception of Garrus and Tali, none of these characters are playable in Mass Effect 3 [Figure C-53], where the squad is comprised of seven characters (left to right): Garrus Vakarian, EDI, Tali'Zorah vas Normandy, Liara T'Soni, Javik, James Vega, and Ashley Williams. This includes four of the original Mass Effect 1 characters and three new characters.

Narratively speaking, these rosters reflect the changing status of Shepard over the three games: in the first game she is a Citadel Spectre, vested with the authority of the Council, but ultimately under their control. In the second game she is truly outside the law, and so her companions are those people who are able to operate in the shadows with her. In the third game, Shepard’s role evolves from that of a fallen soldier – a war criminal stripped of her rank by the Alliance – to that of a diplomat and battle leader, marshalling all of the forces of the galaxy to repel the Reaper threat. In the third game, Shepard must confront the characters from the first game and seek redemption for her actions in the second.

Shepard as war criminal, diplomat, and savior

The roles that the games create for Shepard within the narrative world are significant because these represent identities for the player to inhabit within the games. Shepard undergoes some significant transformations over the course of the Mass Effect 3. When the game opens Shepard is one step away from being court marshalled and imprisoned:
only her actions defending the Citadel and the galaxy from the Reapers have prevented her from being thrown in the brig. When Earth falls to the Reapers, all of this changes: Shepard is reinstated, returned to the Normandy, and tasked with building a galactic alliance to defeat the Reaper threat. This is a very new role for both the player and the character to inhabit, if only because it operates at a scale that was previously unavailable to Shepard. “Shepard the Diplomat” can’t win the war without the unified forces of the entire galaxy behind her, but the history of galactic civilization is fraught with conflicts that need to be resolved or set aside in order to face the Reapers. Shepard becomes the embodiment of humanity’s resolve to survive, and over the course of the game ends up speaking for all sentient life in the galaxy – biological and synthetic – ultimately sacrificing herself to end the Reapers’ cycle of destruction and rebirth.

Additions to the Mass Effect Storyworld
At this stage in the game series, the world is pretty well developed, and so most new material comes in the form of expanding on previous information, and in changes to the status quo.

Leviathan and the Origins of the Reapers

As the main villain in the trilogy, the Reapers have been lurking in the background since the first appearance of Sovereign in Mass Effect 1. However, they have never been an immediate presence in the story world until the opening of Mass Effect 3, and their origins
and motivations have always been shrouded in mystery. In the previous games they worked through intermediaries – first the Geth, and then the Collectors – whereas in this game they are hiding around every corner, dropping troops into the battlefield, attacking settlements, hunting the Normandy through local systems, steadily claiming territory and harvesting entire civilizations. For the first time, the player faces a range of Reaper troops, mostly comprised of harvested and cybernetically modified members of the Galactic community.

In *Mass Effect 3* we finally get something like an explanation for the behavior of the Reapers. The Reapers themselves are millennia old, and are responsible for periodically purging all life in the galaxy every 50,000 years or so. Whenever Shepard encounters a Reaper she is told the same thing: that nothing can stop the harvest and that the cycle must continue. The Reapers are terrifying in their dispassionate implacability: they don’t appear to have any personal stake in the fate of organic life in the galaxy – they’re cosmic janitors doing the dirty job of periodically cleaning up the Milky Way.

We learn that the Reapers are the actual creators of the Citadel and the Mass Relay network, both of which exist to guide the development of organic life along predetermined pathways, so that it may be successfully harvested when it reaches a certain level of civilization and technology. At the core of each Reaper lies a genetic record of the particular species or civilization that was harvested to give birth to it – each Reaper carries with it the legacy of its own harvest. This is the explanation for the Human Reaper Larva that Shepard destroys at the end of *Mass Effect 3*. Reapers have the ability to harvest and repurpose lesser species, and to enslave them through a hypnotic ability known as Indoctrination.

Through an extended DLC sequence called Leviathan Shepard tracks down artifacts and rumors that eventually lead her to discover the existence of an unspeakably ancient apex species: Leviathans. The Leviathans are aquatic, and are the same size as the Reapers. Only a small number of them still exist in hiding, deep within the oceans of uninhabited planets. Leviathans also command a form of Indoctrination, which they have used to elude notice for millennia [Figure C-55].
Back when they ruled the galaxy, the Leviathans created a great artificial intelligence, called the Catalyst, to try and solve an ancient paradox: at some point, every organic society that reached a certain level of sophistication would create synthetic beings, which would eventually – inevitably – lead to war between synthetic and organic civilizations. The solution that the Catalyst reached was the Reapers, which were born out of the first race to be harvested: the Leviathans themselves. The Reapers’ role was to prevent any organic civilization from advancing to the point where they would create the synthetic life forms that would eventually destroy them: instead, the Reapers would harvest every organic civilization at its peak, preserving their knowledge and genetic diversity in Reaper form. When this happened, any pre-technological societies were left untouched, so that organic civilization could recover and even flourish, until the return of the Reapers.

As solutions go, it is not without its problems. Although the response of the broad player community is not the central interest of this dissertation, it bears mentioning that this explanation for the Reapers and its role in the game’s ending resulted in significant debate within the online community following the game’s release. I will discuss this in some detail below when I discuss the controversy surrounding the ending of the series.

**The Crucible**

The central macguffin of *Mass Effect 3* is a device called the Crucible. When Shepard
leaves Earth to seek out help in her fight against the Reapers, the first stop she makes is
at the Prothean ruins on Mars – the very same ruins whose discovery 30 years previously
introduced the human race to the broader galactic community. She reunites with Prothean
expert Liara T’Soni who reveals that she has discovered records of a mysterious Prothean
device: the Crucible. While the workings of the device are unclear, what is clear is that the
Protheans believed that this machine could potentially stop the Reapers, but were unable
to complete it before they were eradicated and harvested. The Crucible plans that the
Protheans were working on were in turn left behind by the previous apex civilization upon
whom the Protheans had built their culture. Every culture managed to add something to
the device before the Reapers destroyed them, resulting in a mysterious super-weapon
that had never been built successfully, and never deployed.

**Figure C-56 The Crucible**

As Shepard pursues her various diplomatic alliances across the galaxy, immense
resources are funneled toward the construction of the Crucible [Figure C- 56], and the
search for the mysterious “Catalyst” needed to activate it. Shepard and her companions
discover a Prothean Virtual Intelligence on the Asari homeworld of Thessia that was
responsible for continuing the Prothean’s “uplift” program after the fall of the empire to the
Reapers. The Prothean VI reveals that the Catalyst is the Citadel itself, and that the
Crucible must be docked with the ancient space station in order to operate. This connects
the weapon into the Mass Relay network, via the relay at the heart of the Citadel (the
Conduit from *Mass Effect 1*). The endgame of *Mass Effect 3* requires that Shepard reach the heavily guarded Citadel, while the fleet maneuvers the Crucible into place.

**The rise of Cerberus as a major villain**

Another significant change to the *Mass Effect 3* storyworld is the rise of Cerberus as a significant threat and secondary villain. Over the course of the game, every step taken by Shepard towards solving the mysteries of the Crucible and defeating the Reapers is opposed by the forces of the Illusive Man. The Illusive Man is convinced that he can find a way to use the Reapers’ own Indoctrination technology against them: that he can control the Reapers rather than destroying them. In pursuit of this goal he commits terrible atrocities, including harvesting war refugees and converting them into Reaper Husks so that he can experiment on them. Cerberus uses a modified form of indoctrination to transform civilians into the soldiers that the group sends against Shepard.

Throughout the game, as Shepard works to unite the races, Cerberus seeks to divide them. The organization attempts to start a war between the Turians and the Krogan by detonating a bomb on the Krogan homeworld. They attempt to gain control of the Citadel and assassinate the Citadel Council, by staging a coup with the help of Donnel Udina, the human councilor.

The Illusive Man sends two assassins to interfere with Shepard over the course of the game. The first is an android construct who poses as a researcher to gain access to the Prothean ruins on Mars. When Shepard captures the construct’s body, EDI is able to reprogram it to serve as a “remote platform” for her own intelligence, which introduces a new member of the squad. The other assassin is the cybernetically enhanced Kai Leng, who defeats Shepard several times over the course of the game and serves as a “mini-boss” in the penultimate fight aboard the Illusive Man’s hidden base. In the game’s climax, when Shepard arrives aboard the Citadel to activate the Crucible, the Illusive Man is waiting for her, and there is a final confrontation that ends with the Illusive Man defeated, and Shepard bleeding to death as the Crucible is activated.

**New Gameplay and Interface Mechanics**

*Mass Effect 3* does not make nearly as many radical changes to the gameplay as *Mass Effect 2* did: many minor elements are refined, but the experience follows naturally from the previous game.
Navigation and nonlinearity

One change to the game is the addition of new, context sensitive, environmental interactions.

Figure C- 57 Shepard is trained to jump across a gap during the Reaper invasion of Earth

In the previous two games, Shepard could duck behind obstacles for cover, and vault over them: she could climb onto ledges, if they were below knee high. She could not jump. In Mass Effect 3, Shepard cannot jump at will, but she can leap over gaps in the environment and jump down from ledges to new areas. She can also climb ladders. These changes impact the design of the game’s environments.

In the previous games the combat environments were mostly linear corridors that occasionally opened up into rooms filled with obstacles. Enemies were scripted to appear ahead of the player, either lying in wait, or spawning in waves. The environments in Mass Effect 3 often have multiple paths through them, often including a “high road” and a “low road”. Enemies appear from all sides, and they move around, often flanking the player or sneaking up from behind. Surviving combat in Mass Effect 3 requires a significant amount of situational awareness, because one cannot simply advance through the level in a linear fashion. Instead, I found myself often running back and forth across levels to find and dispatch new groups of enemies before they could find me.
When the eye symbol appears in the center of the screen, pressing "V" will pan the player's camera toward a point of interest (inset). Characters will often remark on the subject of Shepard's attention. Here, Garrus looks down on his home planet of Palavan from its besieged moon, remarking “That blaze of orange—the big one—that's where I was born.”

Mass Effect 3 introduces an interface mechanic designed to direct the player's attention towards points of interest in the environment. This is a minor change to the game, but it adds some interesting new narrative poetics to the experience, especially when the player is out exploring the storyworld. This kind of “environmental storytelling” incorporates the context of the play into the narrative: characters conversing with Shepard in the background about the events surrounding them creates opportunities for a more complete integration of the narrative and the combat sequences of the game.

**Multiplayer**

Many of the levels for the side quests in Mass Effect 3 are small, self-contained “arenas”, which reflects their dual purpose in the game as single player and multi-player maps. Mass Effect 3 is the first game in the trilogy to incorporate a multi-player mode: an addition that requires some very specific changes to the overall design of the gameplay. Unlike the first two games, which often needed to be paused to slow down combat into manageable chunks, Mass Effect 3 is designed to be completely playable in real-time. This is because synchronous multi-player combat does not support any single player pausing the action. As a result, much more attention has been paid to the timing and targeting elements of
the weapons, and the number of available powers is even further reduced and streamlined.

The multi-player mode of *Mass Effect 3* is a cooperative team-based game in which squads of four players must survive against increasingly difficult waves of enemies while periodically having to complete randomly generated objectives. Some aspects of the multi-player game feed back into the single player game: characters that the player levels up in multi-player can be converted into “war assets” for the single player game, and defeating maps in multi-player increases their “galactic readiness” rating: a metric that is critical to determining the overall military strength of the armies that the player gathers in the single-player game.

Narratively, I struggled to reconcile my experience within the single-player game with the multi-player experience, at least at first. The maps in the multi-player game are spread across different sectors of the galaxy, and the enemies that the players face include Cerberus, the Geth, the Collectors, and the Reapers. When the player levels up a character to “max” in the multi-player game, she can “promote” that character, which resets the classes level to 0, and adds some points to the player’s “effective military strength” (see below). To fit this into the game narrative, one must consider that the battle against the Reapers is an event that is fought across many different fronts. I chose to regard each multiplayer match as a small battle within the context of the larger war. This had the unexpected consequence of making it easier to grapple with the sheer magnitude of the galactic conflict.
New galaxy map and resource acquisition

Figure C-59  Early in the game, only a few systems are under attack by the Reapers

Figure C-60  By the end of the game, the Reaper invasion has advanced across the galaxy

*Mass Effect* 3 scales back and simplifies the game economy, discarding all of the specialized resources and metals from the second game, and instead using the universal “credits” as the sole currency. The game still includes aspects of exploring the galaxy map, but introduces several new elements: because the Reaper invasion is now underway,
many systems are now occupied by Reaper forces, which increases the risk for Shepard when searching for resources.

Searching for resources in *Mass Effect 3* involves “scanning” the immediate area around the Normandy on the Galaxy Map. The player navigates the Normandy around a system, triggering pulses that reveal areas of interest, including destroyed fuel depots, credit caches, and stranded military personnel.

![Figure C-61: Scanning for resources in Mass Effect 3 – the red circle indicates a revealed point of interest](image)

In systems occupied by the Reapers, the player only has a limited number of attempts to scan before the Reapers are alerted to her presence. If the Reapers discover the Normandy, a number of Reaper dreadnoughts emerge from the edges of the system and converge on the ship’s location. The player must evade the angry reapers by escaping via a Mass Relay or by leaving the edges of the system. The Reapers will remain active in a system where they have been alerted to the Normandy’s presence until the player successfully completes some sort of off-ship mission, after which they “reset”. Once the Reapers have been alerted, it becomes almost impossible to continue searching a system. This means that there are a limited number of attempts to scan any given solar system for resources over the course of the game.

Due to the changed nature of Shepard’s mission, the primary resource that the player is
searching for in this game is “War Assets”: materials that can be applied directly to the fight against the Reapers. These may take the form of material resources such as those harvested in the second game, but more often than not they take the form of rescued fleets and military units, or specialist groups who can join the Crucible construction effort.

**Figure C-62** The War Assets interface provides the player with a means of tracking galactic readiness and the various military resources she has been able to marshal.

Within the Normandy, Shepard can access a central command interface that allows the player to track the various War Assets that have been collected [Figure C-62]. Many of these entries are impacted by the choices made by the player over the first two games. A group of operatives rescued in a side quest in the first game might add bonus points to a related entry in the third game. Likewise, sometimes choices lead to diminished assets: if the player chose to save the Citadel Council during the first game, then the strength of the Alliance Fifth Fleet is reduced. The game also tracks a metric known as the “Galactic Readiness Rating”: a multiplier that is applied to the total military strength to determine the “Effective Military Strength” of the player’s fleets. Readiness Rating reflects the player’s participation in what amounts to “tie-in” media that was released alongside *Mass Effect 3*. While the easiest way to raise this number is to participate in the multiplayer game, there is also a mobile game (“*Mass Effect: Infiltrator*”) and an iPad application (“*Mass Effect 3: Datapad*”), both of which can contribute small amounts to the Readiness Rating.

The Effective Military Strength number is the main factor in determining the options
available to the player in the game’s ending, while also impacting how things fare for the galaxy and which characters survive in the epilogue.

**Conclusions to major story arcs**
One of the most satisfying aspects of this game for me was getting to see several major story arcs from the first two games finally resolved.

**The Krogan Genophage**
The development of the Genophage by the Salarians, its distribution by the Turians, and the subsequent decline of the Krogan race are a central presence across the games. In *Mass Effect 1*, Shepard must not only resolve to end Saren’s corrupt Krogan breeding program, but must also talk her Krogan companion Urdnot Wrex into siding with her, even if it means destroying the first real hope of a future for the Krogan Race. In *Mass Effect 2*, Shepard encounters the devastation on Tuchanka first hand, as she assists her new Krogan crew member, Grunt, in the completion of his ceremonial rite-of-passage into adulthood. Perhaps more critically, she must track down Maelon, a rogue Salarian scientist who is performing horrific and deadly experiments on Krogan females in an attempt to try and cure the Genophage. Her crewmate, another Salarian researcher named Mordin Solis, was once involved in a secret effort to “re-calibrate” the Genophage so that it remained effective, keeping the Krogan birth rate low, but not so low as to render the population extinct. Maelon is an ex-student of Mordin’s who is now willing to do anything to undo the damage caused to the Krogan by the Genophage. In my version of the game, I persuaded Mordin to allow Maelon to live, and to preserve the research that had been done towards a Genophage cure.

This sets the stage for the third game. In order to persuade the Turian primarch to contribute his ships to the battle for Earth, Shepard agrees to try and recruit the remaining Krogan clans to defend the Turian homeworld, which is also under attack by the Reapers. The current leader of the Krogan is Shepard’s old friend, Wrex, who says he will only help the Turians if Shepard can persuade the Salarian government to develop and release a cure for the Genophage. Shepard approaches the Salarians about this, and discovers that Mordin Solis is working with the one remaining fertile Krogan female, and Maelon’s preserved data to try and cure the Genophage. Shepard commits to curing the Genophage, over the protests of the Salarian government.
The player is given several opportunities to rethink this decision. The Salarian Dalatrass warns Shepard that curing the Genophage will unleash an unstoppable tide of Krogan that will mean the doom of galactic civilization. She provides Shepard with information that could sabotage the cure, and warns that the Salarians will withdraw their aid from the alliance if Shepard persists in her attempts to distribute the cure. I took the Paragon option and cheerfully ignored this advice.

The expected consequence of these actions came to pass: I traded Salarian support in exchange for Krogan and Turian support. The Krogan have a real future for the first time in many generations, and Wrex vows that they will not squander it. However, there was an unexpected consequence of this decision: Mordin Solis, one of my favorite characters in the game, sacrificed his life in order to distribute the Genophage cure.

**The Quarian/Geth conflict**
The other major story arc that is resolved in this game is the conflict between the Quarians and their Geth creations. More than any other secondary narrative arc in the three games, this storyline explores the central moral themes of the trilogy. It also is one of the narrative arcs whose outcome is most dependent on a large number of consistent actions by the player across all three games. It will figure heavily in my subsequent analysis, and so I will devote a larger amount of time to describing it than I have on other side narratives thus
far. Many of the events that I describe here are variable, in particular when the player reaches *Mass Effect 3*: I will tell this story from the perspective of my Paragon playthrough, but it should be noted that certain changes, such as the possible deaths of central characters at the end of *Mass Effect 2* can profoundly impact the options available to the player here.

In *Mass Effect 1*, the Geth are pawns of the Reapers, who they refer to as “The Old Machines”, and are manipulated into conflict with organic life as part of the first wave of the Reaper invasion. In *Mass Effect 2*, Shepard befriends a Geth platform named Legion, who argues that only a small minority of the Geth allowed themselves to be coopted by the Reapers. The vast majority of the Geth want to be left in peace. He leads Shepard to a space station inhabited by millions of sentient programs – “heretics” that have been programed by the Reapers with a virus that, if spread among the other Geth, will cause all of them to join the Reapers. Legion gives Shepard the option of either destroying the space station (a Renegade option) or of reprogramming the virus to remove the Reaper code and cause the heretics to rejoin the main Geth community (the Paragon option). I chose the Paragon path, and reprogrammed the heretics.

The Geth/Quarian conflict also provides the backdrop for the loyalty mission of Tali, the Quarian engineer who is part of Shepard’s crew in all three games. In *Mass Effect 2*, she is recalled to the Migrant Fleet to stand trial for treason. During her pilgrimage Tali would occasionally send back inactive Geth technology to her father, who was researching new weapons to use against the Geth. When his research vessel becomes overrun with active Geth, Tali is accused of carelessness that endangers the entire fleet. Boarding the infested ship, Shepard and Tali discover that her father had been reactivating Geth in order to experiment upon them, and had lost control of them. They find his body, and records that he had hoped to find a technology that would allow the Quarians to reclaim their homeworld, Rannoch, from the Geth. Tali begs Shepard to hide this information: it would exonerate her, but destroy her father’s memory and drive a wedge between her already politically divided people. As the captain of the ship that Tali serves on, Shepard must defend her at trial: during the trial I chose a paragon option that distracted the Admiralty Board from Tali’s situation, and instead leveraged the political tensions between them to exonerate her.

In *Mass Effect 3* the Quarian political situation has become even more dire, with the anti-
Geth faction gaining enough power to launch an ill-fated assault on the main Geth fleet surrounding Rannoch. Unfortunately for the Quarians, the Reapers have returned, and augmented the Geth with new algorithms that make them more powerful and dangerous than before, and Quarian fleet is fighting a losing battle. Shepard and her crew first disable a large Geth Dreadnought that is broadcasting the Reaper signature, before taking the battle to the Reapers on the Quarian homeworld. There, Shepard is reunited with Legion, who is trying to free the Geth from Reaper control. Shepard interfaces with the Geth Consensus to remove the malicious Reaper code. In doing so, she learns the true history of the Geth/Quarian conflict.

Contrary to the Quarians’ historical records, the Geth did not fire the first shots during the war: a faction of Quarians that feared what Geth sentience might mean declared martial law and began to execute Geth platforms. Many Quarians tried to defend their creations, but were killed in the ensuing conflict. The first Geth to pick up a weapon against “the Creators” did so to defend a number of more vulnerable Geth units. When the war turned against the Quarians, and they fled Rannoch, the Geth choose not to follow. They had successfully defended themselves, and were unwilling to destroy another race, especially the race that had created them. Contained in the records of the Geth consensus is Shepard’s first meeting with Legion: the first time that an organic life-form had agreed to
cooperate with the Geth [Figure C- 64]. The Geth fear that the Quarians will try to exterminate them again, and wish for an opportunity for “reunification” with their creators.

Shepard learns that there is a Reaper base located on Rannoch from which the Geth are being controlled. In order to destroy the base, Shepard must lead a small team on the surface to deploy a targeting laser that will guide an orbital bombardment from the Normandy. As this happens, the Quarian and Geth fleets engage each other. Shepard reaches the Reaper base, but discovers that it is not a base at all, but a Reaper who has been directly controlling the Geth.

![Figure C- 65 Shepard faces down a Reaper](image)

Shepard faces off against the Reaper in combat, using the targeting laser to direct the firepower of the entire orbiting fleet. Upon its destruction, the Geth fleet temporarily shuts down, finally free from the control of the Reapers. Tali argues that this is an opportunity to destroy the Geth once and for all. Legion argues that the Geth do not deserve to die – that it is possible to distribute the upgrades provided by the Reapers to all of the Geth, resulting in true individual sentience for each Geth program, only this time with free will. Tali warns that with the Quarian fleet already attacking, that the upgraded Geth will destroy them if Shepard doesn’t act. Shepard instructs Legion to upload the code to the Geth, and tells Tali to call off the Quarian fleet’s attack, but the commander of the militant faction countermands her order.
Figure C-66  Shepard must have done many things in a very particular way over all three games in order to pass this reputation check and broker a peace between the Quarians and the Geth.

What follows is one of the most difficult and complex reputation checks in all three games. The variables impacting the availability of this choice are so complex that I have chosen to cite the *Mass Effect* Wiki entry, which in turn cites the official guide to *Mass Effect 3*:

“The Reputation check's requirements are complex. First, there are factors which seem to be purely pass/fail; missing even one of them flunks the Reputation check:

- Shepard must have at least four bars of Reputation.
- Tali and Legion must both be present, which requires an imported save from *Mass Effect 2*. If no save was imported, Tali will have been exiled and will not be able to support Shepard with an Admiral's authority, while Legion will not appear at all.
- The mission *Rannoch: Geth Fighter Squadrons* must be completed.

Additionally, there are other factors which build up Shepard's trustworthiness to both parties; if Shepard has not done enough of them, the Commander will not have the groundswell of goodwill needed to moderate a cease-fire. According to the official Prima Games guide, each factor has a certain "point" value, and **at least 5 "points" are necessary** for the cease-fire to occur. These factors are:

- **(+2 points)** Destroying the heretic geth in *Legion: A House Divided*. In shipboard conversation, you can ask Legion about the repercussions of your decision, and it will mention that the absence of the Heretics made the consensus to join the "Old Machines" more difficult to achieve. Geth forces are also considerably weakened without the aid of the Heretics, giving the
Migrant Fleet an edge in the battle and reducing the quarians' overall casualties.

- **(+2 points)** Preventing Tali's exile in *Tali: Treason* without presenting evidence of Admiral Rael'Zorah's experiments on the geth. While it's possible to present the evidence and still be able to broker peace, it adds its own problem in that it makes Tali far less likely to survive the attack on the Collector Base.

- **(+1 point)** Brokering a peace in the Tali/Legion loyalty argument. If the player did not have sufficient Paragon/Renegade points at that time, loyalty of either Tali or Legion would have been lost. In that case -- even if loyalty had been regained later -- this "point" will not count towards the five needed to pass the Reputation check (and broker the ceasefire).

- **(+1 point)** Completing *Rannoch: Admiral Koris*.

- **(+1 point)** Saving Admiral Koris during *Rannoch: Admiral Koris*.” (Various, 2014)

It is worth noting here that with the exception of the choice to destroy the Heretic Geth in *Mass Effect 2* most elements of this reputation check derive from Paragon choices. Narratively this makes sense: brokering a peace between ancient enemies is a fundamentally Paragon style action within *Mass Effect*'s mythology.

*Figure C- 67*  
Shepard: "The geth don't want to fight you. If you can believe that for just one minute, Upon passing the reputation check and selecting "Rally the Fleet" Shepard manages to talk the Quarians into backing down. Legion continues his upload to the Geth consensus, sacrificing his own identity to distribute the upgrades across his entire race. As Shepard
and Tali mourn the loss of their companion the newly independent Geth offer to aid the Quarians in resettling their homeworld, and to provide assistance in the fight against the Reapers.

**The Reaper War and the ending controversy**

When *Mass Effect 3* was initially released, there was a significant fan outcry over the ending. Many players were dissatisfied with an ending that they found confusing: an ending that left a number of stories unresolved, and many mysteries unexplained. Other players were vocal in their defense of the ending. In partial response to this Bioware released an “extended cut” of the game’s ending three months after the game launched, as a free DLC pack. The new version addressed many of the central complaints raised within the community, while still retaining several (I think important) ambiguities. When I first played the game, the extended cut had already been released, but I chose to not download it until I could finish the game with the original ending, in order to better understand the controversy. Once I had done this, I went back and replayed the ending several times with the new content added. In the following discussion I will describe the ending as presented in the extended cut, as this is considered to be the canonical ending of the series.

As the conflict in *Mass Effect 3* draws to a head, Shepard has gathered together an unprecedented fleet from all cultures and races to oppose the Reapers. The Crucible has been built, and the missing component – the Catalyst – has been identified as the Citadel itself. The Reapers capture the Citadel and relocate it into orbit around Earth, where it serves as a processing facility for the harvest of the human population. The arms of the Citadel have been closed, sealing the space station off from any attacks. A *Mass Effect* beam connects the Citadel to Earth – Shepard and her team must join up with the resistance forces on Earth and fight across Reaper infested terrain to reach this Conduit so that they can board the Citadel and open its arms, allowing the Crucible to dock with the station. As Shepard and her companions race for the Conduit, Harbinger – the leader of the Reapers – descends on them: Shepard’s companions are wounded and must withdraw to the Normandy [Error! Reference source not found.], leaving Shepard to struggle to the Conduit alone.
Figure C-68  Shepard bids farewell to her lover: “You mean everything to me, Liara. You always will.” This scene does not appear in the original ending, where the fate of Shepard’s team on Earth was left unknown.

Figure C-69  Shepard fights her way to the Conduit

In a scene that directly parallels the race for the Conduit from the end of Mass Effect 1, a badly injured Shepard staggers towards the glowing beam of light, dispatching a few Reaper ground troops until she is finally transported to the Citadel [Figure C-69].
There, she discovers that her old captain – Anderson – has also survived, and has arrived slightly before her. They both converge on a docking platform at the center of the Citadel, only to find the Illusive Man waiting for them. He has implanted himself with Reaper technology that allows him to take control of both Shepard and Anderson’s bodies. Shepard and Anderson try to convince him that he has been indoctrinated by the Reapers, but he refuses to listen. He forces Shepard to shoot Anderson, to prove his powers, and argues that he can use the Crucible to control the Reapers as well. Shepard manages to regain control of herself and shoots the Illusive Man in the back. Staggering to the Citadel controls, she opens the arms, and allows the Crucible to dock. Shepard then collapses to the ground and passes out.

At first nothing happens, but then the platform that Shepard is on rises up to dock with the Crucible. Shepard awakens to find herself confronted with a hologram of a young boy – a character that she encountered, but was unable to save during the original Reaper assault on Earth at the beginning of the game. This same young boy has haunted Shepard’s dreams over the course of the game, in a series of increasingly troubling nightmares. The hologram introduces itself as the Catalyst: the original AI created by the Leviathans millennia ago to solve the problem of synthetic and organic life forms destroying each other. The Reapers, he explains, are his solution to this problem of chaos. Synthetics, he argues, will always surpass their creators, leading to war and destruction: if the Reapers did not step in periodically to harvest and preserve all advanced life forms, then eventually organics and synthetics would destroy each-other. The Reapers are a means of returning balance to the universe.

25 If the player has made some very particular choices over all the games, then it is possible to persuade the Illusive Man that he has been indoctrinated, at which point he will commit suicide, however I’ve never managed to accomplish this in any of my playthroughs: this is possibly the most difficult Reputation check in all three games.
Shepard objects to his solution, and Catalyst agrees. Shepard is the first organic being to ever reach him, and the representative for the first epoch to successfully build and deploy the Crucible: a power supply that, when combined with the Citadel and the mass relay network, has the power to alter the variables of the equation that he has been balancing for millennia. The Catalyst offers Shepard three choices:

1. **Destruction:** She can destroy all synthetic life in the galaxy – the Reapers, the Geth, even EDI will die, but organic life will survive. Doing so will also kill Shepard, who is partially synthetic thanks to being revived by Cerberus in the second game. The Catalyst warns that the reprieve will be only temporary. Eventually organics will create synthetic life again, and the cycle will begin again, only without the Reapers to intervene.

2. **Control:** She can take control of the Reapers, sacrificing her own life to live on as a consciousness directing the Reapers. The Catalyst admits that the Illusive Man was correct, but reveals that he could never have taken control of the Reapers because he was already indoctrinated.

3. **Synthesis:** The final option would be for Shepard to use her own biological matter as a template for rewriting the DNA of all life in the galaxy – synthetic and organic – to combine the strengths of both into a new hybrid form. Shepard would, once again, not survive, but the Catalyst argues that now that the possibility exists it is the only correct solutions.

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26 The number of choices available here depends on how high of an Effective Military Strength rating the player has managed to obtain before this mission. Low EMS rating games only have one option: Destruction.
A fourth unspoken choice exists – one which is only available in the extended cut of the ending – to reject all three choices and refuse to play into the Catalyst’s twisted logic. If the player does this, the Reapers complete their harvest of the galaxy, everyone dies, and the cycle begins again.

Given how much time and effort I had put into building a version of Commander Shepard that sought reconciliation at any cost, I had no qualms about choosing the Synthesis option. Shepard throws herself into the heart of the Catalyst, where she is broken down and then “disseminated” across the galaxy via a green pulse of energy.

Across the galaxy the fighting stops, the Reapers withdraw, and the war ceases. Aboard the Normandy, Shepard’s crew escapes from the energy pulse through the Charon relay, and the Normandy crash-lands on an unknown planet. In voice-over EDI narrates the conclusion, over scenes of rebuilding:

“I am alive.

All of us, synthetic and organic, have been changed. The war is over, and the Reapers are helping to rebuild. Where once they threatened us with extinction they now bring us the collective knowledge of the cultures that came before. As a galaxy, we can now live the lives we have wished for, taking our first steps into a new and wonderful future where organics and synthetics can coexist peacefully. With peace across the galaxy and with unlimited access to knowledge to recover...
the greatness that was lost and surpass it. We will reclaim our worlds…and the
stars. As the line between synthetic and organic disappears, we may transcend
mortality itself to reach a level of existence I cannot even imagine. And we will
remember that this chance for a new life did not come without cost. No matter how
far we advance, we will remember the sacrifices of those who made it possible.
And we will remember Shepard.

I am alive, and I am not alone.”

--EDI’s monologue at the end of Mass Effect 3 (BioWare, 2012)

Figure C- 72 Liara places Shepard's name on the Normandy's memorial wall during the epilogue

The final scene before the credits is of Shepard’s companions mourning her, before the
Normandy – repaired – flies off into the future.

Citadel DLC and a proper send off

Although the ending of the main story is very definitive, one final major piece of DLC was
released for Mass Effect 3. The Citadel DLC was released in March of 2013 and, in many
meaningful ways, represents the goodbye that the characters never got to say to each
other. The expansion takes place before the final assault on Earth, and includes a number
of new locations and missions set on the Citadel itself.

The central villain of the Citadel DLC is a clone of Commander Shepard herself, created
by Cerberus as a “back-up” in case the first one needed any spare organs or body parts.
Awakened after Shepard had been imprisoned for her role in the destruction of the
Batarians colony at the end of the game, the Clone has been scheming to take over
Shepard’s life and her ship.

Figure C- 73  Perhaps the best Paragon/Renegade dialogue choice in all three games.  
Shepard: “I will end you.” vs. “I will end you painfully.”

The resulting conflict is at once surreal, personal, and vaguely ridiculous. Although there is a central conflict and mystery that must be solved, the true import of this content is that it brings together all of the surviving characters from all three games and provides them with extensive opportunities to interact with each-other.

After Shepard and her companions defeat the Clone, there is an extended period of exploration in a new commercial district of the Citadel, culminating in an extended “House Party” sequence in which Shepard and all of her companions blow off steam, get drunk, and generally just hang out together one final time before the final mission. The Citadel DLC highlights the importance of the character relationships in the series, providing extended opportunities for banter, conversation, romance, and humor.
Compared to *Mass Effect 2*, *Mass Effect 3* is relatively humorless: the Reaper invasion provides a grim backdrop against which to set the final game. The Citadel DLC makes up for this, through extended comedy sequences: something that very few games have done successfully [Figure C- 74]. Although I enjoyed the actual ending of the game quite a bit, the Citadel DLC gave me a sense of closure that I hadn’t realized I was missing until it was over, and it includes some of the best examples of backleading and scripting in any of the three games.
Appendix D: Reference Materials Used During Close Reading

I employed a number of guides, resources, and other reference materials to help with my close reading process. My goal with this material was to make certain that I had completed each game as fully as possible. These materials represent significant effort within the player community to document and map the boundaries of these games.
Figure D-1  A guide to all the hidden items in Mass Effect 1 (Created by Alex Krasny http://virtualalex.deviantart.com/art/Mass-Effect-Galaxy-Item-Map-260041839)
Figure D-2  A guide to the hidden missions in Mass Effect 2 (Created by Alex Krasny http://virtualalex.deviantart.com/art/Mass-Effect-2-N7-Missions-Analysis-278894569)
Figure D- 3  A guide to all the hidden war assets in Mass Effect 3 (Created by Alex Krasny http://virtualalex.deviantart.com/art/Mass-Effect-3-War-Assets-Scanning-Guide-290013955)
Figure D- 4 The Game Informer guide to saving the entire party at the end of Mass Effect 2 (Created by Joe Juba