

I'm Not Just a Badass With a Gun: Potential Learning Outcomes

Related to Civic Engagement in Mass Effect 2

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# **AUTHOR'S DECLARATION FOR ELECTRONIC SUBMISSION OF A MAJOR RESEARCH PAPER**

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## Abstract

*Mass Effect 2* is a popular computer role-playing game that has registered industry praise and academic attention for its compelling narrative and diverse cast of characters. This MRP examines how the design of the *Mass Effect 2* game supports the potential for fostering civic engagement in its players via the gameplay and narrative design. Labov's model (1997) of narrative structure of stories and narrative capacities (Frank 2010) originating from socio-narrative theory provides the key narrative concepts to guide my analysis of the design decisions that went into the construction of the *Mass Effect 2* world. Concepts of cooperation, reciprocity, and trust are used in conjunction with a qualitative content analysis to determine the existence of these aspects within the narrative of the game. This MRP will establish that the narrative structures and narrative capacities are used to catalyze concepts of cooperation, reciprocity, and trust in an effort to solve conflicts and promote acts that are civic in nature between its characters. Additionally, it will offer insight into how civic engagement is communicated in the *Mass Effect 2* game.

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## Introduction

Video games have traditionally been studied in a negative context. They have been criticized for narrative structures that present misogynistic and hetero-normative worldviews (Adams 2015, pg. 41), and for their representations of sexuality and violence (Williams et al. 2009, pg. 217).

However, many scholars see video games as vehicles for positive learning experience. Players can learn about democracy and culture (Bourgonjon & Soetaert, 2013, p. 3); they can increase their social network by collaborating in virtual online games (Schulke 2013, pg. 368), and; they can teach players values of ethics and tolerance (Simkins & Steinkuehler, 2008, p. 334).

A video game company that has garnered much praise from its consumers and the press is a Canadian company called Bioware, known for a series called *Mass Effect*<sup>TM</sup> that is a science fiction genre role-playing game set in an alien-dominated futuristic galaxy. *Mass Effect* has been championed as an example of a game that challenges current game standards of diversity, and one that presents examples of ethical dilemmas that mimic real life and provides opportunities to civically engage with various factions. The game allows people to play as a female or male primary character, and to participate in relationships and discourse with various alien cultures as the story arc progresses. There are three games in the series, and the goal of each game is to have a human commander unite representatives of various races in the goal of defeating a common enemy force. Commander Shepard, the PC (primary character) of *Mass Effect* is tasked with the responsibility of earning the loyalty of her squad mates to defeat their enemy and ensure both alien and human survival.

For my MRP, I will focus on the second instalment of the *Mass Effect* series. The narrative of the second game begins two years after the campaign from the first game, where Shepard and his/her crew defeated an enemy that represented a powerful force threatening the

existing interstellar civilization. Cultural relations have shifted, humans now have a greatly increased influence in the governing political structure and many alien races, which formerly co-existed peacefully, have become disenfranchised with the system.

## **Interests in Mass Effect 2**

It is important to note that each of these steps constitute ‘micro-narratives’ (mini-stories) that together form the narrative arc for each supporting character. Moreover, Commander Shepard also spends time conversing with each of these crewmembers/non-primary characters (NPCs) outside of these micro-narratives in attempts to solidify a rapport. Therefore, acquiring each squad member’s loyalty is a multi-step, dedicated process of reciprocity and cooperation that evolves into trust over time.

The concepts of trust and cooperation within the relationships in the *Mass Effect 2 (ME2)* game are what interest me, especially in a learning or life skills aspect. However, before examining aspects of trust and cooperation, a full understanding of how the narrative is structured is required. The two theoretical areas that will be of great value in this are socio-narratology (Frank 2010), which is used to analyze aspects of the narrative structure such as mise-en-scene, plot and characters (pg. 26), and narrative structure and game design, which is used to analyze aspects of interactive gameplay such as embedded narrative (Jenkins 2004) and story world (Bizzocchi & Tannenbaum, 2012). In addition to these, narratology and ludology will be used to examine how reciprocity, trust and cooperation are operationalized within the narrative structure of the ME2 game. Lastly, I would like to explore how these concepts relate to aspects of civic engagement within the ME2 game.

## **Literature Review**

My literature review consists of scholarly work within the three identified fields of socio-narratology, ludology and social capital. Socio-narratology will be used to explore the filmic and literary devices that games employ to enhance the narrative. Ludology and game design focus on game structures, as well as how ludology evolved to incorporate many aspects of narrative structure. Finally, the social capital literature provides concepts of cooperation, trust, and reciprocity that will be used as definitions in recognizing those aspects in the narrative structure and game mechanics of *ME2*, as well as how those concepts reflect real world application within social capital.

### **Narrative in Games**

Narratology in the context of games theorizes that game narratives are similar to those in films and literature, and that they should be analyzed by comparing games against narrative and literary theory (Frasca 2003b, pg. 2). Video games have been analyzed for their filmic and literary qualities, their representation of how the story was told, the characters involved, the order of events, plot cohesion, and the setting in which the story takes place (Aarseth 2012, pg. 131).

Furthermore, narratology recognizes that different types of narrative structures can be employed in video games, such as emergent narratives and embedded narratives (Jenkins 2004, pg. 10). Emergent narratives are not pre-programmed – they allow the player the freedom to define their own goals and devise their own stories. This type of narrative structure is employed in games like ‘The Sims’ (Jenkins 2004, pg. 12). Embedded narratives employ pre-authored story climaxes that cannot be changed by the player; however, narrative elements will gradually

emerge through the players choices in select situations, where discretion is allowed through the game's design (Jenkins, 2004, pg. 9).

## **Socio-Narratology Theory**

Socio-narratology theory (Frank, 2010) examines narrative capacities that are used to resonate with the user; it explores how narrative is structured, the themes that are employed, the conflict within the narrative that characters face, and subsequently how those characters are tested.

Role-playing video games, much like their literary and film counterparts, employ tropes to engage the player (Jenkins 2004). What makes role-playing video games different than literary and film works is that players are active agents in the fate of the characters. As a result, frameworks related to game and narrative design are necessary to examine the techniques used to engage and sway player decision-making. To that end, Jenkins (2004) will be employed to examine the use of embedded narrative as a tool for narrative exposition, as well as mise-en-scene as a representation of character identity.

## **Narrative Structure and Narrative Capacities**

Narratives traditionally open with an abstract to alert the audience to the genre and story that is about to begin, using a form such as a news report, a quote, or a dramatic event (Labov 1997; Frank 2010, pg. 26). Video games and movies also employ abstracts in the form of dramatic opening cut-scenes to situate the narrative; these can take the shape of a full-scale military attack, or simple scrolling text that provides a backstory (Cheng 2007, pg. 16). Next, narrative structures employ orientation to identify key characters, the setting or mise-en-scene, and the time and place, giving players an overall sense of the imagined world. This definition of orientation differs from Labov's (1997) definition as his relates the telling of one's own story. Once the viewers and readers have an overall sense of the imagined world, the plot is introduced, taking shape as a

conflict or complicating event whereby a source of trouble requires a solution (Frank 2010, pg. 26). Conflicts or complicating events eventually lead towards a resolution or climax, where the issue has hopefully been resolved. This is followed by the evaluation, where characters reflect on the events and feelings are expressed (Frank 2010, pg. 26).

Frank (2010) states that stories require capacities to form their narrative and effectively ‘be stories’. There are various narrative capacities that serve various functions to make up a story, including how stories resonate with readers, encourage specific points of view, employ inherent morality, and how stories broaden reader imagination. In essence, capacities are employed as narrative instruments to engage the reader (pg. 28 – 41). Frank (2010) does not provide a benchmark for how many must be utilized, and in fact states that there is no hard and fast rule. However, he identifies a number of capacities that serve to form a narrative, including trouble, suspense, and test of character.

**Trouble.** Trouble is a more direct interpretation of Labov’s (1997) conflict or complicating event, in that stories use complicating events as a catalyst to create additional issues within the narrative. From a socio-narratological perspective, trouble elicits more interest in the narrative in two ways; first, the story uses the primary source of conflict to incite other related conflicts; second, the narrative employs different ways of reconciling the subsequent conflicts (Frank 2010, pg. 28).

**Suspense.** “Suspense depends on a tension between different possible outcomes- some to be hoped for, and others to be feared. Sharpening this tension, suspense...enables stories to elicit engagement: stories work because people get caught up in the story” (Frank 2010, pg. 32). In other words, suspense increases drama and uncertainty in stories, and allows stories to take twists not originally anticipated.

**Test of character.** “Stories have the capacity to display and test people’s character” (Frank 2010, pg 29). Although Frank (2010) identifies this capacity as ‘character’, the definition speaks to how characters come to terms and deal with ‘trouble’ or conflict, and how that decision can define a person’s character (Frank 2010, pg 29).

Narrative structures differ from narrative capacities in that they are used as a model to frame each act of the story following the previous act: “one thing happens in consequence of another” (Frank 2010, pg. 25). Narrative capacities are the various story instruments employed to engage the reader in different ways across the acts. Drawing on Frank’s (2010) interpretation, capacities are used at the discretion of the author, and what matters is how those capacities are used in the stories, not the amount (pg. 28).

## **Ludology and Game Design**

Ludology has been defined as the study of video games (Frasca 2003a, pg. 222). According to Frasca (2003a), Ludologists focus on understanding game structure and elements: particularly their rules, as well as creating models for explaining the mechanics of games (pg. 222).

Ludologists also view video games as vehicles for simulating real world experiences, one where a person can manipulate the experience. Frasca (2003a) uses the analogy of participating in a flight simulator: a person is an active participant in the experience, allowing him or her to perform actions that will modify the behaviour of the system in a way that is similar to an actual plane. “If the player increases the power variable on the simulator, the simulated plane will move faster through the virtual sky on the computer screen” (pg. 224).

Jenkins noted that ludologists and narratologists observe conflicts between narrative demands and the demands of the game structure and design (Jenkins, 2004, pg. 1), and proposes an alternative view. In this third approach, games would not have to conform to specific

narrative forms prescribed in the vein of structured theories in film and literature. This would allow for reconciliation of the positions of ludologists and narratologists, where both could evaluate the atmosphere of the game as a narrative device with ripe potential for storytelling (pg. 3). Jenkins coined this third approach as narrative architecture (2004).

Bizzocchi & Tanenbaum (2012) found that although video games had made significant strides in bridging harmony between narrative structure and game play, they suggested that the design elements had not reached the narrative potential of cinema and literature (pg. 393). The authors posited that examining the narrative poetics of the game could develop a richer story, and critically analyzed *Mass Effect 2*, a game that the academic community has deemed an outstanding example of narrative design (Bizzocchi & Tanenbaum, 2012, pg. 393). The authors sought to examine the design strategies that support the narrative interactions between the hero, Commander Shepard and the secondary characters. The narrative design parameters that were observed were characters, story world, narrativized interface, emotion, and plot coherence (Bizzocchi & Tanenbaum, 2012, pg. 396).

The game designers pre-programmed Commander Shepard with three different personality types that the player can elect. The narrative unfolds via the function of a dialogue wheel, where the player is given options that lead him/her through different story progressions, and also determine Commander Shepard's attitude towards interactions. The game also takes the player through mini story arcs within the main story, known as 'micro-narratives' (Bizzocchi & Tanenbaum, 2012, pg. 396).

Bizzocchi & Tanenbaum (2012) provided ample insight into game mechanics, characters, narrative trajectory, and the rich backstory that players are exposed to. These include stories on the various races, cultures, and people with whom the main player can potentially engage (pg.

397).

## **Character Development in Game Design**

In the last decade a number of role-playing games have been released that focus on character development. Among those titles are *Mass Effect* and *Dragon Age* – Bioware produced both titles (Jorgensen, 2010). Jorgensen’s comparative analysis of the two titles examined the role of supporting character as a vehicle for narrative progression (2010). To clarify, *Mass Effect 2* and *Dragon Age: Origin* are dependent on the agendas that are played out by the supporting characters, and not by the primary character (2010, pg. 315). Jorgensen examined the narrative features that were woven into the fabric of the game play. This includes the depth and complex personalities and histories that the supporting characters offered, which lent themselves to creating more significant relationships. She also covered the ethical and moral choices that players can be confronted with, choices that can mimic real-life experiences. This is referred to as the ‘bleed-effect’ (Jorgensen 2010, pg. 319). Jorgensen (2010) took great lengths to show other author examples of the ‘bleed effect’ impact on player experience, in that it can be difficult for a player to fully separate from their character when immersed in the game:

When role-playing, the players will never be able to fully separate between the two identities even when they intend to be “in character”; the real world thoughts and emotions will increasingly bleed into the role identity, and vice versa, thereby making the distinction between player and role more and more transparent (Waskul & Lust 2004, pg. 349).

Ludology and socio-narratology informs my research interests as it provides conceptual context on how video games have been previously analyzed by scholars, and also offers important insights into how the two aspects of game design are inextricable in video game design.



Furthermore, they provide the necessary theoretical lenses to analyze various aspects of the game, such as the narrative structure and game mechanics.

## **Social Capital Theory**

Robert Putnam described social capital as “features of social life and networks, norms, and trust that enable participants to act together more effectively to pursue shared objectives” (Putnam 1998; Foley & Edwards 1999, pg. 144) Putnam believed that associations through face-to face communication among individuals generate trust, reciprocity, and a capacity for civic engagement, which are essential to a sound modern democracy (Foley & Edwards 1999, pg. 144).

Social capital can also be defined as networks of social relations which are characterized by norms of trust and reciprocity and which lead to potential mutual benefit. The spirit of social capital is the quality of relationships, which affects the capacity of people to come together to resolve problems they face in common (Stewart-Weeks & Richardson 1998), and achieve outcomes of mutual benefit (Lochner et al. 1999).

Stones & Hughes (2002) developed an empirical method of measuring the social capital of communities through a theoretically informed framework, based on the hypothesis that social capital is a multidimensional concept comprised of networks, trust and reciprocity, and that social capital should be understood as a resource to collective action. This framework underlined both the quality and the structure of social relations. Key measures of social capital included norms and various network characteristics, in different network types.

## **Concepts from Social Capital**

The following are concepts developed from the literature on social capital. These concepts will be used as definitions to identify aspects of cooperation, reciprocity, and trust in the *ME2*

narrative structure.

**Cooperation.** Cooperation was defined as a feature of a social organization that facilitates coordination and cooperation for mutual benefit, and can be described as a form of behaviour that arises in the context of civic engagement (Putnam 1998, pg. 67). (Fukuyama 1995; Stone 2001) Cooperative behaviour is expected within a community of trust based on shared norms (Stone 2001, pg. 25). From that, cooperation can be defined as a form of behaviour that arises in the context of shared norms for mutual collaboration.

**Reciprocity.** Gouldner (1960) defines the norm of reciprocity as an expectation of a moral obligation that “(1) people should help those who have helped them, and (2) people should not injure those who have helped them” (Gouldner, 1960, p. 171). More generally, he defines it as “people should help those who help them and, therefore, those whom you have helped have an obligation to help you” (Gouldner 1960, p. 173). The conclusion is clear: if you want to be helped by others you must help them (Gouldner 1960, p. 173).

**Trust.** A social system is incumbent upon norms that are forged between its members; closed social networks serve a function of reinforcing norms, allowing for the formation of social capital through the development of obligations and expectations. When a structure is closed to specific actors or people, norms can be more easily instituted, and expectations and obligations are more easily adhered to (Coleman 1988).

### **Associated Learning Outcomes**

Some researchers found that social capital led to interest in traditional civic engagement. Dalisay’s (2015) survey of 465 college students in the United States, found a positive correlation between social interaction and neighbourly behaviour; this can be characterized as acts of kindness during game play (pg. 1411). Furthermore, the survey found a positive correlation

between civic engagement and political participation among players who immersed themselves in virtual worlds that involved role-playing, discovery, and escapism (Dalisay 2015, pg. 1412-1413).

Video games have been posited to reflect a series of positive benefits to players. The act of collaborating towards the acquisition of common goals can improve communication skills, and by extension, social capital (Bourgonjon & Soetaert, 2013, pg. 3). Players also have the opportunity to forge new relationships, and feel a sense of community (Zhi-Jin Zhong, pg. 1). These benefits are said to better manifest themselves in games that focus on virtual worlds where players are fully immersed in organized groups, where they are tasked to accomplish specific objectives for reward and advancement (Schulke 2013, pg. 359). However, these objectives cannot be achieved without cooperation and reciprocity inside and outside the game world; in fact most missions in these games are too difficult for players to face alone (Zhi-Jin Zhong 2011, pg. 2).

Trust is also paramount in online gameplay, and is an attribute that emerges through collaborating and supporting other players. Trust acts as a binding force that enhances social interaction between players, and can positively lead to acts of kindness that Dalisay (2015) defines as ‘neighbourliness’. Furthermore, behaving in a ‘neighbourly’ manner in the game, and gaining the trust of other players leads to increased self-disclosure (pg. 1402). As a result players may be able to exercise more influence within their network; they have access to more resources, such as goods that improve gameplay, and social connections that can further their status in the game world. These are all benefits that tie into the concept of social capital.

All of the referenced literature on social capital is highly relevant to my research in providing the concepts needed to define cooperation, trust and reciprocity in a way that could be

applied to the narrative of *ME2*.

## Method

In this study, I used a qualitative content analysis to explore the narrative structure, and narrative capacities, to understand how they are reflected in the *Mass Effect 2* design and if they support the potential for fostering civic engagement. Specifically, my research questions are:

1. How are narrative structures (Frank, 2010; Labov, 1997) and narrative capacities (Frank 2010) reflected in *ME2*?
2. In what ways do the narrative structure and narrative capacities contribute to the presentation of the positive behaviours of cooperation, reciprocity and trust in gameplay?
3. How does the design of the narrative structure *Mass Effect 2* allow for the potential of fostering civic engagement?

## Qualitative Content Analysis

A qualitative content analysis was chosen as a flexible approach to interpreting the dataset, while still providing a structured analytical framework (Hsieh & Shannon 2005). The specific methodology involved a multi-step process of selecting the sample, formulating research questions, and developing the necessary categories to organize the data, along with the creation of a coding process as I conducted my analysis (Hsieh & Shannon 2005).

Pre-existing narrative concepts derived from literature were necessary to locate and analyze the creation of the NPC narratives. Labov's model (1997) of narrative structure of stories, and narrative capacities (Frank 2010) originating from socio-narrative theory, provided the key narrative concepts that guided my analysis of the design decisions that went into the construction of the *ME2* world. Using a qualitative analytical approach with guiding concepts allowed me to recognize patterns and themes within the narrative structure.

To address my research interests in civic engagement, a qualitative content analysis was employed once again, however using definitions of cooperation, reciprocity, and trust developed from the literature on social capital. Particular attention was paid to how narrative capacities and narrative structures catalyze the positive behaviours of cooperation, reciprocity, and trust in *ME2*.

## **Data Collection**

The overall plot has Commander Shepard forced to work with a human supremacist group, known as Cerberus, to assemble an elite task force for a suicide mission to investigate the mysterious abductions of human colonies and where an enemy force is involved. The odds of survival are slim without the support and loyalty of a full squad – even for the player. As such, the player must assemble a team, which can consist of both aliens and humans, by completing a unique mission of personal significance for each crewmember. Securing crewmember/non-playable character (NPC) loyalty is a three-step process. First, the PC has to convince the NPC to join the squad through a recruitment mission; this can entail cooperating with the NPC on a matter such as assassinating an enemy, or securing an area from a hazard, before he/she can join the squad. Second, once the NPC is on the squad, the NPC will ask the PC if he/she will agree to assist them on a Loyalty Mission of significance. The last step entails the completion of said loyalty mission. Once the PC has secured loyalty, the player gains rewards by way of powers and skills, as well as having the in-game support of the team, which is required in order to defeat the enemy.

Cerberus is a paramilitary, human supremacist group with the goal of making humans the dominant race in the galaxy, at whatever cost to other races. In *ME2*, they are the only faction that believes the Reapers, a highly evolved sentient race of synthetics that surface every fifty

thousand years to purge the galaxy of all highly developed life forms, are a serious threat to humanity.

The Illusive Man is the morally ambiguous leader of Cerberus, who invested substantial resources into resuscitating and reconstructing Commander Shepard to lead the cause against the Reapers. Although Commander Shepard does not trust Cerberus and the Illusive Man, she feels left with no choice but to cooperate with them, as they are the only ones who will invest all resources into eradicating the Reapers and saving the human race.

There are 10 NPCs with whom Commander Shepard interacts. Each NPC has a narrative arc that is played to completion through a series of interactions and missions with Commander Shepard. Players can also customize the PC by adopting two morality approaches through conversational topics and gameplay choices, yielding more rewards and narrative iterations. ‘Renegade’ adopts an aggressive, unemotional personality, while ‘Paragon’ adopts a compassionate, nurturing personality. A more detailed description of the morality system can be found under the heading ‘*ME2* Universe’.

## **NPC Narrative Arcs**

My data consists of screengrabs, recording of game responses, and journaling. Data on four NPC narrative arcs was collected via four play-throughs (playing the game through to its conclusion); the first two times I played through the game were to decide which four NPCs to analyze out of the ten NPCs available, followed by ascertaining the type of data to be collected. The last two times were to collect data, based on the attitude of ‘paragon’ and ‘renegade’ personality type.

In addition to the play-throughs, Youtube videos were used to record any dialog that was missed during gameplay, along with capturing screen-grabs to provide visual examples in the

MRP. For example, to capture missing dialog from Tali's Loyalty Mission, a Youtube video of the walkthrough posted by a player was referenced for this purpose (Militus, 2012).

**Data Recording and Structure.** Elements of the narrative structure and corresponding game mechanics for the NPCs were recorded by spreadsheet in an excel workbook. Each NPC was assigned their own worksheet, dividing the worksheet into parts: a narrative structure section at the top, followed by a game mechanics section at the bottom. The narrative arcs include the recruiting missions, character interactions aboard the *Normandy* ship, and the loyalty missions.

**Narrative Section.** Please see Table 1 on Pg. 16. The narrative section includes the following three broad categories: plot coherence, micro-narrative type, and characters. Each broad category includes sub-categories. Under plot coherence are the following sub-categories: narrative structure, scenes, ludic actions, genre (the story genre that the mission follows such as 'mystery'), story world (descriptions of the mise-en-scene), and alien races. Micro-narrative types include: recruiting missions, loyalty missions, and character interactions aboard the *Normandy* ship. 'Character' lists the PC, NPC, minor characters aboard the *Normandy*, and minor characters that are central to the narrative in loyalty missions and recruiting missions.

Each sub-category has a column for a description, and an example of what it looks like in the game. Codes were developed for each sub-category, most reflect the sub-category heading, while other sub-categories have been condensed. For example, recruiting mission is 'RM', loyalty mission is 'LM', primary/playable character is 'PC', and non-primary/playable character is 'NPC'.

Table 1: Narrative Data Characteristics

Characteristic Name	Code	Description	Example	Amount
<b>Plot Coherence</b>				
<b>Narrative Structure</b>	Narrative Structure	Loose interpretation of narrative structure and plot coherence.	Describing the use of cut-scenes to establish characters and genres.	
<b>Scenes/Sequences</b>	Scene	Scene involving a specific segment of story within Mission.	PC talks to a minor character at police station to get whereabouts of a recruit.	20
<b>Ludic Actions</b>	LA	Gameplay actions that move the narrative forward	The player clicks on a narrative element/object that serves as an exposition tool or clue. Examples: audio recording, data pad, video log.	These are dispersed throughout the 8 missions (4 recruiting and 4 loyalty).
<b>Genre</b>	Suspense/detective/mystery, Military Courtroom, military special ops/rescue/	These were used to describe the story genre of the missions	Using dialog wheel to converse.	
<b>Story World (mise-end-scene)</b>	Mise-en-scene	Details of the virtual world. Setting (urban, ruin) atmosphere (serene, gritty), musical score.	<b>This mission is the first playable sequence. Narrative Setup:</b> Orientation, Establishes Narrative/motivation for entire game, including primary character purpose. <b>Structure:</b> embedded. <b>Point of view:</b> PC (Commander Shep).	8 (4 recruiting and 4 loyalty)
<b>Alien Races</b>	Asari, Krogan, Turian, Justicar, Human, Quarian, Geth	Races that play key roles in the ME world were recorded.	Salarrians are a highly evolved amphibian race.	
<b>Micro-Narrative Type</b>				
<b>Recruiting Mission</b>	RM	PC travels to location to recruit skilled member for	Shepard travels to Haestrom to recruit engineer/AI	4



			team.	
<b>Loyalty Mission</b>	LM	PC helps NPC resolve their personal conflict.	Shepard helps an NPC resolve their personal conflict.	4
<b>Normandy Character Interactions</b>	Norm	Interactions between PC and NPCs	Commander Shepard and NPC have a conversation aboard Normandy.	10 (all four NPCs)
<b>Characters</b>				
<b>Primary Character</b>	PC	Only playable character – protagonist of game, Can play as Paragon or Renegade personality through dialog choices	Commander Shepard is the protagonist from the first game.	4 (play-throughs). Played paragon one time, renegade one time.
<b>Non-Primary Character</b>	NPC	Cerberus squad member recruited	Jacob (J), Grunt (G), Samara (S), Tali (T)	4
<b>Minor Character – Normandy</b>	Minor	Minor Characters on Normandy	EDI (Ship AI), Miranda (Works for Cerberus), Illusive Man (head of Cerberus), Joker, Legion (Geth)	5
<b>Minor Character – missions</b>	Minor	Minor Character dialog in story missions.	Detective Anaya – on Samara recruiting mission, helps Shepard & Samara.	15

Amounts were recorded to account for the numbers of times played through, and the number of things related to the sub-category. For example, the data of 4 NPCs were collected; therefore the amount represented was '4'. There were 20 sequences in total across the 4 narrative arcs. The mise-en-scene was described for 8 missions (4 Recruiting Missions and 4 Loyalty Missions). Character interactions aboard the Normandy were also recorded.

**Game Mechanics.** Please see Table 2 on Pg. 19. The corresponding game mechanics section was more involved. The section categorizes the scene number and brief scene description preceding a dialog interaction, followed by each dialog wheel option available, as well as the type of dialog topic: conversational, investigative, or action-oriented. I did not include an example for 'investigative' as the purpose of that option is to provide background information and does not affect the narrative choices. Additionally, the conversational tenor/attitude from PC was described; specifying if the responses available were paragon or renegade in nature, and I provide a verbatim transcript of the dialog under the heading, "What Does the Dialog Look Like". The last category detailed instances of paragon or renegade interrupt options available, and the outcome of that option.

Table 2: Sample - Game Mechanic (Dialog wheel) Data Characteristics

Scene #	Scene Description	Dialog Options Available	Dialog Option Chosen	What Does the Dialog Look Like?	Paragon/Renegade Trigger Interrupt?
7e	Samara introduces herself: "My name is Samara, I am a servant of the Justicar. My quarrel is with these eclipse sisters, but I see three well-armed people before me." " Are we friend, or foe?"	"You killed in cold-blood" (renegade tone), "friends" (paragon tone)	"You killed in cold-blood" (renegade tone),	<b>Shepard:</b> "That merc was wounded and helpless, you just kill anyone who won't help you?"	None available
7e			"Friends" (paragon tone)	<b>Shepard:</b> My name is Commander Shepard, and I need your help on a critical mission	
14b	Grunt & Shepard visit the Shaman to get Grunt the Rite of Passage. The Shaman begrudgingly agrees and asks who is willing to kill and die on his behalf.	"He can bring allies" (investigative), "He is part of my crew" (paragon tone), "We will kill for Grunt" (renegade tone).	"We will kill for Grunt" (renegade tone).	<b>Shepard:</b> Grunt will strengthen clan Urdnot. Name our target, and it will die. (Shepard agrees to be his 'krant': willing to battle and die for Grunt.	<b>Renegade trigger:</b> Shepard headbutts him really hard to display her strength.
14b			"He is part of my crew" (paragon tone),	<b>Shepard:</b> We stand with Grunt, as shipmates and comrades.	
18G	Tali hearing – returned from ship. Addressing courtroom. <b>Shala Raan</b> asks if Shepard has any new evidence to submit to the hearing.	I don't need evidence (paragon), You're wasting our time! (renegade),	"I don't need evidence" (paragon tone),	<b>Shepard:</b> Tali helped me defeat Saren and the Geth at the Citadel. That should be all the evidence you need!	
			"You're wasting our time!" (renegade tone).	<b>Shepard:</b> Tali's achievements are the evidence you need. Come on, Tali, we're leaving	

## **General Narrative Structure and Game Mechanics**

Please see Table 1 on Pg. 16. An excel spreadsheet was created to describe the overall narrative structure to gain a better understanding of the ME2 world, in addition to collecting data on each NPC narrative arc. Four broad categories were defined: the title/name of the element, the definition of each element, background information, and a description of what it looks like in game. For example, when recording data on Cerberus, I defined it as per the ME2 codex, and supplied background information on Cerberus' role in the current game, along with a sample of how they are addressed in dialog or described in the game. The following general narrative elements were recorded and described: story world, micro-narratives, including recruiting and loyalty missions, NPCs, characters on the ship that were not NPCs, the setting, alien races, user emotion, the PC, and the mise-en-scenes.

Please see Table 3, Pg. 21 - 22. The game mechanics and narrativized interface were also recorded and described in detail. The morality system and points described the actions and effects that 'paragon' and 'renegade' have on gameplay and narrative outcomes. The dialog wheel was broken down by conversational topic, tone, and identified what an action looked like. Other gameplay mechanics that were described are the popup window that provides tasks and guidance, Commander Shepard's private terminal on the ship, and the news radio/audio transmissions that can serve as both narrative exposition tools, and descriptors of story worlds.

Table 3: General - Game Mechanics and Narrativized Interface

Characteristic Name	Code	Description	Example
<b>Dialog Wheel Options</b>			
<b>Investigate</b>	Investigate	This is used to access information: history, people, situation, background, intel, characteristics, clues.	"What is an Asari?", "What is the nature of a beacon?"
<b>Paragon</b>	Paragon	Compassionate, more nurturing tone or action meant to influence another character or the direction of the conversation.	Something on your mind?, These colonists need my help.
<b>Renegade</b>	Renegade	Aggressive or defensive tone or action meant to influence another character on the direction of the conversation.	"Leave him in the hell he made", "Do as I say, EDI"
<b>Action</b>	Action	An action conversational option prompts a player call to action.	[Hail a cab]. Or agreeing to help on a mission.
<b>Trigger Interrupts</b>			
<b>Paragon</b>		Using the Paragon trigger option allows the <i>PC</i> to commit acts of compassion and goodwill towards <i>NPCs</i> and minor characters. Executed by activating the left-trigger of the xbox controller.	<b>A paragon act takes on many forms:</b> stopping an <i>NPC</i> from doing something they'll later regret, like shooting an enemy in the knee-caps, consoling a minor character who is in despair, giving \$\$ to a minor character who wants to go home to his colony but does not have the funds, healing an ailing stranger (minor character).
<b>Renegade</b>		Using the renegade trigger option allows the <i>PC</i> to commit acts of aggression and "the end justifies the means" attitude towards <i>NPCs</i> and minor characters. Executed by activating the right-trigger of the xbox controller.	A renegade act takes on many forms: Head-butting someone, ejecting an enemy from a window, shooting an enemy without mercy.
<b>Points</b>			
<b>Paragon</b>		Gained by committing compassionate acts or using compassion or positive persuasion during interactions. Paragon points unlock dialog options	With sufficient paragon points, the <i>PC</i> , Commander <i>Shepard</i> , can broker peace between the two parties, thus preserving their loyalty. Without sufficient paragon points: the <i>PC</i> /player is forced to side with

		game.	
<b>Renegade</b>		Renegade points are gained by committing acts in an aggressive tone or using more threatening, aggressive means during interactions to gain advantage.	There are two scenes in <i>ME2</i> where two <i>NPCs</i> are fighting. With sufficient renegade points, the <i>PC</i> , Commander <i>Shepard</i> , can broker peace between the two parties, thus preserving their loyalty. Without sufficient renegade points: the <i>PC</i> /player is forced to side with one of the <i>NPCs</i> consequently losing their loyalty. This loss of loyalty has consequences for the third mass effect game.
<b>Loyalty</b>		When <i>PC</i> gains <i>NPC</i> loyalty, the <i>PC</i> is able to use the <i>NPC's</i> bonus power, and the <i>NPC</i> gains a new outfit.	When <i>Shepard</i> and <i>Jacob</i> successfully completed his loyalty mission, <i>Jacob</i> gained a new power and outfit.
<b>Narrative Interface</b>		Graphics that pop-up during gameplay	
<b>Pop-up window at bottom right-hand corner</b>		Pop-up windows indicate accumulation of points re: renegade/paragon, and also to indicate that new dossiers, and codexes have been added to the journal. During missions it also provides guidance on how to proceed in a scene.	Will indicate next task in a mission, the amount of paragon, and/or renegade points acquired.
<b>Information Screens</b>			
<b>Journal</b>		Dossiers provide a cursory overview of the missions before going, once on the ground, the dossiers will be updated with tasks to complete.	Recruiting mission gives a brief overview of special combat skills and location to find person.
<b>Mission completion reports</b>		Gives player a mission wrap-up report, points collected, weapons picked-up.	A static card that appears upon completion of each mission summarizing the mission, and detailing points rewarded, and items.
<b>Codex</b>		In-game <i>Mass Effect</i> Wiki. Information of all races, histories, weapons, ships, administrative bodies, enemies, etc.	Can find detailed history of events from first game.

## **NPC Rationale Choices and Issues Encountered**

Choosing the NPCs was a daunting task, as several have unique personalities and stories. The first characters to be eliminated were those with story arcs that largely focussed on combat, fighting/killing enemies, and dealing with personal vendettas. Out of the ten possible choices, five were eliminated. As my research interests are focussed on civic engagement that relate to concepts of cooperation, reciprocity, and trust, close attention was paid to NPC stories that employed these criteria through their narrative. As a result, Grunt, Tali, Samara, and Jacob's narrative arcs were chosen.

The biggest difficulties were dealing with an incredibly large data set, choosing the dialog sequences to record and analyze, as well as the speed at which the dialog titles go by before the dialog wheel activates. The dialog titles are like sub-titles, moving to match the speed of conversation. Using Youtube videos allowed me to pause interactions, recording dialog I was not able to capture during gameplay. In terms of selecting dialog sequences, I decided on character interactions that were related to the concepts of civic engagement. Some additional dialog was recorded before and after to allow for context.

## **The ME2 Universe**

This section briefly details narrative and gameplay aspects necessary to understand how one navigates the ME2 world.

### **Commander Shepard - The Primary Character (PC)**

Commander Shepard is the only playable character in the *Mass Effect* series. The PC's identity is designed with inherent values and traits, although his/her personality attitudes are mutable through the dialog wheel options; the player can elect to respond in a sarcastic, aggressive, and unemotional tone, or a more compassionate, nurturing, and understanding tone.

## **Non-Primary Characters (NPCs)**

NPC's only exist in conversation with Shepard, and similar to Shepard, they have a fixed identity and core traits.

## **The Alliance & the Citadel Council**

The Alliance represents Earth and all human colonies in Citadel space. Backed by Earth's most powerful nations, the Alliance has become humanity's military, and economic leader. The Citadel Council is an executive committee that represents the interests of various races throughout the galaxy.

## **Setting – The Normandy Spaceship**

The bulk of the story takes place aboard a spaceship called the *Normandy*; where the PC, the NPCs and minor characters are stationed. Onboard the ship, the PC/player spends time getting acquainted with the NPCs, and reviewing missions. The ship is equipped with a private terminal and on-deck assistant; both to alert the PC to incoming dossiers/messages regarding upcoming missions, and to notify her when NPCs require her assistance. The ship is also equipped with an artificial intelligence (AI) named 'EDI', that functions as the electronic warfare defense system, helping the shore crew (PC and two NPCs) with important logistical and tactical information to optimally reach the mission targets.

## **Morality System & Points**

The *ME2* game has integrated a morality system into the game play that can be used to unlock additional dialog options and actions that can allow the player to change the outcomes of some scenes and missions.

The system is based on two different types of points that can be acquired by interacting with characters throughout the game, and through certain choices made in some story missions.



The points are as follows: 'Paragon' points are rewarded after committing acts of good and altruism, and 'Renegade' points are rewarded after committing acts that have an aggressive, or emotionally detached approach. The dialog options and additional actions that are unlocked correspond in tone to the type of morality involved, 'Paragon' or 'Renegade', providing another way for the player to customize the personality and attitude of Shepard.

## Dialog Wheel

The dialog wheel facilitates several dialogue "topics" that indicate the general tenor of the conversational choice, such as 'Paragon' and 'Renegade'. Players can also gain personal knowledge while interacting with other characters, and use the "investigate" option to access backstory, as well as logistical, historical, and cultural information. Lastly, it prompts the player to make choices that can steer the game down different narrative paths in the long-term.

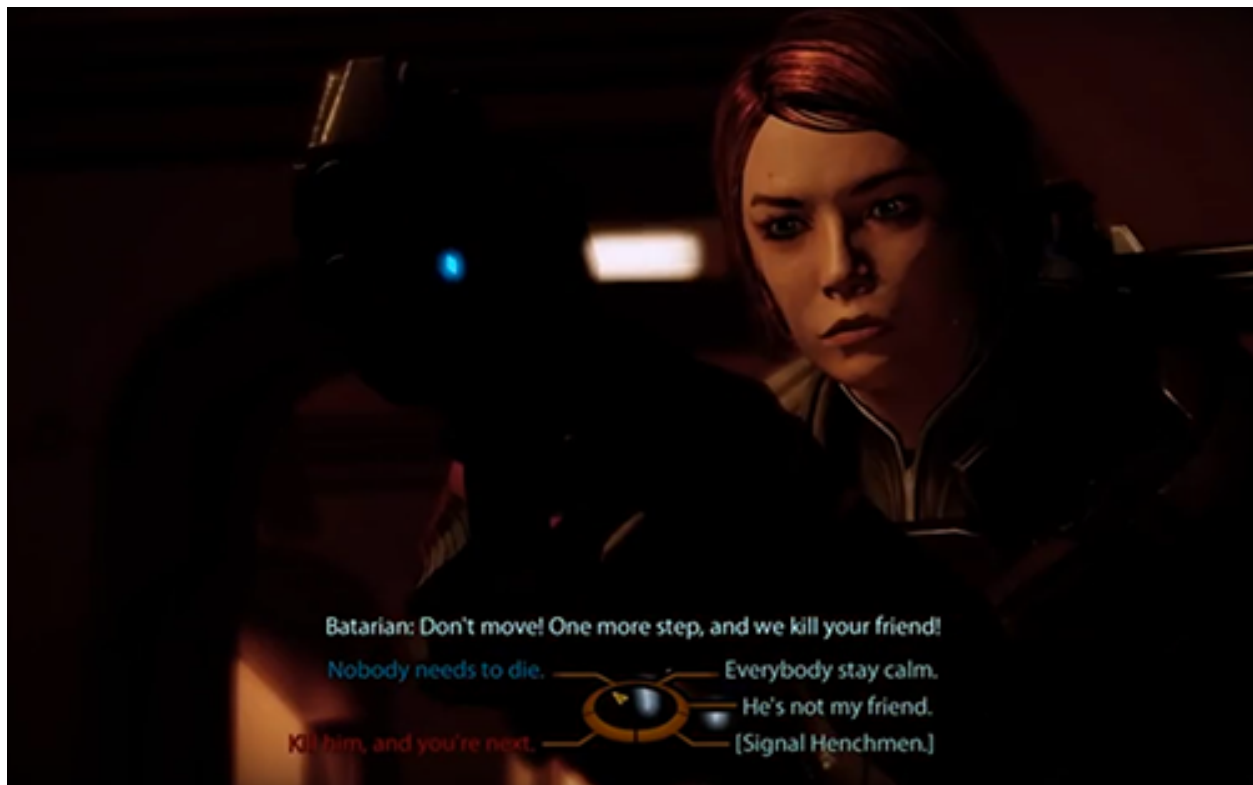


Figure 1.0. Dialog Wheel with 'Paragon', 'Renegade', and call to action options

## **Journal and Dossiers**

The journal lists mission dossiers in a collapsible menu format that provides a cursory overview of potential squad recruits and Loyalty Missions. When actively playing a mission, the dossier will be updated with a bulleted list of tasks for the player to complete.

## **Codex**

The Codex is an in-game encyclopaedia that houses information on races, planets, institutional/governing bodies, as well as all historical information related to the *ME2* world. Additionally, it stores logistical and tactical information on adversaries, technology, ships, and weaponry.

## **Pop-up Cards**

Pop-up cards appear in the bottom right-hand corner of the screen to indicate points accumulated, journal and codex updates, as well as tasks to complete.

## **Mission Computer**

The Mission Computer is a navigational directory whereby players access the *ME2* Codex, the squad directory, journal, and navigational map.

## **Major Alien Races**

Five alien races play a major role in *ME2*: the Asari, the Turians, the Krogans, the Quarians, and the Salarrians. The definitions below are sourced from the dialog and Codex in *ME2*.

***The Asari.*** The Asari are a mono-gendered biotic race with a feminine form, share similar physical characteristics to humans, and are known for their diplomatic nature. The Asari bond, mate, and reproduce by adapting their nervous system to that of another mate. Additionally,

they are extremely long-lived and go through a few life stages: the Maiden stage (puberty) where they seek new experiences, often working in clubs, and as mercenaries, followed by the Matron stage, where they want to settle down and start a family. A possible consequence of reproduction is giving birth to an Ardat-Yakshi, an Asari with a rare disorder that causes a person's brain to haemorrhage when she mates with them, eventually resulting in death. Ardat-Yakshis are empowered by this ritual, resulting in an addiction to killing.

**The Quarians.** The Quarians are adept at engineering, research, and AI hacking. They are responsible for the inception of the Geth, a synthetic species who think and behave as a collective unit. Evolving beyond Quarian intelligence, the Geth sought independence as a species and rebelled against their creators, eventually forcing the Quarians from their homeland. The Quarians now live on the migrant fleet called the Flotilla, made up of thousands of passenger and military spaceships of varying sizes.

**The Turians.** The Turians are a strong military race that are highly disciplined and value collective honour. They work cooperatively with Humans, Salarisians, and Asari to maintain civil and military concerns throughout the galaxy.

**The Salarisians.** The Salarisians are a fast-talking and highly intelligent amphibian species, specializing in espionage, intelligence-gathering, and scientific research. The Salarisians were responsible for the advancement of the Krogan species to space-faring status, for use as highly effective warriors in battle.

**The Krogans.** The Krogans were a ruthless and underdeveloped species that were struggling to survive until the Salarisians realized their full potential as warriors. The Salarisians taught them to build and use modern technology so they could serve as frontline troops in a war.

Liberated from unforgiving conditions of their home world, the Krogan experienced a population explosion. They began colonizing other nearby worlds, even though they were already inhabited by other species. The Krogans rebelled against the galactic government, and could only be stopped as a result of a Salarian-invented bioweapon. Used by the Turians to suppress the Krogan population; the genophage bioweapon reduces the viability of a pregnancy to one in a thousand.

### **Mission Story World & Navigation**

**Orientation/Story World.** Missions begin by situating the NPC story, the type of world the PC/player has landed on, as well as the economic and political climate; the sequence can either open with a cut-scene, a tactical and logistical report by EDI, and/or narrative exposition through conversing with minor characters. Random conversations the player overhears, as well as radio news/audio transmissions serve as narrative exposition tools. Missions are uniquely designed and are representative of the NPCs identity, backstory, and conflict.

**Navigation.** The PC/player, along with two NPCs, navigate missions by completing narrative and ludic tasks in sequential order. Ludic tasks can involve combat, collecting clues dispersed throughout the story world, or a combination of both. Narrative tasks consist of speaking to specific people in sequential order. Missions are intended to be completed by the player; there are no narrative exit strategies. Popup cards appear in the bottom right-hand corner to indicate the next task to complete. Players can refer to their journal to keep track of said tasks.

**The Cut-Scene.** Cut-Scenes in video games are widely used to establish fictional worlds that situate the narrative for the player, and are often based on film genres in the vein of action, thriller, and horror (Cheng 2007, pg. 18). The creation of these fictional narrative worlds allows the player to suspend their disbelief, and heightens tension leading up to suspenseful events

laden with conflict, where players will be called to act as agents in that world. Cut-scenes are passive, narrative segments that orient the player to the interactive game experience, moving the player along through a series of events, until the player reaches the story ending (Cheng 2007, pg. 16). In addition, they provide the context to aid players in performing narrative and ludic actions necessary to completing missions. In *ME2*, cut-scenes precede missions, and serve to orient players to the story, mise-en-scene, and possible minor characters that play key roles in mission narratives. They are also used to establish dramatic events, wherein the player is called to action once the cut-scene ends, through narrative and/or ludic action.

## **Data Analysis – Part One**

### **Narrative Structures**

My initial challenge was to organize and interpret the data from a narrative perspective. Each of the four NPC narrative arcs were assessed against William Labov's model of the narrative structure (Frank 2010, pg. 26), which includes the abstract, orientation, conflict, resolution, and evaluation.

**Abstract.** An Abstract uses the genre and dramatic event to mark the type of story to come. The mise-en-scene was identified as foreshadowing the oncoming dramatic event: futuristic environments equipped with advanced technologies, unidentified suspicious characters shrouded in shadow, an ominous musical score. The dramatic event was used as a climactic ending to precede gameplay, beginning aboard the *Normandy*, whereby an undetected enemy force attacks an unsuspecting vessel. As the ship is being blown to pieces, the player is introduced to Commander Shepard attempting to evacuate surviving crewmembers.

The opening sequence of the *ME2* game was identified as an abstract. The abstract was presented in the form of cut-scenes, whereby the player passively watches the opening sequence.

The sequence also situates the narrative for the player. Unidentified characters and a title card describe the narrative by referring to the protagonist, the *Mass Effect* origins and current day issues, and an unknown enemy force.

**Orientation.** Three of the four NPCs selected for analysis in this paper are unknown to the PC at the beginning of the game; NPC Tali was a former squad member in the first game. Orientation was identified in Recruiting Missions as they establish a rapport and working relationship between the PC and NPC. Through second-hand information, narrative exposition in the mise-en-scene, and fighting on behalf of the NPC, the PC pieces together an impression of the NPC. As well, the PC may briefly interact with the NPC/recruit to acquire information necessary for the player to complete the NPC's mission. For example, in table 4 on pg. 32, Shepard has travelled to Illium to recruit Samara for the suicide mission. The first third of the Recruitment Mission is occupied by gleaning second-hand information about Samara and her world through overhead radio announcements, and random background conversations. The PC/player receives more information upon agreeing to fight for Samara's current cause in exchange for her joining the PC's squad; however the information provided through the 'investigate' option only provides the information necessary to successfully complete Samara's cause.

**Complicating event/Conflict.** Once the viewers and readers have an overall sense of the imagined world, the plot is introduced, taking shape as a conflict or complicating event whereby a source of trouble requires a solution (Frank 2010, pg. 26). In the ME2 NPC narrative arcs, the complicating event was implemented in the NPC personal conflict, where Commander Shepard is approached by the NPC to assist them on a personal matter of great distress. The origin of the personal conflict is revealed through the conversational topics on the dialog wheel.

**Resolution.** Conflicts or complicating events eventually lead towards a resolution or climax, where the issue has hopefully been resolved. The loyalty missions are an opportunity for NPCs to confront and resolve those personal conflicts. For example, Table 4 on pg. 32, Samara is able to resolve her conflict by fulfilling her Justicar warrior code to kill her dangerous fugitive daughter, Morinth, whom she has been pursuing for the last 400 years. This code was also a form of punishment for Samara, as she felt her previous lifestyle was responsible for her daughter's affliction (see pg. 27 'the Asari – Ardat-Yakshi').

**Evaluation.** Evaluation allows for character reflection on the events and for feelings to be expressed. In the case of NPCs, evaluation takes place in conversation with the PC after the loyalty missions have ended, whereby the NPC reflects upon the conflict and thanks the PC for their assistance. In the example in table 4, pg. 32, Samara expresses her catharsis to Shepard and feels free of the guilt she has carried for the last 400 years. She has finally fulfilled her code and put her daughter to rest.

Table 4 – Narrative Structure Examples

<b>Abstract</b>	<b>Orientation</b>	<b>Complicating Event</b>	<b>Resolution</b>	<b>Evaluation</b>
Alerts user to genre and story that is about to begin, such as a news report, a quote, or dramatic event.	Identifies key characters, the setting or mise-en-scene, and the time and place.	A source of trouble requires a solution.	Conflicts or complicating events eventually lead towards a resolution or climax, where the issue has hopefully been resolved.	Evaluation allows for character reflection on the events and feelings are expressed.
<b>NS-Abstract - Opening cut-scene of ME2:</b> Cut-scene introduces player to PC and ME origin, present context of ME2, including unidentified major players, genre, and setting.	<b>NPC-Samara-RM</b> - The PC pieces together an impression of the NPC and her world through second-hand information, narrative exposition and ludic tasks: In 'Samara's case, her role and code as a Justicar. The PC briefly meets the NPC and agrees to cooperate on the NPC's mission (combat) in exchange for NPC joining mission.	<b>Tali requests loyalty mission.</b> The NPC is faced with a personal conflict of significant distress, and reaches out to the PC for assistance. <b>Tali is facing charges of treason by her people. The admiralty board will not disclose the charges until she goes home. She asks Shepard to help her.</b>	<b>NPC-Samara-LM. NPC fulfills her code, kills her criminal daughter, and feels free of guilt.</b> After 400 years of pursuing a dangerous fugitive who kills without mercy, Samara is able to confront Morinth, her fugitive daughter, who has a rare genetic disorder that causes her to burn people's mind when she joins with them. Shepard <b>secures Samara's loyalty.</b>	<b>NPC-Samara-NORM.</b> For NPC-Samara, evaluation is catharsis, expressing her freedom from the self-inflicted punishment of pursuing her fugitive daughter for 400 years.



## Narrative Capacities

Recruiting missions, loyalty missions, and character interactions were analyzed for their narrative structure, in addition to the role they serve in driving the narrative forward between the PC and the NPC. More specifically, I explored narrative capacities that were employed in the NPC's story to keep the user captivated throughout the narrative arc. Drawing from Frank's (2010) narrative capacities that are commonly employed in literature (pg. 28), trouble, suspense, and test of character were used as a framework to examine the existence of those particular devices in the NPC narrative arcs. These three capacities were chosen as they can be applied to a visual medium, and are more easily identifiable in an interactive gaming experience. As cited by Bizzochi & Tannenbaum (2012) in the literature review, although video games had made significant strides in bridging harmony between narrative structure and game play, the design elements of video games had not reached the narrative potential of cinema and literature (pg. 393).

As Mass Effect 2 relies on the development of supporting characters, I explored how each capacity contributed to the NPC narrative experience and the NPC identity. Furthermore, I catalogued how each capacity contributed to the narrative coherence and mise-en-scene (Jorgensen 2010, pg. 315).

**Trouble.** Trouble was recognized in NPC loyalty missions where personal conflicts incited other conflicts, requiring the PC and NPCs to solve the initial and subsequent conflicts in order to complete the mission. In 'NPC-Grunt's Loyalty Mission' (Table 5, pg. 35), the table describes the issues of confronting Grunt's personal conflict in order of sequence; the PC/player (Shepard) has accompanied Grunt to his Loyalty Mission on Tuchanka, where the Krogan clans reside. As the player, Shepard is informed that Grunt's personal conflict requires a rite of

passage into adulthood, however Grunt's 'tank-born' status causes outrage among other clans, creating other conflicts. This information was made available from activating conversations with Krogan clan members through the dialog wheel.

**Suspense.** "Suspense depends on a tension between different possible outcomes – some to be hoped for, and others to be feared. Sharpening this tension, suspense...enables stories to elicit engagement: stories work because people get caught up in the story" (Frank 2010, pg. 32). Narrative elements consist of plot clues that were collected through ludic action, such as a written note, a recording, or video projection, and through conversation with other minor characters (Jenkins 2004, pg. 6).

NPC-Jacob's Loyalty Mission was identified as using suspense to frame the narrative related to his personal conflict; he and Shepard arrive on an island on a remote planet to investigate a distress signal sent by his estranged father's ship, only to find that his father is not a victim. As per table 5 on pg. 35, the PC/player, and NPC make their way through the narrative, collecting clues and speaking to minor characters. The clues were uncovered by clicking on radios, data pads (futuristic iPads), and crew logs. Furthermore, by activating conversations with other minor characters that have also been marooned, the PC/player, and NPC gather evidence to suggest that the father is trying to escape from the crimes he has committed against these people

**Character (Test of character).** "A story's characters are those who come to terms with whatever the trouble is" (Frank 2010, pg. 29). In ME2, the PC/player is given various choices on how he/she will react to that trouble or conflict; those choices have a direct implication on the NPC narrative arc.

NPC-Tali-LM is an example in Tali's Loyalty Mission. Tali's personal conflict revolves around the charge of treason for sending active parts of Geth, the robotic enemies of the

Quarians, to her father. Shepard and Tali find concrete evidence that incriminates Tali's father for intentionally activating the Geth parts that he had asked Tali to find and send to him. If Tali is found guilty, she will be exiled; the evidence that Shepard and Tali have found can exonerate Tali. Tali begs Shepard not to turn in the evidence against her father, preferring exile to revealing information that would destroy her father's reputation among her people. Shepard's test of character was recognized as the player having to make the decision of either concealing the evidence from the admiralty board and being responsible for Tali's permanent exile from her fleet, or turning in the evidence, and betraying a dear friend.

Table 5 – Narrative Capacities

Code	Capacity	Example
NPC-GRUNT-LM	Trouble	<b>Subsequent Conflicts - 1st conflict:</b> NPC Grunt's tank-bred status causes outrage amongst purist Krogan clan members who believe the rite is a sacred privilege reserved for pure Krogan. <b>2nd conflict:</b> after Grunt successfully completes rite, Uvenk offers Grunt a restricted, conditional clan status, where he would only be accepted for his combat skills. Grunt is tasked with accepting or rejecting the offer. Rejection prompts combat with Uvenk and his clan.
		<b>Different means to reconciling/solving trouble. The first means of reconciliation:</b> Shepard has to convince the Shaman that Grunt is worthy of rite. She agrees to stand in as his advocate, and through the dialog wheel choices convinces the Krogan Shaman, despite opposition. <b>2<sup>nd</sup></b> when confronted by Uvenk, Shepard advocates for Grunt through the dialog wheel: shepard can refuse for him, choose, or allow him to make his own decision.
NPC-JACOB-LM	Suspense	Clues in the form of ludic tasks and narrative exposition are used to modify the original intent of the narrative. Jacob and Shepard's intent was to locate Jacob's father, thinking he was marooned. As Shepard and Jacob encounter afflicted members of his father's crew, and collect clues, mounting evidence incriminates Jacob's father in a series of heinous crimes. His father sent the distress call to escape the wrath of the victims that are trying to kill him.
NPC-Tali-LM	Test of Character	Player/PC is faced with a difficult decision: Tali pleads with Shepard not to turn in evidence that will incriminate her father, but the evidence will clear Tali from permanent exile.

## **Data Analysis – Part Two**

### **Cooperation, Reciprocity, and Trust in ME2**

Using definitions developed from the literature on social capital, the final phase of analysis explored the existence of cooperation, trust, and reciprocity in relation to narrative structures and narrative capacities. Particular attention was paid to identifying each concept as defined in the literature, which was accompanied by an example of representation and followed by a brief analysis of how the concepts were verbally expressed in the narrative. The last section explores the use of the concepts in relation to the narrative structures and capacities previously identified in part one of the analysis.

This section discusses how concepts of cooperation, trust, and reciprocity were recognized based on the definitions developed from the literature. The concepts will be discussed individually, although it is important to note that the concepts are linked together and cannot exist in isolation, (Putnam 1998; Coleman 1988; Stone 2001; Gouldner 1960)

**Cooperation.** Cooperation was defined as a feature of a social organization that facilitates coordination and cooperation for mutual benefit, and can be described as a form of behaviour that arises in the context of civic engagement (Putnam 1998, pg. 67).

In example NPC-Tali's Recruitment Mission (Table 6, pg. 37), Cooperation was identified as 'behaviour' performed out of civic duty, in spite of working with an entity bearing a history of nefarious conduct. The NPC is asked by the PC to collaborate out of shared norms. Tali has expressed disdain towards Cerberus, having just boarded the *Normandy* ship after being recruited for the suicide mission, and is shocked that Shepard is working with Cerberus. Shepard asks her to put her feelings for Cerberus aside as they all share the same goals, to defeat the enemy and save their civilizations.

**Reciprocity.** The norm of reciprocity is an expectation of a moral obligation that (1) people should help those who have helped them, and (2) people should not injure those who have helped them. In NPC-SAMARA-RM (table 6) reciprocity was found as a moral obligation to help the PC in return for their cooperation. Shepard has successfully completed the investigation for the NPC Samara to recover information on the whereabouts of a dangerous fugitive that Samara has been pursuing. Samara had previously agreed to join the suicide mission in exchange for that information

**Trust.** A feature of a social system, generally a closed system, that allows for the development of obligations, expectations, and norms of reciprocity between its members. In *ME2*, trust is fostered as an extension of cooperation and reciprocity, and more precisely, out of shared norms and values. In Table 6, NPC-JACOB-NORM was classified as an example of two characters that fundamentally share the same values and norms. Based on the data collected, Jacob has previously expressed his trust of Shepard. The scene occurs aboard the *Normandy*, after Jacob has completed his Loyalty Mission. Shepard directly inquires as to the reason Jacob trusted him/her from the start.

Table 6 – Examples of Cooperation, Reciprocity, Trust

Code	Concept	Example of Dialog Interaction
NPC-TALI-RM	Cooperation	<b>Tali:</b> "I don't know who you are, but Cerberus threatened the security of the migrant fleet. Don't make nice." <b>Shepard:</b> You don't have to like them Tali, but we are on the same side.
NPC-SAMARA-RM	Reciprocity	<b>Shepard:</b> "I've got the name of the ship. Your fugitive left here two days ago on the AML Demeter." <b>Samara:</b> "Shepard, you impress me. You fulfilled your part of the bargain, and I will fulfill mine."
NPC-JACOB-NORM	Trust	<b>Shepard:</b> "You seem ok with taking a risk on me. Why?" <b>Jacob explains:</b> "Soldiers like us know how important trust is to the crew. I'm not used to seeing it on a Cerberus ship. Definitely not from the people they put in command. But you focus on more than the job."

## Communicating the Concepts

The analysis of *ME2* suggests that cooperation, trust, and reciprocity are communicated in different ways. To that end, I have included a brief explanation that will help guide readers through the analysis and findings.

The dialog-related data collected on cooperation, trust, and reciprocity revealed several instances where they were not verbalized directly. As such, a table was created with examples of two ways in which the concepts emerge in the narrative. Dialog that used those specific words were identified as ‘direct’, dialog that expressed the same meaning, but used different words within the dialog, was identified as ‘implicit’:

Table 7

Code	Cooperation, Trust, Reciprocity	Direct, Implicit	Example
NPC-Jacob-RM	Trust	Direct	<b>Direct:</b> Jacob asks: "Do you trust me, Commander?"
NPC-Tali-LM	Cooperation	Implicit	Tali (cooperation - requires PC action): <i>so..er.. you would actually speak for my defense?</i>
NPC-Samara-RM	Reciprocity	Direct	<b>Samara presents a solution:</b> "I see a way, while I am in custody, you find the name of the ship. Do that, and I will join you. Then the code will be satisfied."

## Findings and Discussion

In part one of the analysis, concepts derived from narrative structures (Frank, 2010; Labov, 1997) and narrative capacities (Frank 2010) were employed to deconstruct game design

decisions that make up the *ME2* narrative architecture. Part two examined the existence of cooperation, reciprocity, and trust, paying specific attention to verbal application within the narrative by providing examples for each of the concepts. The final part of the analysis contextualized the use of these concepts in relation to the narrative structures and narrative capacities by examining their existence in each of the narrative segments.

The findings will discuss patterns across the narrative structures and narrative capacities, focusing on similarities and differences between the NPC narrative arcs, using examples and tables as supporting evidence. This is followed by a discussion related to the concepts of cooperation, reciprocity, and trust.

The findings will be presented in order of the research questions below:

1. How are narrative structures (Frank, 2010; Labov, 1997) and narrative capacities (Frank 2010) reflected in *Mass Effect 2*?
2. In what ways do the narrative structure and narrative capacities contribute to the presentation of the positive behaviours of cooperation, reciprocity and trust in gameplay?

These findings support my research interest in an overall exploration:

3. How does the design of the narrative structure in *Mass Effect 2* allow for the potential of fostering civic engagement?

## **Part One - Narrative Structure**

Deconstructing the narrative capacities and game design decisions was central to understanding the narrative devices and structures that support each NPC narrative arc. In part one of the analysis I identified patterns that exist by comparing the similarities and differences between arcs. The findings will show evidence and examples that demonstrate common themes across the

narrative structures and narrative capacities, beginning with an examination of how each stage of the narrative structure functions to move the narrative forward.

**Narrative Structure Similarities.** As evidenced by table 8 (pg. 42 - 43) all four narrative arcs employ a procedural model to situate each stage of the narrative, achieving the same story goals. Abstract and orientation are used to introduce the PC to the NPC world, and establish a working relationship. Complicating event creates conditions for the relationship to move from professional to personal, through revelation of the personal conflict, ‘humanizing’ the NPC. Resolution allows for the opportunity to resolve said personal conflict with the full support of the PC; the conflict is resolved through the completion of sequential narrative and/or ludic challenges. In evaluation, characters reflect on the personal conflict by expressing feelings regarding the preceding event. NPCs express gratitude towards PC/player.

The main theme across each narrative structure is to use conflicts as a vehicle to forge a relationship between PC and NPC, whereby the PC plays a vital role in resolving said conflicts for the NPC. In orientation, the PC agrees to resolve a conflict for the NPC. Complicating events address the NPC personal conflict in conversation aboard the *Normandy*. NPC Personal conflicts are confronted through resolution on the Loyalty Missions. During evaluation, feelings are expressed about the conflict. For example, in the case of NPC Samara, she expresses catharsis of being free from pursuing her criminal daughter for the last four hundred years: “For the first time in four hundred years, I am free. I am a ruined vessel of sorrow and regret, but I am free.”

Other similarities exist in the procedural method in which ludic and narrative challenges are executed within Recruitment Missions and Loyalty Missions. Termed “railed” (Bizzocchi & Tanenbaum, 2012), players are confined to completing a set of ludic and narrative challenges towards executing the goals of the mission. Although the player is given some freedom on how



those goals are reached, ultimately, the direction of the story cannot be derailed (pg. 401). As seen in the tables, the orientation and resolution for all four NPC narrative arcs employ the same challenges to achieve the end goal.

**Narrative Structure Differences.** “The approach in ME2 is to let the companions’ personal development be central to the narrative progression of the game, and allow the creation of emotional bonds between companions and PC” (Jorgensen 2010, pg. 318). Although the four narrative arcs are dependent on the motivations of the NPC, each NPC agenda is a unique reflection of that character and their origins, making their personal agenda responsible for the narrative progression. As a result, the pacing of each narrative stage is presented differently. For example, orientation for NPC-JACOB (Table 8, pg. 42), serves as a player orientation to the overall game experience, whereby the PC is trying to navigate an unfamiliar space, with unknown characters. Shepard encounters Jacob, who works for Cerberus. Shepard spends the mission fighting alongside unidentified characters in the hopes of getting answers on the motivations of an organization with a nefarious history.

Another example is from NPC Grunt’s orientation (Table 8, pg. 42) that occurs over two sequences. In the first sequence Grunt lies dormant in a tank filled with water, and is guarded by his insane creator, Okeer, who is breeding an army of artificially created Krogan warriors. The military leader that Okeer is working for has decided to kill him and destroy his creation. The PC learns about Okeer’s reasons for creating tank-bred Krogan. Okeer sacrifices himself to save Grunt, allowing the PC to bring the tank back to the Normandy. The second phase of the sequence occurs aboard the Normandy, when the PC releases Grunt from the tank, and recruits him for the Cerberus suicide mission. This example will be re-visited in narrative capacities.

Table 8 – Narrative Structure Similarities and Differences

<b>Abstract</b>	<b>Orientation</b>	<b>Complicating event</b>	<b>Resolution</b>	<b>Evaluation</b>
Alerts user to genre and story that is about to begin, such as a news report, a quote, or dramatic event.	Identifies key characters, the setting or mise-en-scene, and the time and place.	A source of trouble requires a solution.	Conflicts or complicating events eventually lead towards a resolution or climax, where the issue has hopefully been resolved.	Evaluation allows for character reflection on the events and feelings are expressed.
<b>NPC-JACOB-RM</b> Dramatic cut-scene demonstrates her ‘previous outcome’, followed by her current state or circumstances’. It also confirms the presence of a faction that has great interest in the PC – Lazarus project.	<b>NPC-JACOB-RM CONT’D</b> PC/Player awakes in an unknown facility, where she is forced to <b>fight alongside strangers</b> (Jacob) to access info on where she is & why she’s there. <b>Establishes narrative/motivation for entire game, including primary character purpose – recruit PC for mission.</b>	<b>NPC-JACOB-NORM.</b> Jacob has confided a source of family conflict to Shepard, and has asked her assistance in investigating the conflict. NPC gets NPC backstory	<b>NPC-JACOB-LM Opens with cut-scene.</b> Rescue mission turns into a confrontation w/Jacob’s estranged father when evidence collected finds him guilty of crimes. PC supports NPC through process of confronting personal conflict. Conflict resolved through completion of sequential narrative and/or ludic challenges.	<b>NPC-JACOB-NORM</b> Jacob has confronted his father (complicating event); Shepard and Jacob discuss trust, express feelings.
<b>NPC-GRUNT-RM</b> Cut-scene introduces player/PC player to mise-en-scene, genre, target sought, antagonist, and type of gameplay	<b>NPC-GRUNT-RM cont’d</b> PC to recruit NPC. AS PC locates Okeer (original target) uncovers clues about him thru narrative & ludic tasks. Orientation to NPC Grunt & species take places over two scenes: meets okeer- insane creator, gives PC backstory on tank-bred pure Krogan, and ‘release from tank-scene’, where recruits Grunt for the squad. <b>PC fights for NPC</b>	<b>NPC-GRUNT-NORM</b> NPC Grunt requires PC assistance for his issues of rage and identity struggle. PC agrees to assist w/personal conflict by going to Krogan colony. NPC gets NPC backstory	<b>NPC-GRUNT-LM</b> <b>Opens with cut-scene. PC helps NPC Grunt confront his personal conflict</b> by supporting him in a rite of passage. Conflict resolved through completion of sequential narrative and/or ludic challenges.	<b>NPC-GRUNT-NORM</b> NPC expresses gratitude towards PC. Knows who he is. NPC expresses feelings and evaluates what occurred

<p><b>NPC-SAMARA-RM</b> Cut-scene introduces player to the genre (murder-suspense), the NPC reputation (feared), key minor character, and foreshadows antagonist (Pitney for). Player sees PC and crew landing at location at end of cut-scene.</p>	<p><b>NPC-SAMARA-RM cont'd</b> Evaluation While trying to get the NPC/recruit to join Cerberus, PC builds impression of NPC and her world through second-hand information, narrative exposition, and assisting NPC in combat mission (<b>PC fights for recruit</b>).</p>	<p><b>NPC-SAMARA-NORM</b> NPC Samara confided in PC that the fugitive she is after is her daughter, and has asked PC for her assistance in killing her. PC gets NPC backstory</p>	<p><b>NPC-SAMARA-LM</b> <b>Opens with cut-scene. PC supports NPC through personal conflict.</b> NPC and PC confront the personal conflict – Daughter. Conflict resolved through completion of sequential narrative and/or ludic challenges.</p>	<p><b>NPC-SAMARA-NORM</b> NPC expresses her newfound freedom from her code, her punishment, and her gratitude towards PC.</p>
<p><b>NPC-TALI-RM</b> Cut-scene with EDI (ship AI) voice: establishes that NPC is located on the planet, no specific location disclosed, gives logistical info, and warns PC/player of Geth activity (hostiles). EDI warns that exposure to sunlight will melt shields.</p>	<p><b>NPC-TALI-RM cont'd</b> PC search for recruit to join Squad, PC uses clues to locate recruit, PC contacts recruit through radio (she is captive), recruit asks <b>PC to fight</b> and recover crewmember (reegar). PC cooperates and succeeds, save Tali and crewmate reegar. NPC joins mission.</p>	<p><b>NPC-TALI-NORM</b> NPC Tali asks PC to accompany her to hearing to confront charges of treason @ migrant fleet. PC gets NPC backstory</p>	<p><b>NPC-TALI-LM</b> <b>Opens with cut-scene. PC supports NPC via personal conflict,</b> accused of treason: sent active Geth parts to father. PC and NPC take steps to locate father and proof to exonerate NPC. Conflict resolved through completion of sequential narrative and/or ludic challenges.</p>	<p><b>NPC-TALI-NORM</b> Tali and Shepard reflect on the hearing, express feelings on her father's conduct.</p>

## Narrative Capacities

Tables were created for each NPC to support the evidence of themes related to the narrative capacities (Frank 2010, pg. 26) across the narrative arcs. Each table includes a legend explaining condensed codes, along with each stage of the narrative arc. In addition, missions that reflect Labov's model (1997) of narrative structure were indicated in the table. Please refer to table 9 on pg.60.

**Suspense.** Suspense was identified in the abstract/orientation for each of the four NPC narrative arcs. Overall, suspense was established through carefully staged cut-scenes that created tension in the story, and was used as a narrative foreshadowing technique. For example, this technique was used to create the tension in anticipation of NPC Samara's introduction to Shepard and her crew, by showing a scene where the criminal element feared Samara due to her Justicar code's ruthless commands to punish the wicked.

Suspense was also used in the form of ludic elements embedded in the mise-en-scene. The game designers of *ME2* employ environmental storytelling techniques by embedding narrative elements within the story in the form of clues, to immerse the player during missions, and to move the narrative forward (Jenkins 2004). In Tali's orientation, the tension was built through the use of ludic elements embedded in the mise-en-scene of a desolate, ruined planet. The clues are recovered audio recordings that are activated by the player, while traversing the game space. The clues made clear that the Quarians were under attack by the Geth, and that Tali was being held captive, and to ensure her survival at any cost. The clues created concern that Tali was in grave danger, creating a source of conflict.

In Jacob, Samara, and Tali's narrative arcs, suspense was also identified in the resolution stage of the Loyalty Missions. In the resolution stage of Loyalty Missions, suspense functions in

a similar manner to orientation in Recruiting Missions, but the overall degree of suspense is greater. The PC/player's investment in the situation is greater as the relationship with the NPC is now deeper, and the NPC is already wrestling with a personal conflict of great distress; as a result, each narrative and ludic element tackled by the PC/player increases the tension. To that end, clues revealed during these missions are directly related to sources of conflict created as a result of the personal conflict, otherwise known as trouble. The PC and NPC are tasked with confronting and reconciling a series of conflicts that arise within that mission, leading to a suspenseful climax. The relationship between the PC and NPC are at different stages in orientation and resolution, thus changing the character motivation with regards to capacities like suspense and trouble.

**Trouble.** Trouble was identified in orientation and resolution for NPC Samara and Tali, whereas for Jacob and Grunt, Trouble was only used in resolution. The use of Trouble was also modified in Recruitment Missions and Loyalty Missions to reflect the nature of the relationships, and subsequently, the nature of the conflicts. In orientation, the relationship between PC and NPC is in its infancy, thus other conflicts do not have an emotional impact on the PC/player such as in the case of Samara's orientation. Whereas in resolution, the PC/player's investment in the situation is greater as the relationship with the NPC is now deeper, and the NPC is wrestling with their significant personal conflict. To that end, trouble was directly associated with the personal conflict, thus amplifying the emotional aspect in resolution.

### **Symbiotic Relationship Between Trouble and Suspense.**

As evidenced in table 9 (see Appendix), suspense and trouble appeared in a symbiotic relationship in the orientation and resolution stages of the narrative.

For example, suspense is established in NPC Jacob's Loyalty Mission as an investigation to verify the validity of the rescue and distress signal that was sent from his father's ship. Trouble is introduced as a personal conflict for Jacob who had not spoken to his father in over ten years. Upon landing on the planet where the signal originated, Jacob and Shepard uncover evidence that implicates Jacob's father, Ronald Taylor, in a series of heinous crimes. The first uncovered evidence related to suspense was an activated beacon confirming local flora causes neural decay and is incompatible with human consumption. The beacon was resumed after being paused for over eight years. This causes Jacob and Shepard to question why the beacon was paused; perhaps the crew were forced to eat local food out of desperation, and as a result, had lost cognitive function. However, Jacob and Shepard later encounter the crew, who react to Jacob's face as he resembles his father, stating Ronald Taylor made them eat the food – this marks the first instance of trouble, in that Jacob has to find a way to help these people. It also creates more tension, as the female crew's reactions seem to implicate Jacob's father.

Later on, a female crewmember notices Jacob and Shepard, and gives them a crew log that lists the crimes that Ronald Taylor committed, including the exploitation of the cognitively impaired female crew and executions of members who attempted to mutiny. This logbook is the last clue that Jacob and Shepard collect and confirms a second source of trouble, that Jacob will have to confront his father in the light of these crimes. The clues culminate with a heated resolution, where Jacob confronts his father about his behaviour. In the end, Jacob's father is punished for his crimes, and the sick crew are air-lifted to safety by Cerberus. As can be seen, suspense and trouble are used together to propel the player forward to solve clues and progress toward the resolution.

**Test of character.** Test of character was identified as how characters come to terms and deal with a conflict, and how that decision can define a person's character. In *ME2*, test of character was only found in relation to the PC, and depending on player decision, had the potential to negatively alter the PC/NPC relationship and, ultimately, the gameplay trajectory.

As evidenced by table 9 (see Appendix), NPC-TALI's resolution was the only instance found as a test to the PC's character, where her choices in resolving a conflict not only has a bearing on the PC's character but has consequences for the NPC/PC relationship and, subsequently, the suicide mission. This finding relates to Tali's resolution, whereby PC Shepard's character is tested in deciding whether to turn in evidence that could exonerate Tali but implicate her father, or to conceal the evidence and preserve her friendship with Tali.

Tali's personal conflict revolves around the charge of treason for sending active parts of Geth, the robotic enemies of the Quarians, to her father. Shepard and Tali find concrete evidence that incriminates Tali's father for intentionally activating the Geth parts that he had asked Tali to find and send to him. If Tali is found guilty, she will be exiled, but the evidence that Shepard and Tali find can exonerate Tali. Tali begs Shepard not to turn in the evidence against her father, preferring exile to revealing information that would destroy her father's reputation among her people. However, when searching the Geth invaded ship for survivors, Shepard and Tali recover a video message that Tali's father had left for her, where he apologizes to Tali, and pleads that she turn in the evidence that would clear her of suspicion and incriminate him.

Shepard's test of character was recognized as the player having to make the decision of either concealing the evidence from the admiralty board and being responsible for Tali's permanent exile from her fleet, or turning in the evidence to protect her from permanent exile, and betray his/her dear friend. Opting for the latter causes the PC/player to lose Tali's friendship,

in that Tali will refuse to speak to the PC unless it is mission-related, and loyalty for the suicide mission.

## **Cooperation, Reciprocity, Trust**

This section discusses the ways in which the narrative structure and narrative capacities contribute to the presentation of positive behaviours of cooperation, reciprocity and trust in gameplay. The findings will first discuss the presence of the concepts in the NPC narrative arcs, as evidenced by the findings. The narrative capacities and structures will also be addressed in relation to the concepts; each will be discussed individually, however it is important to note that the concepts are linked together and cannot exist in isolation, based on the literature.

Table 10 (see Appendix) was created to show evidence of the concepts. The table shows all the stages of the NPC narrative arcs, and includes the narrative stages, narrative capacities, along with the number of times cooperation, reciprocity, and trust was mentioned at that stage. The narrative capacities have been condensed into codes: ‘NC’ stands for ‘Narrative Capacity’, ‘T’ is for ‘trouble’, ‘S’ is for ‘suspense’, and ‘TC’ is for ‘test of character’.

It is important to note that the word ‘reciprocate’ was never used directly, and ‘cooperate’ was used only one time. However, different words were used verbally to convey the same meaning, as presented in the analysis. ‘Trust’ was used more frequently, but other words were also expressed verbally. To that end, the examples that are used to support the evidence are of dialog interactions between the PC and other characters, presenting a clear line of conversation.

**Exclusions.** Labov’s (1997) Abstracts were also excluded, as they are narrative, cut-scenes that are non-interactive.



## Frequency of Cooperation, Reciprocity, and Trust

The concepts will initially be reviewed, followed by a closer examination of each concept presented within the narrative arcs. Examples will be provided to support the evidence, as the concepts were shown to behave differently at each stage of the narrative, depending on the capacities that were present.

**Cooperation.** As evidenced by Table 10 (see Appendix), cooperation was identified six times in various Recruitment Missions and Loyalty Missions, where suspense and trouble also existed. The predominant concept derived from social capital was found to be cooperation, mentioned consistently throughout each narrative stage- with the exception of evaluation. The highest number of mentions occurs in orientation, where the PC is helping the NPC on their pre-existing conflict in an effort to recruit them, and in resolution, where the PC is supporting the NPC with their personal conflict. This is due in part to more than one person cooperating on a mission, as well as cooperating on various issues within said missions.

Cooperation was verbally communicated in four ways: as a question, such as asking someone for help, in agreement to a request for help, as a solution to a conflict, and out of a sense of civic duty. The emergence of cooperation within a conversation was most frequently found as a ‘call to action’, whereby the PC or NPC is asked to cooperate on a mission or perform a narrative or ludic action.

**Reciprocity.** Reciprocity was found as a norm of cooperation, thus any act of cooperation would result in reciprocation. Furthermore, reciprocity was predominantly presented or mentioned at the end of missions, after the conflicts had been resolved, verbalized as a promise or debt of gratitude. In orientation, reciprocity resulted in NPCs joining the Cerberus Suicide mission, and conversely the PC secured NPC loyalty after resolution. NPCs were

identified as the primary initiators on the topic of reciprocity, with exception of NPC-TALI's Loyalty Mission, where she receives support at her hearing (resolution) for assisting two minor characters in prior missions, and PC Shepard, who receives gifts in appreciation for representing Tali at her hearing. As a result there were four instances of reciprocity. Reciprocity in this mission will be revisited when explored in more detail.

**Trust.** In *ME2*, trust is fostered as an extension of cooperation and reciprocity and, more precisely, out of shared norms and values. As per the table, trust was identified most frequently towards the end of narrative arcs in resolution and evaluation, where the NPC and PC relationship has progressed into friendship as a result of working together during the Loyalty Missions, and with specific NPCs. Trust was predominantly initiated by NPCs, with the exception of NPC-TALI-LM, where Shepard attests to Tali's character at her hearing. NPC Jacob was found to initiate the topic of trust the most consistently, in that he values trust greatly, and understands the mistrust of Cerberus as an organization. For example, when meeting Tali for the first time, Tali has a hostile reaction towards Jacob because Cerberus had threatened the Migrant Fleet (pg. 56). Jacob acknowledges her mistrust and hopes that he can gain her trust as they work together.

## **Concepts as Behaviours to Narrative Structures and Capacities**

Cooperation, reciprocity, and trust were evidenced throughout each narrative stage. This final section will address how each concept varied in these appearances, depending on how evolved the relationships were at that time. Cooperation will use examples from orientation and resolution to illustrate the different uses of cooperation at different stages of a relationship, while trust will address how the norm can evolve over the course of the relationship between the PC

and NPC. Reciprocity will be discussed as a norm of showing support for minor characters. The findings from narrative structures and capacities will be used to support the examples.

**Cooperation.** As previously discussed in the analysis and under the broad findings, cooperation was identified as a positive behaviour that solves interpersonal and personal conflicts, and can involve more than one conflict as a result of trouble. However, the relationship between the PC and NPC are at different stages in orientation and resolution, thus changing the character motivation with regards to cooperation. By providing examples, I will present how the capacities and cooperation are used differently in orientation and resolution, due to the differing nature of the relationship at each of those times.

In orientation, with the exception of NPC Jacob, the PC is cooperating by solving an interpersonal conflict on behalf of the NPC. In contrast, the PC and NPC confront a personal conflict alongside each other in resolution, thus cooperating and bearing direct witness on how that conflict affects the NPC. In addition to this, in resolution the motivations for the conflicts are deeply personal in nature, and require the PC to act on behalf of the NPC, where the player risks and emotional stakes are much higher. For example, in Grunt and Samara's Loyalty Mission, the PC puts her life at risk to resolve their conflicts. And in Tali's case, the PC/player may risk losing both loyalty and friendship, depending on the choices made. Thus, in orientation cooperation takes on a behaviour borne out of mutual civic interest, whereas in resolution, cooperation is modified from a purely civic behaviour to a behaviour driven by personal motivation that also fulfills broader civic responsibilities.

For example, in Samara's Recruitment Mission cooperation is borne out of mutual civic benefit for three characters: Detective Anaya (minor character), Samara, and Shepard. The first example of cooperation begins with Commander Shepard's meeting with Detective Anaya. After

landing on Illium, in an attempt to locate and recruit Samara, Shepard speaks to Anaya, who is currently trying to detain Samara but wants to avoid a confrontation since Samara's code will force her to resist and kill Anaya; this is the first conflict. As a result, Anaya cooperates with Shepard by giving him/her access to a crime scene so that he/she can persuade Samara to join Shepard's mission and leave her district willingly.

The next sequence depicts Shepard's encounter with Samara, where he/she finds out that Samara is seeking evidence that will point to the location of the fugitive she has been pursuing for 400 years. Samara is interrogating a mercenary for this information. Shepard then addresses his/her reason for tracking Samara down, indicating the second instance of cooperation:

**Shepard meets Samara - asks to join her mission:** "My name is Commander Shepard, and I need your help on a critical mission."

**Samara replies:** "You honour me, but I am in the middle of an investigation."

**Detective Anaya:** "I wish you were willing to go with the human, justicar. I've been ordered to take you into custody if you won't leave."

**Samara responds:** "You risk a great deal by following your orders detective. Fortunately, I will not have to resist. My code obligates me to cooperate with you for one day. After that I must return to my investigation."

**Shepard:** "There must be some way we can all get what we need."

**Samara presents a solution:** "I see a way, while I am in custody, you find the name of the ship. Do that, and I will join you. Then the code will be satisfied."

Shepard agreeing to cooperate with Samara by finding the name of the ship not only allows him/her to gain a valuable member for the Cerberus Suicide Mission, it saves lives in Detective Anaya's district and provides a lead on a dangerous fugitive, which helps fulfill Samara's Justicar code. This example shows an example of cooperating in the mutual interest of civic duty by solving interpersonal conflicts.

**Reciprocity.** Reciprocity was predominantly presented or mentioned at the end of missions, after the conflicts had been resolved, verbalized as a promise or debt of gratitude.

However, one exception was identified in NPC-TALI-LM, where NPC Tali receives support at her hearing (resolution) for assisting two minor characters in prior missions. The characters' names are Kal'Reegar and Veetor.

This is an example of a narrative climax iteration that is only available on the condition that the player acquiesced to two calls to actions requested by Tali in previous missions. The example illustrates how player actions in the preliminary stages of the game can positively affect later stages of the game, such as with reciprocity. The narrative iteration is called 'Rally the Crowd', and is a dialog wheel option that can be used to rally support from the audience for Tali and to draw the attention away from the evidence that will incriminate Tali's father.

In the mission Freedom's Progress, Veetor is being taken back to the Normandy for questioning as a result of an attack, at which point Tali objects as Veetor has sustained psychological trauma. The player can agree with Tali or side with Cerberus and take Veetor in for questioning. In NPC-TALI-RM, when Shepard offers to help Tali against the Geth, Tali makes a point of asking him/her to look for Reegar. In a scene preceding a major combat mission against the Geth, Shepard meets Reegar, who has sustained injuries from combat. Reegar is willing to fight and rescue Tali at any cost. However a 'Paragon interrupt action' allows the player to persuade him to stand down, ensuring his survival, and honouring Tali's request. Honouring Tali's requests unlocks the 'Rally the Crowd' option. In NPC-TALI-LM, after part one of Tali's hearing, Tali and Shepard run into Veetor who says that both he and Reegar tried to help Tali when the admiralty board approached them.

After returning to the hearing with evidence that will exonerate Tali, but incriminate her father as a traitor and war criminal, Shepard is asked if he/she has found any evidence. At this point, the dialog wheel is prompted with the option to 'Rally the Crowd'. See Figure 1.8

Activating this option this option prompts a speech from Shepard, whereby he/she calls on members of the crowd to attest to Tali's impeccable character and reputation as a hero. The example below is the dialog sequence where Shepard addresses the crowd and asks people to stand up in support of Tali:

**Shepard appeals to the crowd:** "Look at them, all of you! They don't care about Tali! All they care about is their war on Geth! Tali risked her life for all of you! On Haestrom, hell on the Citadel when she stopped Saren! She deserves better than this!" **Crowd starts crying out in agreement.**

**Veetor'Nara:** "Wait! Shepard is right! Tali saved me! She doesn't deserve to be exiled! "

**Kal'Reegar:** "Damn straight! Tali has done more for this fleet than you assholes ever will! You're pissing on everything I fought for! Everything that Tali fought for! So if you exile her..you might as well do the same to me."

By happening later in the sequence of events, in-game reciprocity has a form similar to what it has in the real world, in that a helpful act or acts must have occurred before they can be reciprocated, and bonds of trust must have been established first in order to create the relationships that allow for reciprocity.

**Trust.** As per my analysis of on pg. 37, trust was identified as an extension of cooperation and reciprocity, and more precisely of shared norms and values. As the findings on table 10 suggest (pg. 61), trust was identified mainly towards the end of each mission, after the PC and NPC relationships had transitioned from 'normal' to 'loyal'. The exceptions to those findings were Tali, a squad member of Shepard's in *ME1*, and Jacob, who valued Shepard's trust from the start of the game. The latter example of trust will be discussed based on those shared norms and values. Drawing from select dialog examples with Jacob and the data collected, we will see how trust evolved over the course of the narrative arc, and Jacob's reasons for initiating trust.

The first example occurs at the end of the NPC-JACOB-RM, after Shepard has spoken to the Illusive Man and agreed to investigate the disappearance of human colonies to confirm Cerberus' suspicions that the Reapers are responsible.

**Jacob:** "I'm glad the Illusive Man convinced you to join us, Commander."

**Shepard:** "I just want to find out what happened to those missing people. I still don't trust Cerberus."

**Jacob asks Shepard if she trusts him:** "Do you trust me, Commander?"

**Shepard:** "I haven't made up my mind about you yet, Jacob."

**Jacob:** "At least you're giving me a chance. Most Alliance Soldiers hate Cerberus on principle."

When Jacob asks if Shepard trusts him, there are three dialog wheel responses available to the player: 'Yes' (meaning he/she does), 'Not sure' - the example I supplied above in table 32, and 'no' - as he works for Cerberus. When the player chooses 'no', due to Jacob's affiliation with Cerberus, Jacob replies the following:

"Fair enough. I can't expect you to trust me just because I asked you. I'll just have to earn that trust." Based on this response, Jacob understands that trust is based on expectations and obligations that have yet to be formed at this stage of their relationship. Thus, he is willing to earn trust by cooperating and obliging Shepard.

When the player chooses 'yes', the PC responds: "I think you are a good man, Jacob, but I think you got mixed up with the wrong people." To that, Jacob replies the following: "Maybe, but I thought the same when I was with the alliance. That's why I'm here now." This response demonstrates that Jacob left his former military command because he felt that they did not share the values and norms he deems important.

As well, Jacob also understands that trust is earned, expressing understanding of NPCs who voiced their suspicions of him, and Cerberus. Below is an example of his understanding, and occurs right after Tali's orientation, at a debriefing session aboard the *Normandy*:

**Jacob:** "I'm looking forward to having you on the team. Your engineering expertise will really help the mission."

**Tali replies:** "I don't know who you are, but Cerberus threatened the security of the migrant fleet. Don't make nice."

**Shepard:** "That's why you are here Tali, I need people I can trust."

**Jacob:** "I wasn't part of what happened to the migrant fleet, but I understand your distrust. I hope we'll get past this as we work together."

Despite Tali's Hostility, Jacob expresses understanding, and hopes that she will trust him through collaboration. Here, Jacob understands that trust is formed through norms of obligations and expectation, as the definition stipulates.

The final example is of a character interaction between Jacob and Shepard that occurs on the *Normandy*, after Jacob has completed his loyalty mission. In this scene, Jacob explains to Shepard the reason he trusted her early on:

**Shepard:** "You seem ok with taking a risk on me. Why?"

**Jacob explains:** "Soldiers like us know how important trust is to the crew.

I'm not used to seeing it on a Cerberus ship. Definitely not from the people they put in command. But you focus on more than the job."

Although, the recognition of trust as a norm is implicit, Jacob's answer explicitly confirms that he values trust and recognizes it as a norm when he emphasizes its value within a military crew, and notes that seeing a Cerberus Commanding Officer also upholding these beliefs is rare for him. This is made clear when he states that Shepard focuses on more than the job, she actually values her crew.



## Potential for Fostering Civic Engagement in the ME2 Game

My research question discusses if the design of *ME2* supports the potential to foster a sense of civic engagement in its players through their actions in the game. In online MMORPG (Massive Multi-Player Online Role-Playing Game) communities, players cooperate with other players, hoping said players will later reciprocate to effectively mobilize as a collective through difficult levels, and achieve greater in-game rewards in return. As an offline RPG, *ME2* adopts a similar approach, being dependent on NPC agendas to drive the narrative forward; player actions cannot be completed without the coordinated efforts of NPCs.

As seen throughout the analysis and findings, the player must engage with the story by cooperating and supporting the NPCs through their narrative experience with the promise of reciprocity and trust. These aspects of civic behaviour are insinuated into the narrative and gameplay so that the ‘learning’ aspect is not obvious. They are obscured by the complex narrative structure and capacities that strategically position the concepts at various stages of the game. And since the missions are ‘railed’ (Bizzocchi & Tanenbaum, 2012, pg. 401), the player is obligated to see the mission through. Moreover, the concepts are integrated into the game play in a subtle way as part of completing missions and moving the story forward, rather than overt lessons on which the player’s attention is focused. This may make it more likely for the game to have a positive learning impact on the players, who would not feel like the concepts are being blatantly forced upon them.

For example, trust is seamlessly insinuated into the narrative of NPC Samara’s Loyalty Mission when she uses it to reassure Shepard before she takes on the role of ‘bait’ by going into a club to lure Morinth out. In this scene, trust is positioned at the height of the suspense, before the player engages in narrative and ludic action with the enemy:

**Samara reassures Shepard before confronting daughter Morinth:** "I will be near, and I will come for you, Shepard. Trust me, as I trust and honour you."

**Shepard:** "Let's get started."

**Samara:** "And Shepard, thank you. I do not share this burden easily, and you are the only soul I can imagine sharing this with."

Gouldner (1960) defines reciprocity as "people should help those who help them and, therefore, those whom you have helped have an obligation to help you. The conclusion is clear: if you want to be helped by others you must help them" (Gouldner 1960, pg. 171) As presented in the findings and evidence, reciprocity and trust were identified as predominantly existing between PC and NPC, with reciprocity manifesting at the end of missions. The example provided on pg. 53 of the 'Rally the Crowd' option in Tali's hearing in NPC-TALI-LM presents a clear example of civic engagement outside the PC and NPC realm, in that reciprocity was not immediately obvious to the player. In this case, the *ME2* game designers and writers had implemented narrative and ludic actions into the story to encourage players to acquiesce to Tali's requests regarding those characters in earlier missions, however those actions do not suggest any rewards. Tali, and by extension, the player's actions, leads to unexpected support from Veetor and Reegar, as well as the support of the crowd.

What makes Tali's resolution unique vis-a-vis civic engagement is that the player witnesses the benefits of cooperation by seeing these two characters act out of a sense of gratitude from previous actions, though this was not expected at the time of those actions.

Although I cannot make claims that the civic acts in *ME2* will encourage players to become politically active or become civically engaged within their communities, the design of the game provide numerous opportunities to act neighbourly by having the player cooperate for mutual benefit and gameplay rewards, and through that process be an instrumental part of NPC character development through support in their personal conflicts. This is seen with NPCs

Samara, Tali, Grunt, and Jacob, none of whom would have been able to reconcile their personal conflicts without player willingness to risk his or her self. And by integrating concepts of civic engagement into the gameplay, players bear witness to the fruitful rewards of civic engagement as an unexpected added benefit.

## Conclusion

ME2 is about uniting vastly different races in an effort to thwart evil forces. This could only be achieved through acts of cooperation and diplomacy. The exploration of the game showed how cooperation, reciprocity, and trust work symbiotically to unite characters of different origins as a resource towards collective action. The findings demonstrated that cooperation was used as a solution to both interpersonal and personal conflicts, forging important relationships. Trust was earned through the fulfilling of expectations and obligations, as a necessary step towards building stronger relationships. And finally, aspects of civic engagement are insinuated into the narrative fabric and communicated as a natural extension of gameplay, rather than as overt lessons.

**Limitations.** The limitations encountered throughout the research process of my MRP were not having the space to analyze more than 4 NPC narrative arcs, and not being able to explore the use of civic engagement as a tool for defeating the common enemy, ‘the Reapers’. The scope of an MRP also limited my ability to examine the use of conflicts as plot devices, more specifically if familiar literary and film tropes were used to make the characters more relatable and appealing to the player.

**Future research.** Future research to consider is a closer examination of the existence of literary and film tropes to make characters and their personal conflicts more relatable and

engaging to players. Additionally, NPC narrative arcs could be explored for further evidence of aspects related to civic engagement and to determine the degree to which civic engagement plays a role in the suicide mission to defeat ‘The Reapers’ and hinder Cerberus’ agenda. Finally, it could be valuable to seek the views of other RPG game players on *ME2* and then evaluate it as a vehicle for learning civic engagement.

## Appendix

Table 9: Narrative Capacities - Patterns

Code	Labov's Narrative Structure	NC-Trouble	NC-Suspense	NC-Test of Character
<b>NPC-JACOB-RM</b>	Orientation	0	1	0
<b>NPC -GRUNT-RM</b>	Orientation	0	1	0
<b>NPC -SAMARA-RM</b>	Orientation	3	1	0
<b>NPC -TALI-RM</b>	Orientation	1	0	0
<b>NPC-JACOB-NORM</b>	Complicating event	0	0	0
<b>NPC -GRUNT-NORM</b>	Complicating event	0	0	0
<b>NPC -SAMARA-NORM</b>	Complicating event	0	0	0
<b>NPC -TALI-NORM</b>	Complicating event	0	0	0
<b>NPC -JACOB-LM</b>	Resolution	2	1	0
<b>NPC -GRUNT-LM</b>	Resolution	2	0	0
<b>NPC -SAMARA-LM</b>	Resolution	2	1	0
<b>NPC -TALI-LM</b>	Resolution	3	1	1
<b>NPC -JACOB-NORM</b>	Evaluation	0	0	0
<b>NPC -GRUNT-NORM</b>	Evaluation	0	0	0
<b>NPC -SAMARA-NORM</b>	Evaluation	0	0	0
<b>NPC -TALI-NORM</b>	Evaluation	0	0	0

Table 10: Frequency of Cooperation, Reciprocity, and Trust – Narrative Structures and Capacities

Code	Labov's Narrative Structure	NC-T	NC-S	NC-TC	Cooperation	Reciprocity	Trust
NPC-JACOB-RM	Orientation	0	1	0	6	1	2
NPC -GRUNT-RM	Orientation	0	1	0	2	1	0
NPC -SAMARA-RM	Orientation	3	1	0	6	2	0
NPC -TALI-RM	Orientation	1	0	0	4	2	2
NPC-JACOB-NORM	Complicating event	0	0	0	2	0	0
NPC -GRUNT-NORM	Complicating event	0	0	0	2	0	0
NPC -SAMARA-NORM	Complicating event	0	0	0	2	0	0
NPC -TALI-NORM	Complicating event	0	0	0	2	0	1
NPC -JACOB-LM	Resolution	2	1	0	1	1	0
NPC -GRUNT-LM	Resolution	2	0	0	10	1	1
NPC -SAMARA-LM	Resolution	2	1	0	6	1	2
NPC -TALI-LM	Resolution	3	1	1	6	4	4
NPC -JACOB-NORM	Evaluation	0	0	0	0	0	2
NPC -GRUNT-NORM	Evaluation	0	0	0	0	1	1
NPC -SAMARA-NORM	Evaluation	0	0	0	0	1	0
NPC -TALI-NORM	Evaluation	0	0	0	0	0	0

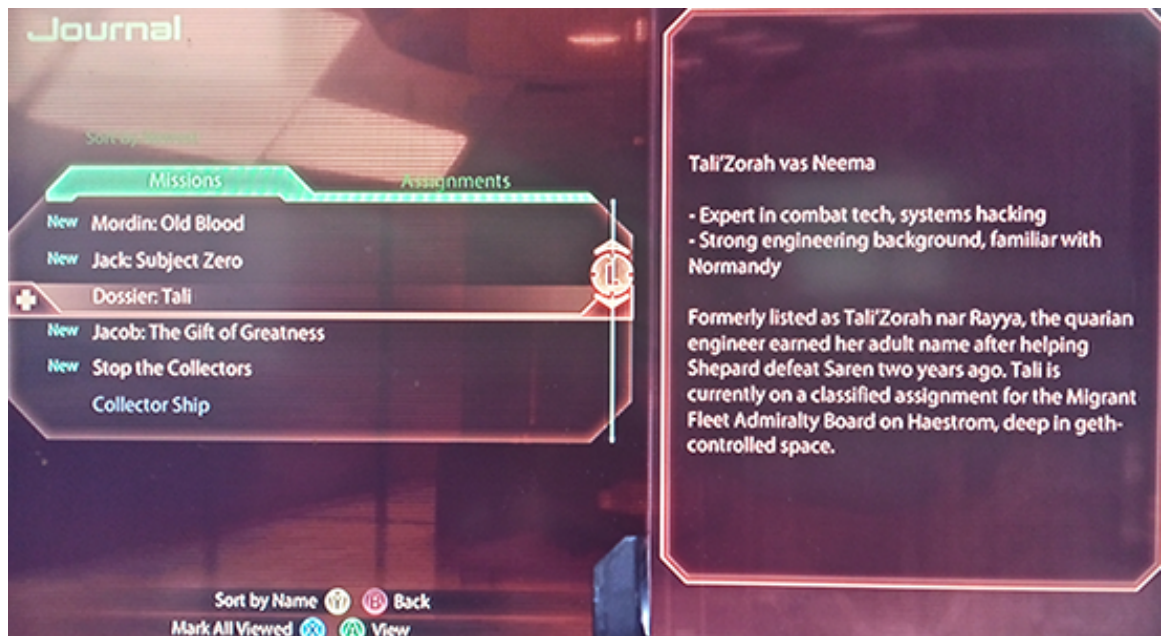


Figure 1.1. Journal of mission dossiers



Figure 1.2. Popup window guides player to task



Figure 1.3. Example of Implicitly Asking for Cooperation

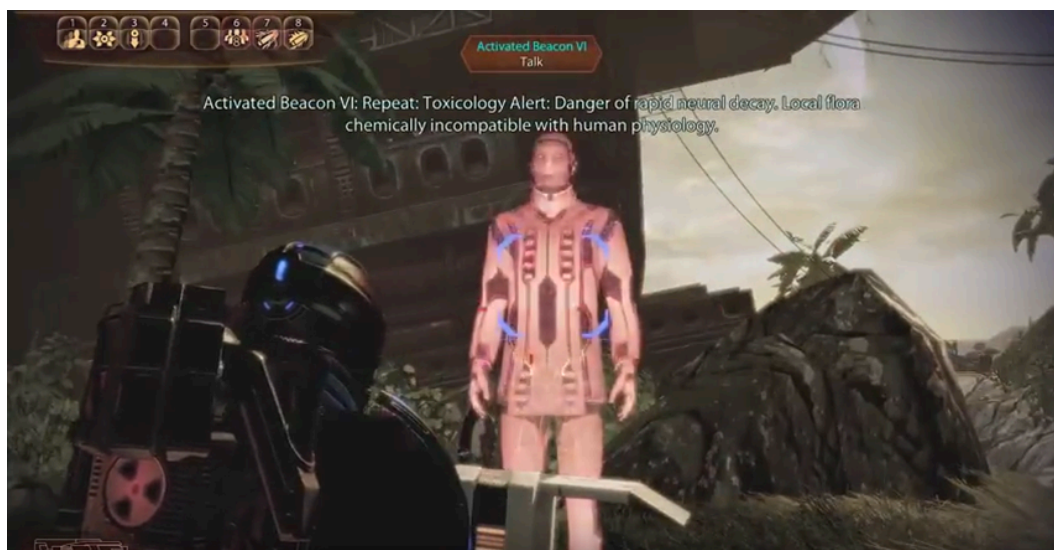


Figure 1.4. Beacon is the first set of collected clues.





Figure 1.5. Beacon is the first set of collected clues.



Figure 1.6. Veetor explains how he and Reegar tried to help clear Tali's name



Figure 1.7. Rally the Crowd option.

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