

Mass Effect 2: A Case Study in the Design of Game Narrative

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Abstract

Digital games have matured substantially as a narrative medium in the last decade. However, there is still much work to be done to more fully understand the poetics of story-based-games. Game narrative remains an important issue with significant cultural, economic and scholarly implications. In this article, we undertake a critical analysis of the design of narrative within *Mass Effect 2*: a game whose narrative is highly regarded in both scholarly and vernacular communities. We follow the classic humanities methodology of “close-reading”: the detailed observation, deconstruction, and analysis of a text. Our close-reading employs a critical framework from our previous work to isolate and highlight the central narrative design parameters within digital games. This framework is grounded in the scholarly discourse around games and narrative, and has been tested and revised in the process of close-reading and analyzing contemporary games. The narrative design parameters we examine are character, storyworld, narrativized interface, emotion, and plot coherence. Our analysis uses these parameters to explicate a series of design decisions for the effective creation of narrative experience in *Mass Effect 2*, and by extension, for game narratives in general. We also expand our previous methodology through a focused “edge-case” strategy for exploring the limits of character, action, and story in the game. Finally, we position our analysis of *Mass Effect 2* within contemporary discourses of “bounded agency”, and explore how the game negotiates the tension between player-expression, and narrative inevitability to create opportunities for sophisticated narrative poetics including tragedy and sacrifice.

Keywords

game narrative, interactive narrative, game design, narrative, close reading, poetics

Introduction

Narrative in digital games has made great advances over the past decade; however, it remains a challenging design problem with significant cultural, economic, and scholarly implications. In spite of ongoing improvement in the technology of digital games, the poetics of videogame narratives remain in an early state, especially when compared with more mature and sophisticated narrative forms such as cinema and literature. To develop the digital game into a richer narrative platform, a rigorous understanding of the specific poetics of narrative within the medium is necessary. This process can be accelerated through the critical analysis of the most effective manifestations of narrative within exemplary contemporary games (Jenkins, 2005).

In this article, we undertake such an analysis, directing our attention at the narrative poetics of *Mass Effect 2*: a game that is widely considered to be an excellent example of contemporary game narratives by both the scholarly and vernacular communities (Cowan, 2010; Jørgensen, 2010; McLean, 2011; Metacritic, 2010). The process we follow is

the classic humanities methodology of “close-reading”—the detailed observation, deconstruction, and analysis of a text. To focus on this analysis, we use a critical framework from our previous work designed to highlight and isolate the critical narrative design parameters within digital games (Bizzocchi, 2007). The framework adds specificity and rigor to the description, analysis, and understanding of the design of game narrative. This framework is grounded in the scholarly discourse around games and narrative and is itself tested and revised in the process of close-reading and analyzing contemporary games. The narrative design parameters we examine are character, storyworld, narrativized interface, emotion, and plot coherence.

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Such an analysis provides a detailed understanding of the narrative poetics of *Mass Effect 2*. Additionally, such an analysis is part of a hermeneutic process of scholarly criticism (Bizzocchi & Tanenbaum, 2011; Carr, 2009; Gadamer, 2006) with results that go beyond the individual game. We argue that our close reading in fact serves two distinct scholarly functions. First, the reading provides insight into the design of narrative within *Mass Effect 2* and, by implication, the design of narrative in other electronic games. Second, the reading also provides insight into our own methodology and analytical perspective. This close reading process expanded our original framework, identifying and applying a set of additional design directions subsumed within the original framework. This improved articulation of the analytical framework represents an advance in the comprehensive understanding of game narrative as a generalized design practice. It also illustrates the reflexive and hermeneutic character of our methodology and its evolving analytical framework.

Games and Narrative Context

Narrative is a pervasive and powerful human phenomenon, with manifestations in all aspects of our lives: personal, social, cultural, and economic (Polkinghorne, 1988). Like all contemporary cultural phenomena, the range of narrative manifestations is being steadily influenced by the ongoing implications of computation and networking (Mateas & Sengers, 1999). In this regard, interactive narrative may well be the “holy grail” of new media research and development. However, it represents a significant design challenge. The game studies and interactive narrative research communities have long held that there is a contradiction between interactivity and narrative: between the active exercise of choice and the classic surrender to the pleasure of story. This contradiction is worth addressing—the associated stakes are high across all vectors: intellectual, creative, cultural, and economic. The stakes are particularly high in the digital games sector as the medium evolves and the demands on game narrative increase.

There are at least two formulations of this potential contradiction. The first is based on the moment-by-moment experience of the reader and his/her ability to fully sustain “the willing suspension of disbelief.” The assumption here is that the exercise of choice may, in and of itself, interfere with the pleasure of story. Stopping the flow of a narrative to participate forces the reader to reflect on the mediated nature of the experience, a form of *hypermediation* consistent with Bolter and Grusin’s (1999) theories of remediation. We have argued that any potential contradiction can be minimized through two design strategies. The first was the infusion of a broad “narrative texture” throughout the detailed design of the interactive work, and the second was the incorporation of narrativity within the design of the interface—the focus of interactive choice (Bizzocchi, 2001; Bizzocchi & Woodbury, 2004). We

continue to agree with this formulation and are pleased to note the ability of increasingly narrativized interface design to more completely address this problem (Bizzocchi, Lin, & Tanenbaum, 2011). Furthermore, our adoption of an analytical framework that includes character, storyworld, and emotion supports the explicit recognition of the various ways a “narrative texture” can be incorporated throughout the design and across the experience of a game (Bizzocchi, 2007).

A second (and more troubling) potential for narrative contradiction seems to be rooted in the idea that players of games are primarily interested in asserting their own authorial vision over plot decisions and the outcome of the story. If accurate, such a conception is at odds with the goals of the storyteller, who needs events to fit together in a coherent manner. In our previous work we have undertaken to build a more nuanced understanding of the relationship between the desires of the interacto and the demands of the story in order to better negotiate this proposed contradiction. We have argued that it is counterproductive to treat players as irrational forces for chaos within games out to only satisfy their own authorial desires (J. Tanenbaum & Tanenbaum, 2008). Instead, we have described the pleasures of *bounded agency* by exploring situations in games which encourage and reward players for “playing along” with the narrative (K. Tanenbaum & Tanenbaum, 2010). One of our primary contentions is that there is a pleasure to be found in *participating* in a digital narrative that is not about authoring an outcome but is instead about submitting to the story that the author wants to tell: a “readerly” pleasure (J. Tanenbaum, 2011). From this perspective, the extent to which a player can change (author) the outcome of an interactive story is less interesting than the channels along which the player participates and the negotiation between the player’s desires and the modes of participation afforded by the system.

We do need to make clear the boundaries to our claim about the importance of narrative in game design and gameplay. We are not claiming that games are primarily vehicles for narrative and storytelling. Nor are we claiming that narrative is of critical importance in all games. Neither of these is true. The core pleasure of most gameplay is probably to be found in the winning and losing and the associated state of “flow” engendered by the combination of challenge and performance (Csikszentmihalyi, 1990). Other researchers point to the sensory pleasures of modern game platforms, appealing to our sense of spectacle—effectively acting as a parallel to film’s long-standing “cinema of attractions” (Ermi & Mäyrä, 2005; Gunning, 1990; MacTavish, 2002). Indeed, some very successful electronic games (e.g., *Tetris*) have no narrative component at all. However, we do maintain that for many games, narrative adds to the pleasure of the game experience in significant and powerful ways. Our position—that a more robust understanding of the poetics of narrative in games will greatly advance the medium—is consistent with much current games scholarship (Jenkins, 2004; Juul, 2005; Pearce, 2004; Salen & Zimmerman, 2004; Wardrip-Fruin & Harrigan, 2004).

Narrative expression within games manifests in a variety of forms, ranging from carefully crafted game storylines (e.g., *Bioshock* [2K Games, 2007] or *Metal Gear Solid* [Kojima Productions, 2008]) to games that deemphasize pre-authored narrative content, instead focusing on providing the player with a toolbox of narrative possibilities from which narratives can be built (e.g., *The Sims* [Maxis, 2000] or *Fable II* [Lionhead Studios, 2008]). This range of different narrative manifestations within the medium highlights the heterogeneity of the phenomenon and suggests that there will be no single solution to the challenges facing interactive storytellers, game narrative theorists, and game designers. The challenge of interactive narrative will be solved not through the blinding flash of a single brilliant work, but incrementally, over decades, across a variety of separate fronts. We contend that it is through extended communities of practice that the future of interactive narrative will be born and argue that careful examination of narrative games emerging from these communities can yield deep insight into the development of the medium. To this end, we have undertaken a close reading of *Mass Effect 2* (BioWare, 2010).

Close Reading Methodology

The methodology followed in this article is the classic humanities methodology of “close reading.” Close reading is the detailed observation of a work, based on immersion into the piece sustained over repeated viewing, supplemented by the systematic notation of relevant details, leading to an explication and higher order analysis of the work.

A close reading can be carried out from any one of a variety of theoretical perspectives: aesthetic, cultural, or sociopolitical. Our theoretical perspective is based in aesthetics—or to be more precise—“poetics.” Poetics derives from the Greek *poeisis*, or “active making” (Bordwell, 2008). “Poetics” refers to the design decisions instantiated within an artifact, and in a broader sense, the design channels or design principles commonly used within a medium. Some of the design channels for cinema, for example, are editing, or cinematography, or sound. Design principles from cinema would include “cutting on action.” Both design channels and design principles are within the domain of poetics. Our version of close reading can be seen as a form of textual analysis whose purpose is to uncover the design decisions manifest in representative artifact, and in the process to understand the effects of the design on the experience. Bordwell (2008) makes a strong claim that the textual analysis of poetics is a profoundly empirical activity. Since it is deeply founded in direct observation of the work in question, the analysis is open to review and discussion by other colleagues. We are mirroring Aristotle’s original *Poetics* in this regard. Aristotle “reverse-engineered” and explicated the design parameters of classic Greek tragedy based on his observations of exemplary works within the genre (Aristotle, 1951). Our own close reading is intended to describe, analyze, and understand the creative decisions which went into the design

of narrative within *Mass Effect 2*. Our broader goal is to extend the observations of this particular work into understandings of the medium and genre within which the work is situated. Jenkins cites Gilbert Seldes’s critical work on popular genres from the 1950s and maintains that critical analysis of an emergent art form consolidates and accelerates its growth as a fully expressive medium (Jenkins, 2005).

Our approach to close reading is rooted in classical hermeneutic techniques (Gadamer, 2006) and more recent work on textual analysis in games (Carr, 2009; Carr, Burn, Schott, & Buckingham, 2003). We have articulated this methodology in previous work (Bizzocchi & Tanenbaum, 2011), wherein we specifically address the challenges incurred in adapting a methodology from the humanities into the realm of games. In this article, we show how the close reading process can both apply and refine a framework of analytical lenses.

An Analytical Framework

The focus of our close reading is the design of narrative and narrativity within *Mass Effect 2*. We take a broad view of narrative—reflecting the many aspects of story and storytelling that build the entire game narrative experience. We have identified several design parameters that we believe are useful for the incorporation of narrative and “narrativity” within the game: the narrative arc, storyworld, character, emotion, and the narrativized interface (Bizzocchi, 2007). Collectively, these parameters form our analytical framework. The framework’s components are recognized critical perspectives—each is grounded in the literature around games studies. Their first function is observational—to focus our initial observations of a complex phenomenon. We also believe that a consistent initial framework not only helps objectify and organize our observations but also supports summative analysis—the “unriddling” of these observations into justifiable conclusions (Alasuutari, 1995). This framework is a dynamic construct. Its utility is tested in its ability to provide significant and defensible results in the analysis of individual games (and in comparisons between games). As it is tested in the review of various games, our framework will be subject to refinement and modification. This process is therefore iterative and ongoing—the revised framework will be further modified in the process of future game analyses.

Narrative arc. Most definitions of narrative include the concept of plot coherence—the logical sequencing of narrative events in time and space (Bordwell & Thompson, 2004; Marie-Laure Ryan, 2006; Miller, 1995). The completely defined and fully controlled narrative arc of traditional forms such as cinema or the novel is denied in interactive narrative forms such as electronic games. However, within most electronic games there are other manifestations of the narrative arc—sequences of coherent narrative progression—found at various levels of scale. The player’s progress through game levels is one manifestation of a modified overall arc. Within that overall path, a player engages in a series of subsidiary

narrative arcs down to and including “micronarratives”—miniature narrative arcs, each with its own narrative progression and cohesion (Jenkins, 2004).

Storyworld. The design of the game world itself is in part a narrative act—it forms an active vehicle for the treatment of time and space in both the gameplay and the game’s narrative progression (Wei, Bizzocchi, & Calvert, 2010). Salen and Zimmerman (2004) refer to the game world as a narrativized “space of possibilities.” Other game scholars frame the electronic world as a narrative vehicle in its own right (Juul, 2005)—an active storyworld that instantiates narrative artifacts and processes (Jenkins, 2004).

Character. The design of *character* in an interactive context is a critical challenge for game narrative. Robust game characters need to combine effective visual design, goal-oriented behavior, and an expression of an underlying psychology that gives the character consistency and depth (Isbister, 2006). This character depth and consistency are necessary to support the processes (recognition, alignment, allegiance) of identification with character and engagement with the narrative (Smith, 1995).

Emotion. Identification with believable characters is one of the keys to designing games that support empathic emotion. Crawford and other game scholars have long maintained that elicitation of emotion would form one of the tests for whether games have evolved into an art form in their own right (Crawford, 1982; MIT Games Conference, 2000). Perron sees emotion as central to contemporary game experience and separates the simpler gameplay emotions connected with winning/losing from the more complex and narratively based “fiction” or “witness” emotions (Perron, 2005). To fully support narrative emotions in games, one needs to excel in a variety of directions, including character visual design, character behavior, storyworld design, dialogue, and plot development (Freeman, 2004). Game music plays a strong role in supporting a player’s emotional responses (Livingstone & Brown, 2005).

Narrativized interface. The final vector in the framework is the narrativized interface. This design strategy instantiates narrativity at the focus of the interactive process, directly supporting a relationship between interactive decision making and the pleasure of story (Bizzocchi, 2001; Bizzocchi et al., 2011; Lin, 2007). The development of a new generation of gestural and embodied game interface devices has expanded the impact of the game experience in several dimensions—allowing the player to perform embodied character and enhance the direct perception of a rich storyworld (Bizzocchi et al., 2011; Lin, 2007; J. Tanenbaum & Bizzocchi, 2009). In another interface direction, work on semantics and vocal interaction using natural language processing allows a more natural interaction with the game and a more fluid enhancement of game narrative (Cavazza, Charles, & Mead, 2002). These developments bring us closer to Murray’s extension of Coleridge’s dictum—the “active creation of belief” (Murray, 1997).

The Close Reading Process in Practice

During a close reading, the scholar oscillates between two states. The first is an immersion within the experience of the game, undergoing the pleasures and frustrations of the unfolding gameplay. However, it is also necessary that the scholarly reader objectify the experience of the game, in order to see more clearly the design decisions that support the experience. We relied on several strategies to reconcile our immersive experience with accuracy and objectification of results: multiple playthroughs, a summative joint playthrough with breaks for shared discussion, the use of intensive in-process notetaking and screenshots, and detailed review and analysis when the playthroughs were complete.

The multiple playthroughs allowed us to adopt very different stances toward the characters and the game strategy. In *Mass Effect 2*, the primary valences for differentiation across playings are the ethical trajectory of the main character—Commander Shepard—and his or her character class. Character gender is a third significant source of variation, and although it has no systemic implications (unlike the other two) it *does* have substantial impact on the experience of the narrative. This is due in large part to the nuanced performances of the voice actors playing Shepard. In our various playings of the game, we explored a number of permutations of character gender, personality, and class abilities, which had implications for our perception of the narrative, and for our experience of the game’s combat.

During the joint playing of the game, the authors took extensive notes: one of us would annotate the play while the other operated the controller. Although only one author could control the game at a time, we very quickly made joint decisions about conversations and strategy and periodically stopped to discuss our experiences as they pertained to the dimensions of the narrative framework. Our ongoing dialogue during play resembled many “think-aloud” protocols commonly used in user experience testing, although it was not formally construed as such. We undertook to complete the game as swiftly as possible during our joint playthrough, and we enlisted the aid of a number of online walkthroughs and guides to keep ourselves from straying into the expansive universe of side quests and downloadable content available in the game.

The result of this process was 5 days of simultaneous play and discussion, 55 pages of hand-written notes, several hundred screenshots of representative gameplay/narrative moments, and a few videos of key narrative passages. We followed this data-gathering phase with an analysis period in which we collaboratively reviewed our notes and our insights through the lens of each of the categories in our analytical framework.

Mass Effect 2

Overview of Mass Effect 2

Mass Effect 2 is widely considered to be an excellent example of contemporary game narratives by both the scholarly and

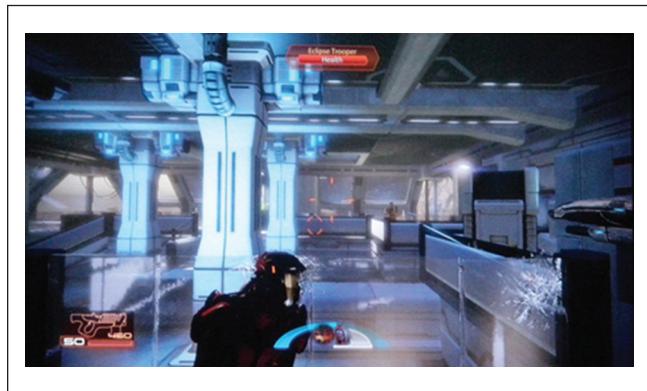


Figure 1. Combat in *Mass Effect 2*

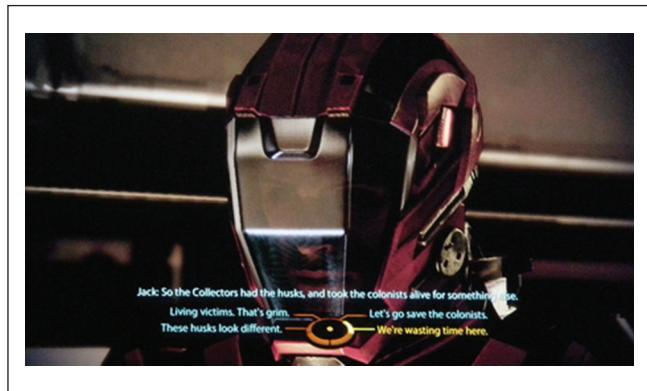


Figure 2. The *Mass Effect 2* dialogue wheel

vernacular communities (Cowan, 2010; Jørgensen, 2010; McLean, 2011; Metacritic, 2010). The game partakes of some classic tropes from the Space Opera genre of Science Fiction, set in a far future in which humanity is the youngest of many spacefaring civilizations, all of whom are threatened by an ancient race of sentient starships known as Reapers. The player controls Commander Shepard, a human hero who has already won a significant victory over the Reapers (during *Mass Effect 1*), who is gathering a team of alien and human scientists, soldiers, technicians, and “biotics” (who wield powerful psychic powers) to investigate a new threat to human colonies. There are two primary forms of gameplay: extended conversation sequences and linear combat missions in which the player controls Shepard and directs the actions of two additional squad members in a third-person shooter style game.

Mass Effect 2 employs a “cover” mechanic in which the player must position the characters behind crates, or into doorways while laying down gunfire and deploying special abilities against groups of enemies (Figure 1). In conversations, rather than select a specific phrase for Shepard to utter, players are given several dialogue “topics” that indicate the general tenor of the conversational choice.

The interface for these choices is known as the dialogue wheel (Figure 2). The rest of a player’s time is spent

exploring the game’s environments or scouting through the galaxy for resources and side-quests. It is, however, in the character interactions that the bulk of the game’s narrative plays out, and it is here that we begin our analysis.

Character. *Mass Effect 2* is notable for the diversity of characters inhabiting the world, from the random nonplayer characters (NPCs) conversing in the environment, to the minor characters encountered in missions, to the more fully fleshed out members of Shepard’s squad and crew. Of the characters in the game, there is a significant and categorical distinction between Shepard, who the player is invited to perform directly, and the NPCs, who inhabit the world. In particular, these two categories of character do very different “work” in the manifestation of narrative within the game.

Shepard exists in dialogue with the player: unlike many game protagonists, who are designed to be empty vessels for the player to project his or her identity into, Shepard has a fully formed identity that is independent of the player. There is a core of character traits, values, and design decisions that comprise Shepard, and which are unchanging regardless of how the player chooses to interact with Shepard. This allows the designers to make strong statements about the values and ideals that frame the narrative world that the player experiences, via the vessel of Shepard. At the same time, however, the specific personality traits of Shepard are mutable: the player interacts with the character at the level of *attitude* rather than *identity*. This is done through the particular grammar of the dialogue wheel, which reflects several “attitudinal vectors.” The player may choose to act the “Paragon,” in which Shepard relates to the world through a lens of nobility, or the player may take the “Renegade” route, in which Shepard takes a more vicious and pragmatic approach to problems. A third “neutral” option is often also provided. All these attitudes lead the player down the same narrative path, but they inflect and nuance the experience of Shepard in profound ways. Our play-throughs allowed us opportunities to experience a range of different possible Shepards including “Kaylee Shepard,” a paragon of the utmost virtue; Richard “Dick” Shepard, a vicious but pragmatic renegade; and Adrian Shepard, a suicidal nihilist (our shared character, played for speed rather than survivability; Figure 3).

Each of these versions of Shepard led to somewhat different variations on the character’s trajectory through the game; however, more significant was the way in which each version of the character evoked very different personal narratives for who the character was and what he or she was fighting for. We imagined Kaylee as the prototypical straight shooter: driven, purposeful, and insistent on the rightness of her quest and mission. Kaylee Shepard was a relentless force for good, a diplomat, and a nurturer who took on all the problems of her crew and sought the good in everyone. Richard Shepard, by comparison, would just as soon shoot someone as talk with them, at least when his mission was at stake. Richard knew that to win the fight, hard choices had to be made, and that pretending to be nice would not save the

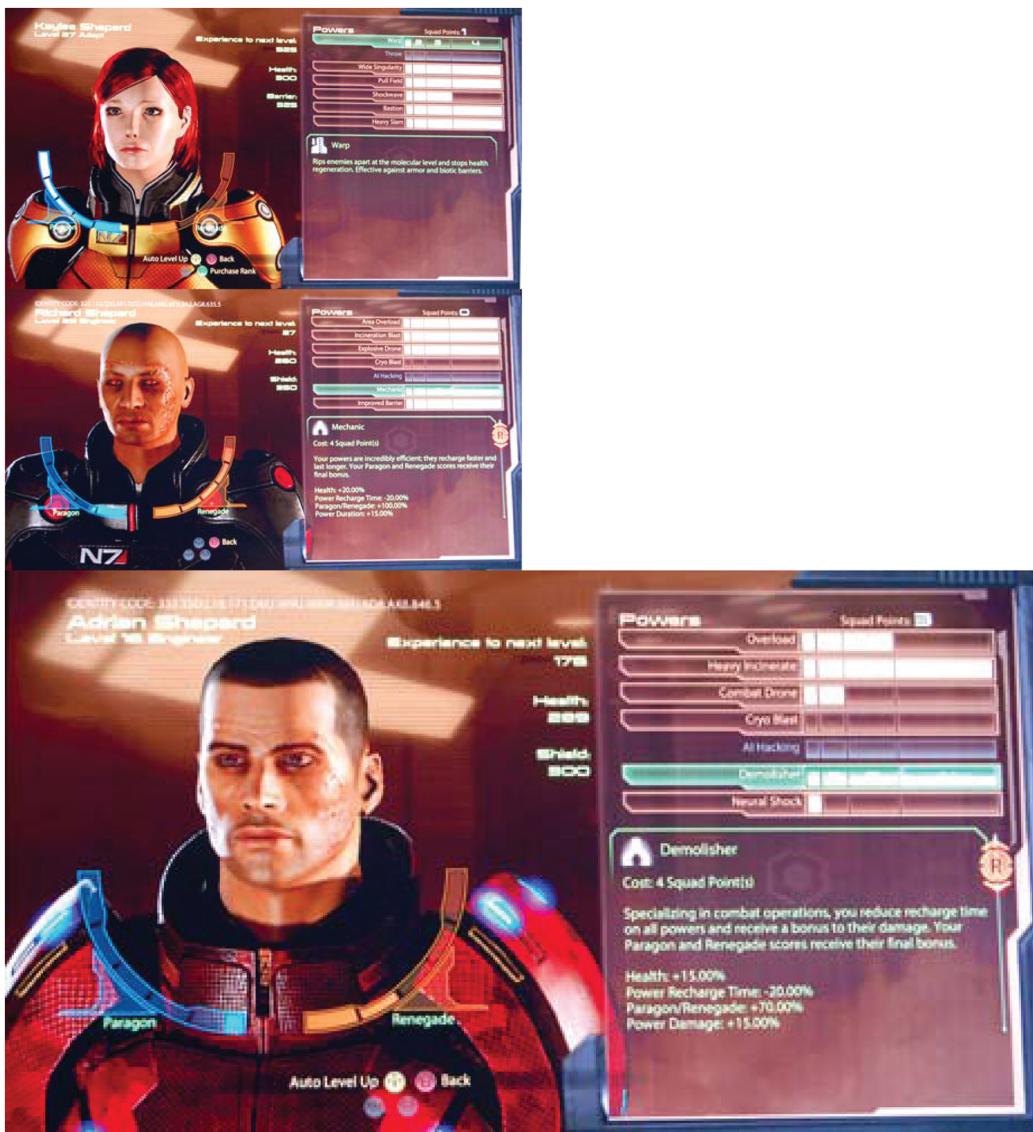


Figure 3. Portraits of three different versions of Commander Shepard
Note. Clockwise from top left: Three Shepards: "Kaylee," "Dick," and "Adrian" Shepard.



Figure 4. Adrian Shepard throws an enemy off of a skyscraper

galaxy. At the same time, he was fiercely protective of his crew: he knew that if they were not 100% committed to the mission they would be a liability, so he went out of his way to resolve any conflicts they were dealing with.

We adopted an unusual strategy for Adrian Shepard—our final iteration of the character and the gameplay, which led to a very different development of character. We had heard rumors that it was actually possible to kill of Shepard at the end of the game, but that it required a systematic refusal to invest in survival from the beginning. We adopted a “win the war or die trying” attitude to the game and story: a form of sociopathic nihilism in which nothing and no one mattered except defeating the Reapers. Adrian Shepard, as a result, was not a beloved commander. His crew was not loyal, and he had

a bad habit of leaving tragedy in his wake. Any altruistic acts from Adrian Shepard were happy accidents, performed in passing while he barreled recklessly toward his destiny with no regard for his own safety or that of others (see Figure 4). At the end, we achieved our goal, with Shepard heroically sacrificing his life for the galaxy. This playing of the game allowed us to experience something that very few games allow: tragedy and catharsis—higher order narrative outcomes explicitly identified in Aristotle's (1951) original *Poetics*.

It bears mentioning that conversation choices were not the sole contributors to our personal narratives for Shepard: play-styles and tactical choices also inflected the character. Adrian Shepard, for instance, was an engineer—a character class ill equipped to deal with enemies at close range—which led us to frequently choose the character of Grunt to accompany on us on missions to watch Shepard's back. Over time we grew to imagine Adrian as a “hands-off” fighter, and we developed a strong sense of camaraderie for Grunt, whose trusty shotgun would obliterate any enemies that got too close.

The player character of Shepard does some important narrative work, by allowing the player to inflect the attitude of the primary frame on the game world, while simultaneously providing a stable embodiment of the core *ethos* of the story. In contrast, the NPCs in the game serve as the primary mechanisms for communicating the content of the story. In particular, the members of Shepard's crew represent strong narrative points of view, insisting that their perspective on the world and the situation be heard. They provide richness and detail about the world, but perhaps more importantly their narratives provide a structure, a context, and a motivation for the player's journey through the game.

We were struck by the complexity and depth of the characters. Although many of them represent common genre tropes, they are each varied and distinct with their own personal contradictions and difficulties for the player to explore. Perhaps more importantly, Shepard's squadmates exhibit a consistency of personality and behavior, even within the ever shifting landscape of the broader simulation. For example, we were struck by the character of Jack's stubborn insistence on finding access to archives that would shed some light on her own troubled history. When we stalled her request at one point in the game, she simply showed up in the next scene, having stolen the records on her own initiative.

Secondary and tertiary NPCs encountered while exploring the world are much less deeply envisioned than the Primary NPCs on his crew. However, it is necessary for Shepard to interact with these lower order NPCs in order to move forward in the game. The interactions with them reveal much of the narrative information that is necessary for a basic comprehension of the plot. Fortunately, although these NPCs are shallower than the primary characters, they are written with a great diversity and enriched through character-based humor. Perhaps more significant, most NPCs that Shepard interacts with follow-up later via the in-game messaging system, providing a persistence of character that extends beyond their brief contact with the player.

Storyworld. The second major narrative category we examine is storyworld—the setting within which the ludic challenge and the narrative experience play out. Murray maintains that immersive experience in digital environments is often driven by two overarching design directions: the spatial and the encyclopedic (Murray, 1997). *Mass Effect 2* certainly meets this test. The storyworld is big—and it is full of details—with respect to both ludic challenge and narrative enrichment. The game traverses space across a wide range of scales: the Milky Way galaxy, star regions, individual stars, solar systems, individual planets, space stations, multiple locations within each planet or space station (Figure 5).

The storyspace provides a suitable canvas for ludic action—it is a storyworld fit for epic battles and quests. At the same time, the game exemplifies what Henry Jenkins (2004) would call a “narrativized game architecture”—story is distributed across a variety of locations and scales. Backstory about races, cultures, and people is liberally distributed throughout the storyworld locations. Some of it is explicit—growing out of direct encounters the player has. Some is implicit—such as the advertising that blares over the public radio in Illium. These backstories are also scaled: from the Reaper-Collector-Prothean ur-myth that drives the entire *Mass Effect* series of games, to broad racial histories such as the Human Alliance, to groups such as the Cerberus operation or the various mercenary groups, down to individuals. Narrative revelation at all these scales is liberally parsed throughout the storyworld and revealed as the player achieves her ludic goals.

The design of space has some limitations, however. Murray maintains that a critical aspect of the spatial design of digital environments is the navigation interface and functionality. Navigation interface is straightforward, but navigational freedom is mixed. During combat, it is generally linear in terms of overall routes—although you must constantly navigate to cover in order to survive. This limited combat freedom is consistent with—and reinforces—the railed nature of the gameplay, to which we will return when we consider plot and narrative coherence. Noncombat zones, such as the planet Illium, are more freeform and also large—rewarding the pleasure of exploration.

Emotion. Drawing on Perron's work, we attempted to separate the ludic “gameplay” emotions of winning and losing—from the fundamentally narrative emotions derived from empathy with the characters. However, this analytical separation does not mean that they are always distinct in practice. An overlap of narrative emotion and ludic emotion can be reinforcing—an indication of a more robust game experience. As gameplayers, but also as Shepard-character, we exulted at the violent destruction of an enemy—hence our real fondness for Grunt and to some extent for all our fighting squadmates.

We have already seen how emotional stance is also central to the core game play. Shepard's emotional commitment or detachment from his squadmates varies considerably across the three playings described earlier—and the game's progress is inflected and driven by these differences. However, we did experience a certain amount of contradiction here. Our

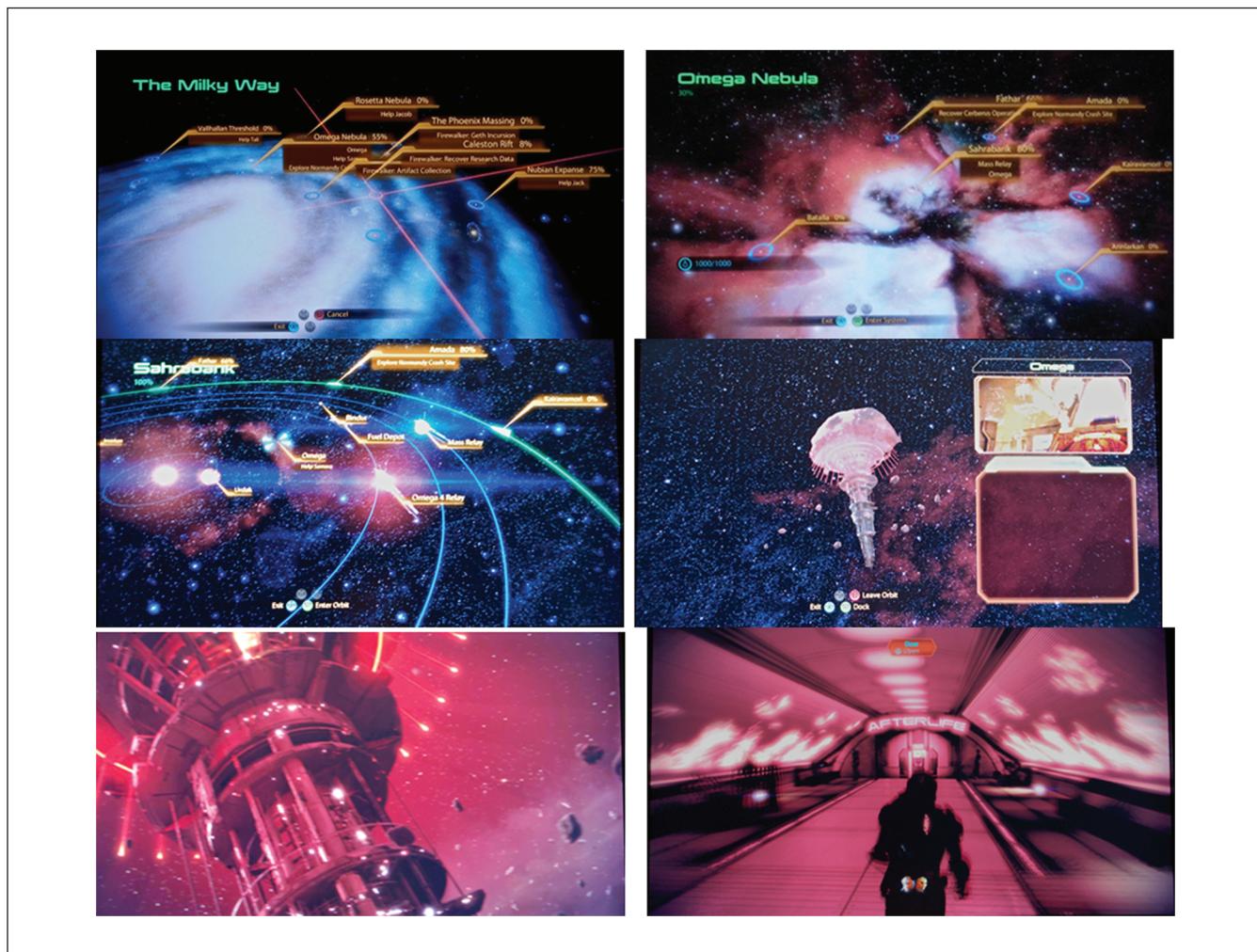


Figure 5. Gradations of storyworld scale from Galactic (top left) to Human (bottom right)



Figure 6. Narrativized game metrics during combat

Renegade suicide option was a cold one indeed—and we found it difficult to stay in character and resist our squadmates' fundamentally emotional pitches for the side quests that would soothe their various hurts. The Paragon option

would have integrated empathic identification more closely with their characters and the actual decisions of gameplay.

Narrativized interface. The narrativized interface is the earliest narrative parameter we identified. It was the subject of one of the coauthor's graduate thesis 10 years ago (Bizzocchi, 2001). Bizzocchi argued that narrative can be distributed widely throughout an interactive experience—and that one channel for this was the incorporation of narrative sensibilities at the focus of play—the interface itself. The coauthors and Ben Lin expanded this concept of a narrativized interface design, identifying a number of design practices that narrativized the interface (Bizzocchi et al., 2011).

At a fairly pedestrian level, narrative can be built into the “look and feel” of the interface. In *Mass Effect 2*, this manifests broadly as a generalized Sci-fi and Techne oriented UI look on all the menu systems. This is seen even more intensively in the circuit hacking and code matching interface screens. More interesting are the narrativized game metrics, which not only provide direct ludic feedback on the state of the gameplay but also add to the narrative urgency of the

moment. Blood and veins fill the screen to indicate proximity to death (Figure 6). A similar effect can manifest in the auditory channel: when stunned by certain attacks—the location sound is attenuated and then further obscured by a ringing in the ears. The cinematic perspective is also narrativized—using shot-to-shot filmic conventions for both dialogue and cut scenes, keeping the character faces in view—conveying emotion and reaction. The protagonist, Shepard is always in the shot in some way—except for the menus—emphasizing his character's narrative weight and point of view.

At a higher level, the central mechanic of narrative play manifests through the dialogue interface. This device straddles the boundary between the ludic and the narrative. It is an interesting mechanic to experience—allowing the player to guide the dialogue through selection of shorthand directions rather than full sentences. This puts control in the hand of the player, without having to spend time and lose momentum reading entire swaths of dialogue. This allows moments of more traditional and relaxed narrative pleasure as the player hears the exact combination of word choice, sentence structure, and event outcome—all in the general plot direction he has selected. This dialogue interface relies on semiconsistent zones of selection to more easily support “paragon/neutral/renegade” decision making.

Narrative arcs and plot coherence. Narrative plot coherence is intrinsically difficult for any interactive medium—the more open the interaction, the more difficult it becomes to provide and ensure narrative flow and progression. When control over plot progression dominates freedom of play, we sometimes criticize a game as being “railed.” *Mass Effect 2* is indeed railed—but the narrative constriction is nuanced, and the effect is not oppressive. *Mass Effect 2* is like a river—as you make progress you inevitably get carried downstream, but you have some choices on *how* you get there. You also have choices on how widely you decide to experience the potential arcs of the game. You can change how wide or deep the river is as you navigate, but in the end, you go where it takes you. This is a form of “bounded agency” where the player’s actions can only deepen each narrative arc in the game, without derailing the direction of the story.

In any case, there are a number of coherent arcs and story progressions within *Mass Effect 2*. Like the variations within “storyworld,” one can see these arcs as nested at various levels of scale. At the highest order, there is the Meta-arc of the *Mass Effect* universe—which cuts across and subordinates the narrative within each game. This meta-arc is given additional narrative weight through its ludic persistence—choices made in earlier *Mass Effect* worlds persist in subsequent worlds, and affect both the game play and the story experience.

Within each game, the high-level arc is your overall progress through the game to the conclusion. The closing stage of this arc is colored by your choice of personality and the implications that flow from that. At the intermediate level, the game presents a number of subsidiary arcs for the player/Shepard to traverse: required battles, optional but recommended loyalty missions, secondary mining missions to add

resources. Each of these has its own narrative arc: a set-up, complicating events, challenges, and a final conclusion (climax) to the battle or mission. Weaving through this quilt of battles, missions, and quests are the evolving threads of your relationships with your squadmate NPCs. Finally, at the most detailed level, each battle and even each conversation carries an arc of its own. These micro-arcs individually lean toward the primarily ludic or the primarily narrative, but each is also tinged with some measure of the other dimension.

Conclusions

Our analysis of *Mass Effect 2* has allowed us to gain insight into the narrative poetics of the game while also providing insight into our broader analytical framework of narrative in games. Our close reading reveals a number of design strategies that we believe actively work to balance the tension between player’s choice and authorial intent to communicate a specific narrative. Nowhere is this more apparent than in the use of character, which serves simultaneously as a vessel for communicating narrative details and as a channel for player expression. By allowing players to provide expressive variations of a core and unchanging Commander Shepard, the designers are able to channel the pleasures of agency and self-expression along a path that reinforces the intended narrative rather than undermining it. The design and actions of the NPC characters in the game help to move the plot forward in a coherent fashion. The rich supporting cast also provides meaningful narrative context for the actions of Shepard—providing a wide range of emotional reactions to the events of the narrative and by deepening the details about the storyworld.

At the same time that we recognize the critical role of character in the design of this game, we also see within our reading a validation of the other dimensions of our analytical framework. Both plot progression and storyworld are manifest at a variety of nested and interrelated degrees of scale. The interface is a critical location for narrativity, plot progression, and expression of character. Narrative emotion is situated in the game characters, developed in the plot progression, and reflected within the interface. All these factors contribute significantly to the overall narrative pleasure embedded within the experience of *Mass Effect 2*.

We see in this game continued evidence for the operation of “bounded agency” and “readerly pleasure” that we explored in our previous work. *Mass Effect 2* employs a number of design strategies that serve to channel the player’s expressions and preferences in constructive ways. The player is afforded a lot of room to explore the boundaries of the narrative world, to dive deeply into the histories of the alien races and individual NPCs, and to map out the vast universe. This freedom to dig deep however never puts the player in a position to contradict or undermine the dominant narrative: by limiting the player’s options to only those which deepen or enrich the story in some way, *Mass Effect 2* purposefully constrains the potential agency of the player. This reduction of agency means that the player will never see a version of

the story where Shepard joins the Reapers and destroys humanity, or where Shepard just decides to give up on the quest and abandon the universe to its fate. Instead, each player broadly experiences the same grand narrative arc. By directing the participation of the player into narrower channels of self-expression, however, such as inflecting Shepard's personality, or choosing which squad member loyalty missions to complete, the game provides meaningful opportunities for active engagement with the established storyworld.

Our version of Adrian Shepard negotiated the tension between expression and inevitability in a manner that was uniquely the product of our own gameplay decisions and the poetics of the game's narrative design. What made our Adrian so unique was that he was a fundamentally tragic figure: we knew at every moment that we were playing the character in a manner that could lead to his equally heroic and tragic self-sacrifice. A cloud hung over Shepard's head: a damoclean destiny that made all of his poor choices—and they were many—provisional. In the face of his potential redemption, we could forgive Shepard his "renegade" nature: the cold unflinching haste, the refusal to consider the social consequences of his actions and choices, the unwavering commitment to the mission at any cost. Adrian Shepard's death was not a twist or a surprise: it was a choice that contextualized every action that we took as we played. Our experience of Shepard's death is very much a boundary case: you could call it the narrative arc of greatest resistance. We pushed the game's narrative logic to its absolute limits. From a ludic perspective, it was a very difficult outcome to attain: it involved rigidly following a particular playstyle, in order to guarantee that all the correct conditions would be met, sacrificing access to special powers, and storyworld enriching side quests. It also meant coming to terms with the deaths of (often) beloved secondary characters along the way. Playing in pursuit of this goal meant sacrificing many of the minor choices and opportunities for self-expression on the altar of a singular significant change to the game narrative. From a perspective of bounded agency, we find this to be fascinating, because in some ways, the killing of the main character is one of the most disruptive "authorial" choices that the player can make—it is so disruptive, in fact, that our save game file with the dead Shepard could not be imported at the beginning of *Mass Effect 3*; the designers essentially say "this is not a canonical outcome." However, in pursuit of this version of the story, and this vision of the character, we needed to suspend a great degree of our own agency. Our reward for this was an experience of the game as drama and as tragedy; this was not the story of the hero returning triumphant, but instead a descent into Hades from which there could be no return.

This exploration of the edges and boundaries of *Mass Effect 2* also illuminates a previously unarticulated aspect of our close reading methodology. In previous writing on close reading in games, we have described techniques that allow scholars to make observations about the center of an experience: the core of the game-as-text (Bizzocchi & Tanenbaum,

2011). This reading was almost a form of "destructive testing"—purposefully testing the outer limits of a design. This analysis demonstrates the power of "playing to the edge" as a method for uncovering and foregrounding underlying poetics of a design.

By applying our framework to *Mass Effect 2*, we believe that we have teased out several critical and innovative poetics for the design of game narratives. *Mass Effect 2* demonstrates the power of character-centric narratives within games, while also providing a model of how to balance player expression against authorial control. It also opens up new possibilities for drama and emotion in games. Catharsis and Pathos are poetics that very few games have explored, in spite of their centrality to the Aristotelian dramatic forms that are so often invoked in discussions of game-narrative. We see this as an opportunity for the medium as it continues to mature.

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