Playable Tragedy

Ergodic Tragedy in Chrono Trigger

Ritgerð til MA-prófs í Ensku

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Abstract

This essay expands on Jesper Juul’s arguments in *The Art of Failure* (2013, where he theorizes that games allow a “new type of tragedy” which offers a greater degree of personal involvement with the fictional content of a game. Juul suggests that this new type of tragedy finds its uniqueness in the resource of “complicity,” whereby the player shares the responsibility for a tragic outcome in games. In *The Art of Failure*, Juul analyses different games and concludes that none of those fully presents a complicit tragedy. In this essay, a short quest in Squaresoft’s 1995 game, *Chrono Trigger* is analyzed in order to present it as a positive example of the new type of tragedy that Juul identified.

The quest selected for analysis is a short sequence that is referred to as “Lucca’s quest.” This is an optional sequence, playable in the second half of the game, which presents through gameplay the background story of one of the game’s main characters, Lucca. The quest gives players the opportunity to travel back in time to witness the moment where Lucca’s mother is caught in an accident that renders her unable to walk. Players are then given a very short span of time to prevent this accident and therefore change Lucca’s story. This game sequence’s structure is discussed in detail in order to demonstrate that it possesses all the qualities that Juul suggests his new type of tragedy should have.

The analysis follows current scholarship in game studies in order to explain Juul’s conception of “complicity.” The quest is first described as having a branching narrative structure that is significantly different from the classical conception of plot, in order to better reflect what Espen Aarseth called “intrigue.” Then, through an analysis of gaming actions using the typology found in Alexander Galloway’s “Four Moments of Gaming Actions,” the sequence is shown to be “ergodic” as it totally depends on the performance of user functions in order to complete a successful traversal. The resulting representation, graphically understandable as a workflow diagram, is further analyzed using Northrop Frye’s “Theory of Myths” and Algirdas Greimas’s actantial analysis to show that it is structurally tragic, and that tragedy occurs both at the fictional level of the character, and at the real level of the player.
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1. Introduction

1.1 A New Type of Playable Tragedy

In *The Art of Failure*, Jesper Juul discusses the psychological impact that losing a game can have on players and compares this experience with dramatic tragedy. Juul argues that tragedy in games is, at a real sense, not only experienced by the characters of the game in which they feature, but also by the player at a personal level. Juul concludes that although tragic game endings appear distressing due to the tension between the success of the player and the failure of a game protagonist, this distress can give us “a sense of responsibility and complicity, creating an entirely new type of tragedy” (455) in which both the player and the fictional character share the credit for the failure being represented. This study aims to structurally analyze an example of this type of tragedy in the single-player quest game *Chrono Trigger*.

Juul’s proposition derives from his assertion that “games are meaningful not simply by representing tragedies, but on occasion by creating actual, personal tragedies” (456). He works with the comprehensive definition of tragedy by Oscar Mendel, which is as follows:

A work of art is tragic if it substantiates the following situation: a protagonist who commands our earnest goodwill is impelled in a given world by a purpose, or undertakes some action, of a certain seriousness and magnitude; and by that very purpose or action, subject to the same given world, necessarily and inevitably meets with great spiritual or physical suffering. (Juul, 407)

Juul’s work suggests that fictional tragedies can be coupled with objective game-failure in order to add greater emotional involvement in game plots. More importantly, it suggests that it is conceivable that there could be games with tragic endings, in which the player has played a game which ends in the protagonist’s death, showcasing a successful player (who has completed the game) and an unsuccessful protagonist (who has died).

Juul’s work tests several of Marie-Laure Ryan’s arguments in “Beyond Myth and Metaphor,” where she writes that “only selected types of emotional experiences will lend themselves to the first-person perspective”: the ones that feature “a rather flat character whose involvement in the plot is not emotional, but rather a manner of exploring a world,
solving problems, performing actions, competing against enemies, and above all dealing with interesting objects in a concrete environment” (2001, Game Studies).

Ryan expresses doubt that a plot containing a main character’s tragic suicide, such as Tolstoy’s Anna Karenina, could be successfully developed in an imagined game. She assumes that players take a hedonistic approach to game playing – that they “participate in the production for their own pleasure, and becoming a character should be a self rewarding activity.” Ryan believes that, if we derive aesthetic pleasure from the tragic fate of literary characters like Anna Karenina, “[i]t is because our participation in the plot is a compromise between the first-person and the third-person perspective.” Ryan concludes,

Interactors would have to be out of their mind—literally and metaphorically—to want to submit themselves to the fate of a heroine who commits suicide as the result of a love affair turned bad, like Emma Bovary or Anna Karenina. Any attempt to turn empathy, which relies on mental simulation, into first-person, genuinely felt emotion would in the vast majority of cases trespass the fragile boundary that separates pleasure from pain.

Thus Ryan’s main thesis constitutes a call to “decide which types of stories are suitable for digital media,” because “each medium has different expressive resources, and will therefore produce different concrete manifestation[s] of this [narrative] abstract structure” (2001, Game Studies).

In The Art of Failure, Jesper Juul critically addresses these observations, which causes his game analyses to be limited to the observation that games representing suicides akin to Anna Karenina. Juul looks specifically for the following characteristics:

1. The protagonist undergoes many painful experiences.
2. The player is aware that the goal of the game is to commit suicide.
3. The player exerts effort in order to commit suicide. (1274)

Juul’s analysis of several games that contain these features, including the experimental Suicide Game leads him to the conclusion that whereas “no commercially successful game has offered the full Anna Karenina experience, both experimental and commercial games have offered partial versions of this” (1445). Juul contends that games offer a new and unique way of representing painful events through the experience of complicity, a feature that is “unique
to games” and that is “more personal and stronger than simply witnessing a fictional character performing the same actions” (1446). Juul tells us that “with complicity, the player shares with the protagonist the feeling of being flawed” (1477).

Juul makes his point by showcasing how the multiple games that he analyzes do not fully feature his theorized potential for a complicit tragedy. This discussion seeks to provide readers with a positive example of how such tragedy has been featured in other games, particularly in Squaresoft’s role-playing game Chrono Trigger. Here, we will observe through a structural analysis the number of resources used to express Juul’s complicit tragedy. However, the understanding departs from the three characteristics that Juul looked for, particularly because they are limited to the search for a tragic suicide that looks like Tolstoy’s Anna Karenina. Instead, I will focus on a more general understanding of tragedy that includes painful experiences that happen to characters, even if they survive.

1.2 Tragedy

In order to expand on Juul’s work on the development of tragedy as a dramatic resource in game writing, my discussion looks at a more general definition of tragedy that departs from the tragic suicide that Juul focuses on in The Art of Failure. Aristotle’s Poetics and the arguments of myth scholars Joseph Campbell and Northrop Frye help draw a broader understanding of tragedy, and present objective elements that can help determine whether games that do not feature suicides are tragic. This is an important first step in the qualification of potential game stories that might feature the complicit tragedy that Juul proposed.

Aristotle writes in Poetics that tragedy is the “imitation of an action that is serious, complete, and of a certain magnitude; in language embellished with each kind of artistic ornament, the several kinds being found in separate parts of the play in the form of action, not of narrative, through pity and fear effecting the proper purgation of these emotions” (23). He furthermore tells us that tragedy should “imitate actions which excite pity and fear.” Aristotle writes that the fear and pity that a tragedy must convey may be aroused from the inner structure of the piece and that “the plot ought to be so constructed, that even without the aid of the eye, he who hears the tale told will thrill with horror and melt to pity at what takes place” (49).
James Joyce, in his *Portrait of the Artist as a Young Man*, muses on Aristotle and expresses (in a discussion between Lynch and Stephen) a view on the nature of the emotional expression of tragedy. He writes,

Pity is the feeling which arrests the mind in the presence of whatsoever is grave and constant in human sufferings and unites it with the human sufferer. Terror is the feeling which arrests the mind in the presence of whatsoever is grave and constant in human sufferings and unites it with the secret cause. (116)

Therefore, Joyce suggests through his character that the dramatic emotion of tragedy should be static, and that it must arrest the mind and raise it above desire and loathing. It is his view that art should induce “an aesthetic stasis, an ideal pity or an ideal terror, a stasis called forth, prolonged, and at last dissolved by what I call the rhythm of beauty” (117). The latter “rhythm of beauty” is interpreted as a metaphor of Aristotle’s much debated “catharsis” or “purification.”

In *The Hero with a Thousand Faces*, Campbell quotes Joyce’s views on the tragic, and discusses them in the terms of folk myth. To Campbell, the purgation of emotions of pity and fear correspond to the earlier ritual of “katharsis,” that is, “[a] purification of the community from the taints and poisons of the past year, the old contagion of sin and death, which was the function of the festival and mystery play of the dismembered bull-god, Dionysos” (24).

Campbell argues that tragedy is beautiful because it unites the mind of the spectator with the principle of continuous life. Campbell describes this union as follows:

This death to the logic and the emotional commitments of our chance moment in the world of space and time, this recognition of, and shift of our emphasis to, the universal life that throbs and celebrates its victory in the very kiss of our own annihilation, this *amor fati*, “love of fate,” love of the fate that is inevitably death, constitutes the experience of the tragic art. (25)

Although Campbell writes in defense of the artistic value of comedy, which he understands as “a transcendence of the universal tragedy of man” (26), he writes this to compare the mythical significance of both genres.

Aristotle introduces the idea of the tragic flaw, or “*hamartia*” in the *Poetics*. Aristotle argues that tragedy should feature an adverse change of fate for a character “who is not eminently good and just, yet whose misfortune is brought about not by vice or depravity, but
by some error or frailty” (45). Northrop Frye argues in his “Historical Criticism” that this flaw is not necessarily wrongdoing or moral weakness: “it may be simply a matter of being a strong character in an exposed position” (38). In his “Theory of Myths” Frye argues that tragedy “must be a moral and plausible displacement of the bitter resentments that humanity feels against all obstacles to its desires” and therefore represents a vision of “what does happen and must be accepted” (157).

Frye’s proposes that “romance, tragedy irony and comedy are all episodes in a total quest-myth,” and analyzes them thematically as “mythoi” or units of the myth to which a season corresponds. Therefore, tragedy is to Frye “the mythos of autumn.” In “Archetypal Criticism,” Frye details through the analyses of several great works four distinct archetypal phases of tragedy. The first is that in which “the central character is given the greatest possible dignity in contrast to the other characters”; the second “corresponds to the youth of the romantic hero, and is in one way or another the tragedy of innocence in the sense of inexperience”; in the third, “the central quest-theme of romance, is tragedy in which a strong emphasis is thrown on the success or completeness of the hero’s achievement.” The fourth is the “typical fall of the hero through hybris1 and hamartia.” Frye contends that at the end of this phase “we reach a point of demonic epiphany, where we see or glimpse the undisplaced demonic vision” (215–23).

During the initial stages of this project, my study was based on the assumption that Aerith’s death in Squaresoft’s Final Fantasy VII would be the ideal object to exemplify Jesper Juul’s new type of tragedy, as suggested by William Swartout and Michael Van Lent in “Once More with Feeling.” In the game, Cloud Strife, the main character, becomes romantically involved with Aerith who is then killed by Sephiroth, the game’s antagonist. Swartout and Van Lent call Aerith’s death “the seminal example of an emotionally engaging game moment” (99). In “From Losing to Loss,” Sabine Harrer finds that “the questions and concerns that the main character [Cloude Strife] raises in the light of Aerith’s death address themselves in a way that can be deeply engaging” (613). Swartout and Van Lent agree that Aerith’s death suggests how “strong narrative structure and a focus on social relationships might be a part of the solution to create games with more emotional impact” (99).

1 Frye uses the word in its original Greek.
Although Aerith’s death is structurally tragic according to the definitions studied above, it does not exemplify Juul’s new type of tragedy. This is indicated in both Harrer’s as well as Swartout and Van Lent’s articles. Harrer found that Final Fantasy VII has a “sense of linearity which makes [it] what Juul (2005, 67) has generically defined as games of progression” (Harrer, 618). Swartout and Van Lent suggest that this linearity causes the narrative structure of the game to bear a strong resemblance to the narrative structure of tragedy in traditional written or visual media, as opposed the imagined kind of narrative resources available to “branching narrative structures” or “a story that could unfold dynamically, allowing the same game to play out dozens or hundreds of times with a different unpredictable outcome” (99).

*Chrono Trigger* came under the attention of this study because it was one of the earliest games to feature a branching story line through its time-travel gameplay that enabled the game engine to record and respond to player actions in a limited manner. Although the game as a whole is arguably a game of progression, the quest involving Lucca and her mother stands out from the rest of the game because it is a challenge situation in which the results of a player’s actions offer branching alternatives in the continuity of the game’s plot. This branching is a calculated emotional moment, which takes full advantage of what Harrer called “a game’s key affordance of profound loss” where players must continue the game despite having suffered (619), and where, in Juul’s terms, the player is fully complicit in said loss.

### 1.3 Chrono Trigger

*Chrono Trigger* is a game of the role–playing genre released by Squaresoft for the Super Nintendo game console in 1995. It tells the story of a boy called Crono, who lives in the year 1000 AD in fictional time. Because of a blunder, he and his friends Lucca and Marle discover time travel and find themselves lost in a dystopian future in 2300 AD, where they discover that a creature called Lavos destroyed their world in 1999 AD and condemned the last survivors to a slow death by starvation. Crono and his friends purpose to use their newfound ability to travel through time to prevent this cataclysm. The game tells the story of their
journey through different ages, including their prehistory, antiquity and the middle ages. By visiting various time periods, Crono’s team gathers information, powers and allies in a quest to avert the destruction of their world.

As a game development project, Squaresoft’s Chrono Trigger saw the involvement of several recognized Japanese artists, who are informally referred to as “the dream team.” The team included Akira Toriyama, the manga artist best known for his work in the Dragon Ball series of manga and anime; Honorubu Sakaguchi, the creator of Squaresoft’s flagship project series Final Fantasy; Yuri Hoji, a freelance designer and the creator of Enix’s Dragon Quest; and music composers Nobuo Uematsu and Yasunori Mitsuda, the renowned composers of the musical themes of several other Squaresoft games.

The game was a critical and commercial success, and is frequently cited as one of the best video games of all times. It has appeared in the top ten best game lists compiled by dedicated publications such as IGN, which ranked Chrono Trigger as second best role-playing game of all time owing to “its multiple endings, astounding art style, and diverse setting” (“Top 100 RPGs of All Time”), placing it above other more recent and more commercially successful entries such as Blizzard’s World of Warcraft and Bethesda’s The Elder Scrolls series. The game has gone through two further releases: the second in 2008 as a special edition for the Nintendo DS console, and the third in 2011 as an adaptation for Apple’s iOS devices.

Critics often praise Chrono Trigger for its story writing, its setting design (including the time-travel theme) and its character development. Reviewers point out that the time travel concept sets the game apart from other RPGs of the time and that the time eras “are expertly interwoven, and your actions in the past accurately influence the future” (Thomas, 2011). They also praise the character development in the face of what appears to be overwhelming game content: the game manages to “have enough character development and dramatic moments to stir the heartstrings of the people playing it” (Zdyrko, 2000).

Academic work on Chrono Trigger is as new as the encompassing field of ludology. With no clear methodology of analysis, previous work has both strength and weaknesses. One of the papers that stand out is Fredrik Norman’s “A Peaceful World is a Boring World,” which studies the narrative structure and mythological elements in the game, and produces an
analysis of the game’s plot based on Northrop Frye’s theory of archetypal myth (Norman, 11). Norman details the significance of several of Chrono Trigger’s agents and settings, and concludes that the game encompasses “a general inclination towards [Northrop Frye’s] mythos of romance” (39). Norman’s work then establishes a connection between mythic structure and the plot structure of Squaresoft’s game.

In “Reverse Design: Chrono Trigger” (2012), Holleman approaches the game by analyzing what he calls “design choices.” Holleman engages in a kind of analysis that he calls “reverse-engineering” that breaks down the storyline in fundamental pieces he calls “quests” (8). Every such quest is analyzed in terms of gameplay mechanics, including enemy strategies and numerical statistics, as well as the viable strategies available to overcome combat and puzzle challenges. He also offers commentary on how these game mechanics reflect on the overall story.

One of Holleman’s most notable conclusions is that Chrono Trigger is a game with two chapters: the first, which he calls “The Tragedy of the Entity,” consists of the presentation of a tragedy where Crono, “the hero of the story, is propelled by a fatal flaw towards his inevitable doom” (6). The tragedy finds its crux at the moment when Crono dies. Holleman contends that the game “continually deceives the player in order to keep him or her off balance” (43) through good writing and a “very clever use of the aspect that makes videogames unique, gameplay,” so players “won’t realize the oncoming tragedy until they are already hooked” (6).

Holleman’s study “The Tragedy of the Entity” finds that through the use of “ludo-narrative dissonance” (5) game developers successfully created a game that breaks away from the general expectation that player successes (winning) reflect successes in the game world. His methodic observations of each of the chapters’ significant action moments show that although the player has successfully overcome challenges and achieved near-completion of character skill development (38), there is an inevitable failure at each and every turn of Crono’s quest to overturn the disaster that will end his world (40).

Although Holleman’s “Tragedy of the Sages” describes several design features that could improve any game’s storytelling, the events leading to Crono’s death do not meet Juul’s definition of tragic complicity. Indeed, Holleman continually reiterates that the story arc in this section of the game unfolds in a “decidedly linear manner for the majority of its length” (13).
The story is structurally tragic, and it succeeds both in the emotional engagement of the player and in building up Lavos’s character as an ultimate evil. However, the portion of the game that Holleman titled “The Tragedy of the Entity” lacks both the feeling of complicity that Juul identifies and the branching structure that Harrer and Swartout and Vanlent’s discussions on *Final Fantasy VII* suggest should be required.

Holleman calls the second part of the game “The Comedy of the Sages.” It begins after the events following Crono’s death, when the player is given a flying time machine that provides instant access to all possible areas and time zones in the game. At this stage of the game, the world becomes open ended and players may or not complete all the available quests before the final confrontation with Lavos. Game play changes significantly to exclude dungeons (Holleman, 47) and involves all time periods, cities, towns and non-player-characters to compose a large, revolutionary puzzle (48) that concludes with the defeat of Lavos and the resolution of several character stories.

Holleman uses the term “comedy” in his discussion to imply the “classical sense of a dramatic work with a (reasonably) happy ending.” He calls the second part of the game “a comedy of intervention” in which “the dramatic action comes close to tragedy, but the characters are saved by a concerned outsider.” Holleman notes that the intervention by the three Gurus of Zeal “not only changes the tone of the story but also changes the style of gameplay.” One of the notable changes he points out is the predominant linearity of the first half of the game, where “the quests are not about destroying Lavos, but about helping minor bystanders.” Contrary to the quests in “the Tragedy of the Entity” these quests have “real, tangible historical impact” (7). One of these quests involves one of the main characters in Crono’s group, Lucca.

In the scene that follows the conclusion of the quest “Fiona’s Forest” Lucca is able to return to a specific moment in her past where she witnessed an accident that rendered her mother unable to walk. This three-minute quest is an adequate example of the kind of tragedy that Juul theorized. By applying their knowledge of *Chrono Trigger’s* game mechanics, and their personal skills, players are given an opportunity to alter the Fate of Lucca’s mother. It is, however, regrettable that Holleman chose to leave this moment out of his analysis.
Reviewer Chard Concelmo, in “The Memory Card,” discusses the scene with Lucca’s mother. Concelmo reviews Lucca’s quest from a game player’s point of view and highlights the fact that the quest has different outcomes depending on the success or failure of the puzzle. He contends that the scene incorporates character development by revealing Lucca’s background in a “seamless manner” (“The Fate of Lucca’s Mother”), as opposed to the typical video-clip or representation used for such purposes. Online reactions to Concelmo’s article call attention to the way in which this scene and its mechanics elicit an emotional response. The majority of the commenters express a high appreciation for this moment, and many recount the pity and fear that failing this quest caused them. Some who did not know the quest could actually be completed in a different way express a desire to play the game again.

Although Concelmo’s review article does not delve into the quest or the mechanics too deeply, the reader reactions seem to suggest that players recognize the arresting pity in the accident involving Lucca’s mother, and discuss a sense of responsibility in the outcome. The heartfelt reactions invite a more careful analysis of Lucca’s quest in order to determine the resources used by the game developers in order to make this a memorable game moment. The present analysis serves to exemplify Juul’s concept of complicit tragedy, and could help game writers and developers to find inspiration in the dramatic resources of a work of art that is arguably a classic.

2. General Introduction to Chrono Trigger

Chrono Trigger tells the story of a boy called Crono, who lives in the year 1000 AD in a fictional time line. Because of a blunder, he and his friends Lucca and Marle discover time travel and find themselves lost in a dystopian future in 2300 AD, where they discover that a creature called Lavos destroyed the world and condemned the last survivors to a slow death by starvation. Crono and his friends purpose to use their newfound ability to travel through time to prevent this cataclysm. The game tells the story of their journey through different ages, including their prehistory, antiquity and the middle ages. By visiting these various time periods, Crono’s team gathers information, powers and allies in an epic quest to avert the destruction of their world.
*Chrono Trigger* features a considerable amount of diegetic content. This includes the history of a world that encompasses six different time periods in two different continents, a group of six protagonist characters and dozens of secondary characters. In this section, I will be discussing the main relevant points of Squaresoft’s *Chrono Trigger* that directly relate to the short section of the game that I have titled “Lucca’s quest.” Given the intensive care that, according to Holleman, Squaresoft’s developers put in the preparation and design of the game, it is important to consider the focus quest in context. Here, I study the broad context of the game following the main points proposed by Aarseth’s “A Narrative Theory of Games” while observing Holleman’s division of the game into two chapters with distinct game-play styles. The discussion highlights the devices used to both foreshadow Lucca’s quest and give the players a degree of preparation in order to overcome it.

Patrick Holleman divided the game in two sections he called “The Tragedy of the Entity” and the “Comedy of the Sages.” The former section can be described as adhering to Aarseth’s “narrative pole” because it develops in a game that is an objective linear corridor with static but usable objects that presents flat characters and is fully plotted. After the death of Crono and the completion of the quest called “The New King,” the game takes a sharp turn and moves towards the Aarseth’s “ludic pole” in the “Comedy of the Sages,” that is, the landscape becomes completely open to the player, objects become modifiable, and characters become rounder. The fact that there are over ten distinct possible endings in “The Comedy of the Sages” after Crono’s death shows that most of the kernels become arguably dynamic.

1.1 Aarseth’s four-dimensional model (2012:4)

<table>
<thead>
<tr>
<th>Ontic Level</th>
<th>World</th>
<th>Objects</th>
<th>Agents</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrative Pole</strong></td>
<td>Inaccessible</td>
<td>Non-interactable</td>
<td>Deep, Rich, round characters</td>
<td>Fully plotted</td>
</tr>
<tr>
<td></td>
<td>Single room</td>
<td>Static, usable</td>
<td></td>
<td>Dynamic satellites/ playable story</td>
</tr>
<tr>
<td></td>
<td>Linear corridor</td>
<td>Modifiable</td>
<td>Flat characters</td>
<td>Dynamic Kernels</td>
</tr>
<tr>
<td></td>
<td>Multicursal Labyrinth</td>
<td>Destructible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hub shaped quest Landscape</td>
<td>Creatable</td>
<td>Bots, no individual identity</td>
<td>No Kernels (pure game)</td>
</tr>
<tr>
<td><strong>Ludic Pole</strong></td>
<td>Open Landscape</td>
<td>Inventable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Aarseth’s work on narrative material in games serves as a point of reference to clarifying the theory behind Holleman’s division of the game in chapters, and it serves to exemplify the ways in which the sense of responsibility is elicited in Lucca’s quest. This comes because the “Tragedy of the Entity” serves in fact as an exposition and presentation that effectively teaches players how they can overcome the challenges and puzzles presented in “The Comedy of the Sages.” Lucca’s quest features some of the rarest challenges in the game, and although it occurs in the latter part of the game and can be studied as a structural unit, much of its dramatic effect relies on the previous content of the game. For this reason, it was felt that an introductory section to the world, objects, agents and events of the game was needed in this discussion.

### 2.1 Main Characters: Agents

<table>
<thead>
<tr>
<th>Character Name</th>
<th>Image</th>
<th>Short Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crono</td>
<td><img src="image" alt="Crono" /></td>
<td>Crono is the game’s player avatar (cursor) for the majority of the game. Crono is introduced as a boy from Truce Village. Crono never speaks and has no salient personality traits other than those expected from a plain hero. He is action oriented, solves problems and faces danger.</td>
</tr>
<tr>
<td>Lucca</td>
<td><img src="image" alt="Lucca" /></td>
<td>Lucca is Crono’s childhood friend. She is presented as a science oriented character, who always has a solution for every problem. Lucca relates well to machines and technology. Being the main focus of this discussion, Lucca is further analysed elsewhere.</td>
</tr>
<tr>
<td>Marle</td>
<td><img src="image" alt="Marle" /></td>
<td>Crono meets marle during the introductory during the Milennial fair during the introductory quest sequence of the game. Marle is later found out to be Princess Nadia of Guardia, and possesses a special pendant that reacts to one of Lucca’s inventions to allow time travel. Marle develops a romantic affection towards Crono.</td>
</tr>
<tr>
<td>Character</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Frog</td>
<td>Frog is a knight from the middle ages that has been cursed to look as a frog by the wizard Magus. He is secretly in love with Marle’s ancestor, Queen Leene. Frog, however, embodies the knightly virtues of honor and perseverance, which he embraces when he receives the mythic sword known as “Masamune.”</td>
<td></td>
</tr>
<tr>
<td>Robo</td>
<td>Robo is an android that Crono’s group finds inactive in the dystopian future in 2300 AD. When Lucca reactivates him, he decides to join Crono in his quest because he finds himself without a purpose. Throughout the game, Robo discovers that he is more than a machine, and comes to terms with his emotional side.</td>
<td></td>
</tr>
<tr>
<td>Ayla</td>
<td>Ayla is the leader of a village the players visit in their world’s prehistory. Ayla leads the fledgeling human race in a war against the planet’s dominant species, the Reptites. Throughout the game, she embodies the qualities of strength and action, seeking to protect all humans. Although Ayla’s prowess is mostly physical, she will show compassion and an ability to compromise.</td>
<td></td>
</tr>
<tr>
<td>Magus</td>
<td>Magus may or may not join Crono’s party at the end of “The Tragedy of the Entity” depending on the players choices. He is at first believed to be the creator of Lavos. However, the quest reveals that he merely summoned hoping to avenge the destruction of his family.</td>
<td></td>
</tr>
<tr>
<td>Lavos</td>
<td>Lavos is the game’s main antagonist. It arrived from outer space to Crono’s world in prehistory, and burrowed itself deep into the earth, consuming the energy of living things. In 12,000 BC, the magical kingdom of Zeal drew energy from Lavos in order to create magical items. In 1999 AD, it rose to the surface and rendered the planet uninhabitable by humans, and began to reproduce.</td>
<td></td>
</tr>
</tbody>
</table>
2.2 World: Temporal and Physical Locations

*Chrono Trigger* allows players to visit six different temporal locations, or ages, in which they can witness the changes to which Crono’s world has been subjected throughout history. Players begin in 1000 AD, which is also called the present and is the home temporal zone of Crono, Lucca and Marle. In this age, the people of the kingdom of Guardia celebrate the turn of the millennium in a fair that is held in the village of Truce and the four-hundredth anniversary of the victory against Magus’s armies of monsters. The game begins when Crono attends the fair, meets Marle, and both of them visit Lucca’s invention, the “Telepod.” When Lucca’s machine malfunctions, the party is sent back in time to the middle ages, 600 AD through the first of the nine time gates in the game. In this section, I will discuss the temporal moments available in game.

<table>
<thead>
<tr>
<th>Year</th>
<th>Time Period Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>65,000 BC</td>
<td>Prehistory</td>
<td>In prehistory, Crono and his group visit the village of Ioka, who is led by Ayla. Here, they must assist in the war against reptites. In the game, players may discover that Ayla is Marle’s distant ancestor, and her leadership continues through the ages towards the creation of Guardia.</td>
</tr>
<tr>
<td>12,000 BC</td>
<td>The Dark Ages</td>
<td>In the Dark Ages, Crono and his group discover that humanity has been divided between “The Enlightened Ones,” who are able to use magic and rule the land of Zeal, a kingdom built on levitating islands. The Enlightened Ones use Lavos to power magical creations, which leads to their eventual destruction. Notable characters from this era are the Queen Zeal, who is possessed by Lavos, and her children, Janus, who is sent by a catastrophe forward in time to the middle ages and Schala, who bears the magical pendant that becomes a heirloom of Guardia, and that later allows Crono and his team to travel through time.</td>
</tr>
<tr>
<td>600 AD</td>
<td>The Middle Ages</td>
<td>In the Middle Ages, the Kingdom of Guardia faces a war with the mystics, monstrous creatures that are led by the wizard Magus. Two important events are featured in this setting: the kidnapping of Queen Leene, which happens as Crono’s group arrives, and the war against Magus, which Crono’s group, with the help of Frog, turns into a victory for the kingdom.</td>
</tr>
<tr>
<td>Year</td>
<td>Time Period</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1000 AD</td>
<td>The Present</td>
<td>The present is an idyllic time of peace where no conflicts exist. Peace develops between the Mystics, who live in their own continent, and humans who inhabit the continents of Porre and Guarida.</td>
</tr>
<tr>
<td>1999 AD</td>
<td>The Day of Lavos</td>
<td>The day of Lavos occurs when Guardia develops into a technologically advanced civilization. He rises from the ground and causes a rain of fire that destroys most of the world.</td>
</tr>
<tr>
<td>2300 AD</td>
<td>The Future</td>
<td>The future is a time period ruled by the survivors of the catastrophe. As the world has become inhospitable, they survive by using the &quot;enertron&quot; -- a machine that keeps them alive. Humans survive in extreme conditions, threatened by monsters and starvation.</td>
</tr>
<tr>
<td>Unknown</td>
<td>The End of Time</td>
<td>The end of time is an empty place outside of time. The game explains that whenever a group of more than three time travelers uses a time–gate, they will end up &quot;in the point of the least temporal resistance.&quot; The end of time is inhabited by an enigmatic Old Man who offers assistance to Crono’s group, and Spekkio, a creature that can empower some of the characters with the gift of magic.</td>
</tr>
</tbody>
</table>

The “temporal locations” exist in a fictional world where the historical timeline is divided, much like our own history, between BC and AD, extending by regressive count to an unnamed event, and begins again from AD. This event is never mentioned in the game, but it is assumed that this is done with the effect of imparting a sense of correspondence between that timeline and our own, real-life historical timeline. The players do not experience this timeline sequentially, but instead uncover it as they travel through time looking for the information and powers that they will need to prevent the cataclysmic event that destroyed the world in 1999 AD.

Despite the illusion provided by the game that all time periods are indeed available to players, throughout the first half of the game, players must traverse the time periods in a very defined sequential manner as they gather the necessary information, allies and powers that lead up to the confrontation with Lavos. Holleman calls this linear sequence “The Tragedy of the Entity.” The vastness of the spatial locations (as opposed to the temporal ones) gives
players the illusion of a much larger world, although it is not accessible to them during the first half of the game. Therefore, the game world’s temporal dimension reads as a linear corridor, as exemplified by the following chart.

2.1 Temporal Dimension of *Chrono Trigger's* world

In chart 2.1 we can observe the different ages shown as continually developing the spatial dimension (the physical maps corresponding to each one of the ages), exemplified by the blue arrows. The black circles represent the physical spaces where events happen in response to the player’s presence. The black arrows represent the logical progression of the story’s time as the characters visit the different ages. If we consider the first two time travel events, which depict the blunder that takes Crono, Marle and Lucca from 1000 AD to 600 AD, and their subsequent return to 1000 AD, we will see that time has continued to progress in 1000 AD, in such a way that the people and places are now different: when they return: they find that three days have passed, and Crono finds himself charged with the kidnapping of Marle.

In chart 2.1 we can observe the different ages shown as continually developing the spatial dimension (the physical maps corresponding to each one of the ages), exemplified by the blue arrows. The black circles represent the physical spaces where events happen in response to the player’s presence. The black arrows represent the logical progression of the story’s time as the characters visit the different ages. If we consider the first two time travel events, which depict the blunder that takes Crono, Marle and Lucca from 1000 AD to 600 AD, and their subsequent return to 1000 AD, we will see that time has continued to progress in 1000 AD, in such a way that the people and places are now different: when they return: they find that three days have passed, and Crono finds himself charged with the kidnapping of Marle.
Likewise, we will observe Holleman’s separation of “The Comedy of the Sages” from the “Tragedy of the Entity” following the party’s return to the dark ages in 12,000 BC. After the completion of the “The Tragedy of the Entity,” the sequential structure of available locations stops. At this time, all physical locations throughout the ages, acquire a final state that cannot be further altered. Players may travel both space and time to gather the final items that they will need in order to successfully battle Lavos, and therefore complete the game.

An important point to consider is that as players advance through the game, each of the landscapes becomes more and more accessible to them. During the first iteration of the middle ages, Crono and his group only have access to the Kingdom of Guardia. But the events that have happened while they were away (in both the present and the future) allow them to visit the southern part of the continent when they return. Likewise, after the group’s return to Zeal, their time machine is refitted with wings, which allows them unlimited access to both all temporal dimensions, and all physical spaces.

### 2.3 Objects

*Chrono Trigger* offers an innumerable array of objects that the players can interact with, including several weapons and armors with which the player can equip Crono’s group. In this section, I present a chart of the most significant objects to the diegetic content of the game. These objects act mostly as plot devices that characters (and therefore players) must acquire, activate, or destroy in order to advance the quest. While this list is not fully comprehensive, it focuses on the most important ones in terms of their influence on the narrative. It is important to notice that a great majority of the objects that are significant to the plot find their origins in the Dark Ages (12,000 BC), and that they are somehow related to the three gurus of Zeal: Melchior, Gaspar and Balthazar.
<table>
<thead>
<tr>
<th>Item Name</th>
<th>Graphical</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lucca’s Telepod</td>
<td><img src="image" alt="Telepod" /></td>
<td>The telepod is an invention that Lucca intended for matter transportation from place to place. It originally worked, but as Marle tried it out, it turned out to be capable of much more.</td>
</tr>
<tr>
<td>The Pendant</td>
<td><img src="image" alt="Pendant" /></td>
<td>At first, Marle’s pendant is thought to cause the malfunction in the telepod that made it open the time gate in Truce village. However, it was later discovered to be a piece of Zeal technology, created by Melchior. The pendant can be charged with Lavos’s power to do things such as open doors, and empower items.</td>
</tr>
<tr>
<td>Time Gates</td>
<td><img src="image" alt="Time Gates" /></td>
<td>Time gates are “Hyper-dimensional, space-time distortions” (Chrono Trigger) that allow people to move through time. Robo suggests that these gates were set up by an unknown entity to put Crono’s group on a course to fight Lavos and prevent the destruction of the world. Lucca notes: “Gates are unstable” and “appear and disappear all the time.”</td>
</tr>
<tr>
<td>The Gate Key</td>
<td><img src="image" alt="Gate Key" /></td>
<td>The time key is an invention by Lucca that stabilizes the time gates and locks them in place. Following the events in the quest segment called “Footsteps! Follow!” where the key is stolen, it is implied that Crono’s group cannot travel through time without this item.</td>
</tr>
<tr>
<td>Dreamstone</td>
<td><img src="image" alt="Dreamstone" /></td>
<td>This red stone is a material used in the Dark Ages to create items of power. In prehistory, it is considered a valuable item and the symbol of the Ioka Village chief. Ayla awards Crono with a sample of the stone after he defeats her at a soup-drinking contest. The stone is then used to repair the mythical sword Masamune.</td>
</tr>
<tr>
<td>The Epoch</td>
<td><img src="image" alt="Epoch" /></td>
<td>The epoch is a time machine conceived by Balthasar, the Guru of Reason in the Kingdom of Zeal. After being propelled by Lavos to 2300 AD, he created the ship with the objective of returning to his own time, but died before completing it. When the party is exiled from the dark ages by the prophet, they acquire this ship. When players defeat the Queen, the Epoch is stolen by Dalton, who modifies it to give it wings and the ability to fly anywhere on the maps.</td>
</tr>
</tbody>
</table>
2.4 Events

2.4.1 The Tragedy of the Entity

In *Reverse Design: Chrono Trigger*, Patrick Holleman contends that the story’s switch from being closer to the narrative pole towards the ludic in *Chrono Trigger* is a deliberate design choice. To him, the “Tragedy of the Entity” is designed to linearly convey a tragedy to players as well as introduce the characters and events of *Chrono Trigger*. According to Holleman the tragedy is carried out by “continually deceiving and surprising players using various methods” (6) which include the difficulty level of bosses, pacing and even the interface design. His main thesis is that during the first section of the game, “at almost every turn, the party’s [Crono’s group] efforts to change the past are blown away by Lavos who warps history to suit himself instead” (7). This is occurs despite the fact that the progression of the story is marked by perceived successes of the player.

The “Tragedy of the Entity” owes its name to a “kind of animist incarnation of the planet, a kind of nature god” (43) to whom the characters refer during an iconic campfire scene after the events in the tragedy have been completed. Robo suggests that this Entity is the reason why Crono’s group is able to travel through time and that “it is almost as if some entity wanted to relive its past” (*Chrono Trigger*). Neither the in-game characters nor Squaresoft have ever clarified what this entity is. Holleman does not cite any concrete sources for his identification of the Entity.
Patrick Holleman describes the “Tragedy of the Entity” as a linear succession of events, leading the player from the beginning of the game at the Millennial Fair, through the blunder that took Crono and his friends to the middle ages, the escape that led them to a dystopian future, and their quest to avert it. He points out thirteen different quests that lead up to the climactic moment of Crono’s death. Holleman maintains that this sequence of the game is linear and non-interactive, and that it successfully engages the player because the game “has been deceiving the player the whole time” (40) and none of their gameplay achievements effectively achieve anything to stop Lavos. Holleman explains this in a comparison of player successes, exemplified by a list of the dungeons conquered and the bosses defeated, and comparing them to the historical results of said actions.

2.2 Holleman’s Historical Impact Chart (40-2)

<table>
<thead>
<tr>
<th>Quest</th>
<th>Dungeons Conquered</th>
<th>Bosses Defeated</th>
<th>Historical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescue Queen Leene/Marle</td>
<td>Cathedral</td>
<td>Yakra</td>
<td><strong>Nothing.</strong> Frog was always going to recue her, Marle just delayed his search.</td>
</tr>
<tr>
<td>Escape Guardi Prision</td>
<td>Prision</td>
<td>Dragon Tank</td>
<td><strong>Nothing.</strong> Takes place in the present, no historical impact, beyound your own survival.</td>
</tr>
<tr>
<td>Figure out where you are</td>
<td>Lab 16, Info Center</td>
<td>Guardian</td>
<td><strong>Nothing.</strong> Seeds sprout but never bear crops, and you’re supposed to be preventing this future from existing.</td>
</tr>
<tr>
<td>Find a time warp home</td>
<td>Lab 32, Sewer Access, Factory</td>
<td>R Series</td>
<td><strong>Nothing.</strong> Again, all action takes place in a future you plan to cancel.</td>
</tr>
<tr>
<td>Make it back home to the west</td>
<td>Heckran Cave</td>
<td>Heckran</td>
<td><strong>Nothing.</strong> The Mystics are an isolated community on whom you have no real impact.</td>
</tr>
<tr>
<td>Find and stop Magus and/or his army</td>
<td>Zenan Bridge, Mt. Denadoro</td>
<td>Zombor, Masa-Mune</td>
<td><strong>Nothing.</strong> Ozzie’s attack obviously never destroyed Guardia or Chrono wouldn’t have been born. You found the broken Masamune, but it doesn’t help you yet.</td>
</tr>
</tbody>
</table>
Get Dreamstone to repair the Masamune: Nothing. You get Dreamstone and arouse Azala’s curiosity, but the Iokas and Reptites are the same as ever.

Defeat Magus: Nothing. The Millennial Fair is a celebration of Magus’ defeat. Either Lavos or Frog killed him, before you ever got involved.

Defeat Azala: Nothing. Even if you never defeated Azala and Reptites, Lavos still would have fallen out of the sky and obliterated them.

Explore Zeal: Nothing. No, really, you don’t do much...

Rescue the Guru: Nothing. Maybe this quest will help you change history, but not yet.

Find Schat, Stop Mammon Machine: The Black Omen. Zeal is still obliterated, but at least the Black Omen exists...?

Holleman’s analysis of the game does not account for further play instances in which the game offers different endings, and therefore his analysis applies to a first instance only. *Chrono Trigger* offers a total of twelve different endings, ten of which rely on the moment of the original timeline when the player decides to confront Lavos and successfully defeats him. In this respect, the game has technically ergodic features such as branched action courses that respond to the actions and choices of the user. However, the branching only becomes available to players who have played the whole game at least once.

After the first complete play-through of *Chrono Trigger*, the start menu of the game features a new option called “New Game +” which enables them to start at the beginning of the game while carrying over all the items, experience and powers from a previous play-through. This allows players to revisit the story and explore different moments of the game more thoroughly without the stress from having to deal with enemy battles. Table 2.3 shows how the multiple endings of the game are achieved according to the moment of the fictional time-line where the player chooses to fight Lavos.

<table>
<thead>
<tr>
<th>Quest</th>
<th>Location</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get Dreamstone to repair the Masamune</td>
<td>Forest Maza/Reptite Lair</td>
<td>Nothing. You get Dreamstone and arouse Azala’s curiosity, but the Iokas and Reptites are the same as ever.</td>
</tr>
<tr>
<td>Defeat Magus</td>
<td>Magus’ Castle</td>
<td>Nothing. The Millennial Fair is a celebration of Magus’ defeat. Either Lavos or Frog killed him, before you ever got involved.</td>
</tr>
<tr>
<td>Defeat Azala</td>
<td>Tyrano Lair</td>
<td>Nothing. Even if you never defeated Azala and Reptites, Lavos still would have fallen out of the sky and obliterated them.</td>
</tr>
<tr>
<td>Explore Zeal</td>
<td>None!</td>
<td>Nothing. No, really, you don’t do much...</td>
</tr>
<tr>
<td>Rescue the Guru</td>
<td>Breast Nest/Mt Woe</td>
<td>Nothing. Maybe this quest will help you change history, but not yet.</td>
</tr>
<tr>
<td>Find Schat, Stop Mammon Machine</td>
<td>Ocean Palace</td>
<td>The Black Omen. Zeal is still obliterated, but at least the Black Omen exists...?</td>
</tr>
</tbody>
</table>
Table 2.3 is a graphical representation of the timeline of the game’s events relative to the temporal dimension in which they occur. The blue arrows represent the development of the game’s fictional content, and they are superimposed upon the lines representing the development of one of the developing ages. They are connected through black arrows which indicate both the progression of the story. Table 2.3 therefore represents the different ways in which players can play “The Tragedy of the Entity” and complete the game before reaching the moment before Crono’s death. Because these different endings are unavailable to the player during the first instance of game completion, these are better understood as answers to the question, “what would have happened if Lavos had been defeated when...?”

In this way, Chrono Trigger transforms after the first play-through because the whole game attains a greater quality of dynamism in its plot, as the number of kernels in the traversal becomes variable (as opposed to static) in order to respond to a broader selection of player choices which significantly alter the result that players attain when performing quests, and therefore altering Holleman’s “historical results” from “nothing” into the several answers that the multiple endings provide.
The blue arrow represents the logical flow of the Tragedy of the Entity and the events that lead from the start of the game to the moment of Crono’s Death. Failure during these moments leads to a game reset.

The black arrow represents the transversal from age to age as it maintains the logic of the “Tragedy of the Entity”.

The orange arrow represents the deviant, unpredictable jumps of time that the player may make at specific moments in order to fight Lavos in 1999 AD. Failure during these moments leads to the Bad Ending, where we see the destruction of the world.

These arrows represent an uncharacteristic confrontation with Lavos. Failure during these moments leads to the Bad Ending, where we see the destruction of the world.
2.4.2 The Comedy of the Sages

Patrick Holleman calls the collection of optional quests and the final confrontation with Lavos that occur after Crono’s death “The Comedy of the Sages.” Holleman contends that the chapter division is “not only written differently, but also plays differently” (5). He claims it is a comedy of intervention understood as the “classical sense of the dramatic work with a (reasonably) happy ending (7). It is designed by the intervention of the three sages of the Kingdom of Zeal, who created most of the objects that empower the characters in a fictional way and enable them to complete their quest to defeat Lavos.

Holleman’s division is quite observable in the temporal dimension seen chart 2.1. The Tragedy of the Sages follows a sequential progression between events, and the world evolves in spite of the players. As observed in the diagram, the world and the characters of 1000 AD vary from the first beginning of the game to the second visit. The world, its objects and its characters continue to advance as players advance their quest. In contrast, the totality of events in “The Comedy of the Sages” occur at the same temporal moment, and the world, characters and objects remain static. Narrative action in this block is completely defined by the number of quests that the player chose to engage in.
After the pivotal moment of Crono’s death and the resolution of the scripted events in 12,000 BC, players are able to travel to any moment of the timeline that they wish, and travel from there to any other, which allows for a number of quests to transpire in multiple ages, and for these quests to either be completed in any order or even just completely avoided in favor of a direct confrontation with Lavos. Holleman theorizes that the shift in game-play is a matter of genre convention that is characteristic of the Japanese role-playing game of the nineties (46), but that *Chrono Trigger* is unique because there is a significant lack of emphasis on dungeon completion and battle-centric encounters. Instead, the game relies a lot more on puzzles and the use of the world as a whole (47).

Holleman’s analysis of “The Comedy of the Sages” is brief because it is focused on battle encounters and not the narrative of the game. In this way, he points out seven outstanding quests that feature an especially difficult opponent (a boss), and discusses both the viable strategies to defeat the game, and the ways in which the game presents challenges to the player. Although his analysis of the quest “The Sun Stone” is quite complete and addresses the quest’s aspects of ergodic play, the fact that Lucca’s quest was not included in his discussion of “Fiona’s Forest” is a regrettable oversight.

Lucca’s quest is connected to the latter quest. In “Fiona’s Forest” players are offered the opportunity to help Fiona, a woman in 600 AD who wishes to plant a forest in the central desert of the continent of Guardia. However, her efforts have been thwarted by a mysterious sinkhole. When Crono and his group confront this dilemma, they battle the Retinite, a monster that presents “a kind of challenge for which the stakes are multiple game overs” (Holleman, 50). Upon returning to Fiona, if Robo is in the party, he will ask for permission to stay behind and help Fiona to plant her trees. If players allow it, Robo will leave the party and players must collect him in 1000 AD.

When players revisit Guardia in 1000 AD they will see that the desert has been transformed into a lush forest, and that there is a brand new cathedral where Fiona’s house used to be. Robo will be found atop an altar, and interacting with him will lead to a campfire scene, where the characters offer their personal opinions about the quest. When the conversation takes a turn to regrets, Marle asks Lucca if there is anything in her past that she would like to change. Lucca responds by saying she would rather not talk about it, and then, her quest begins.
Lucca’s quest is essentially a puzzle, much like the ones that, Holleman highlights, occur uncharacteristically after fighting an especially difficult enemy, informally known as “a boss.” This feature, Holleman claims, is one of the defining traits of *Chrono Trigger* that made it very different from other Japanese role-playing games of its time: “an intricate puzzle.” This is contrary to the standard formula whereby quests would consist of long and complicated challenges that may include puzzles, but ultimately would culminate with a single battle against a “boss.

### 3. Theoretical Introduction

Juul’s analysis of playable tragedies in *The Art of Failure* is an inspiration to evaluate the games we have played with the care we would give to any other “serious” form of art. However, the fact is that the critical study of games is an emerging academic field and that there is a lack of terms cemented on tradition. Therefore, scholarly work that focuses on the story content of games demands a meticulous approach in the selection of the typology used to describe games and their dramatic resources, when they are pertinent. In this sub-chapter, I will attempt to clarify the terms I borrow from several authors in order to develop the main arguments by which I seek to propose Lucca’s quest in *Chrono Trigger* as an example of Jesper Juul’s proposed new type of tragedy.

Currently, the study of games is at the center of an academic discussion that has been misleadingly characterized as a debate between those who maintain that games are narratives (narratologists, or narrativists), and those who believe games are systems of rules (ludologists). Espen Aarseth attributed the erroneous conception of the debate as a confrontation of mutually exclusive disciplines to Jenkins (2001) who interpreted Aarseth’s own argument against “applying the theories of literary criticism to a new empirical field, seemingly without any critical reassessment” as an indiscriminate ban on the use of narrative theory in game studies (2012:203).

With the intention of clarifying this misunderstanding, Gonzalo Frasca suggested in “Ludologists Love Stories Too” that the real problem for the elaboration of narrative analyses of games might be the lack of a common terminology, but not a disregard for narrative theory,
on behalf of so-called ludologists (2006:6). Recent work shows scholars apologetically excuse themselves from the imaginary debate (see Howard 2008) by proposing conciliatory views. In this work, the situation is brought to the reader’s attention out of the belief that this so-called “debate” is important because stems from the very important question “Are games narratives?”

The clearest possible answer is “not exactly.” In *Cybertext: Perspectives on Ergodic Literature*, Espen Aarseth shows that the question is in itself ambiguous: a narrative is an entity independent of its medium: a game, just like a book, a play or a movie can be the medium of a narrative. My simplification comes from Aarseth’s development of the “cybertext theory” a function-oriented view that “Focuses on the mechanical organization of the text, by positing the intricacies of the medium as integral part of the literary exchange” (1997: 1). Aarseth reproves most literary theories because they “take their object medium as a given” (15) and proposes cybertextuality as a “way to expand the scope of literary studies” (18).

Alexander Galloway in “Four Moments of Gaming Action” is a solid resource to refer to when confronted with the narrative and games question. Galloway offers a typology of four different sectional moments that occur during the playing of a game that may or may not share the qualities of narratives. Galloway called these qualities “diegetic content” and with this term, he means to indicate “the total word of narrative action which includes characters and events that are shown, made reference to or are presume do exist within the game situation” (22). He then proposes the idea of non-diegesis that includes the “elements of the gaming apparatus that are external to the world of narrative action (and) are centrally connected to the act of gameplay” (23). By evaluating actions effected by either the operator or the game machine, Galloway distinguishes the different kinds of actions that facilitate narrative content in some games, thus implying that different games have different amounts of diegetic content.

Both Aarseth’s discussion of the textuality of games and Galloway’s study on the different sorts of constituents in a game bear a strong compatibility with Seymour Chatman’s structural approach to the study of narrative and discourse. In “A Narrative Theory of Games” Aarseth pointed out the similarities and differences between games and traditional literary works by looking at four “independent ontic dimensions of the ludo-narrative design-space” and discerned different kinds of games according to the degree of determinacy in their
stasis and process statements (see Chatman 1978:37), which he presents in the four distinct categories of world, objects, agents and events (Aarseth, 2012:131).

Aarseth’s model aims to determine through the observation of distinct characteristics of a game whether they are closer to the linear structure of narratives, or whether they are closer to the ergodic quality of games. The consideration of Aarseth’s ontic dimensions allows us to observe that that Chrono Trigger as a whole is an extended linear corridor, with static but usable objects, flat characters and fully plotted events. Although the description accurately defines the mechanics of the game, it does not account for player emotional involvement or the dramatic resources to elicit a sense of tragedy. For this reason, other structural models used to account for narrative action were sought.

1.1 Aarseth’s four-dimensional model (2012:4)

<table>
<thead>
<tr>
<th><strong>Ontic Level</strong></th>
<th>World</th>
<th>Objects</th>
<th>Agents</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Narrative Pole</strong></td>
<td>Inaccessible</td>
<td>Non-interactable</td>
<td>Deep, Rich, round characters</td>
<td>Fully plotted, Dynamic satellites/Playable story</td>
</tr>
<tr>
<td>Single room</td>
<td>Static, usable</td>
<td>Linear corridor</td>
<td>Dynamic story</td>
<td></td>
</tr>
<tr>
<td>Linear corridor</td>
<td>Modifiable</td>
<td>Multicursal</td>
<td>Flat characters</td>
<td></td>
</tr>
<tr>
<td>Multicursal Labyrinth</td>
<td>Destructible</td>
<td>Hub shaped quest</td>
<td>Dynamic Kernels</td>
<td></td>
</tr>
<tr>
<td>Hub shaped quest Landscape</td>
<td>Creatable</td>
<td>Inventible</td>
<td>Bots, no individual identity</td>
<td></td>
</tr>
<tr>
<td><strong>Ludic Pole</strong></td>
<td>Open Landscape</td>
<td>Non-interactable</td>
<td>No Kernels (pure game)</td>
<td></td>
</tr>
</tbody>
</table>

The first is Jeff Howard’s Quest: Design and Theory, where he takes on an approach towards the understanding of quest games as simulations (see Frasca 2003:5) designed to afford experiences structurally akin to the archetypal structures proposed by Joseph Campbell, Vladimir Propp and Northrop Frye. To Howard, quests can be understood as a “goal-oriented search for something of value” which is connected to the medieval romance and Renaissance allegory, in which “an expedition or adventure undertaken by a knight to procure some thing, or achieve some exploit” (2). He proposes that games that follow the classical structure of quests invite the enactment of the well-documented archetypal structures to unify both
action and meaning through the “thematic, narrative and personal implications” of strategic actions (107).

The second model used to describe narrative action comes from Sebastián Genvo’s “Understanding Digital Playability,” where he proposes a general analysis framework for video games based on the work of Algirdas Greimas. Genvo proposes the idea of the “ludic attitude,” or a mood adopted by players, in which they operate “a metaphorical process that voluntarily actualizes a purpose by the way of a set of consciously perceived as aleatory in order to exercise the possible” (136). This attitude, Genvo contends, is mediated by a system of rules that systematically feature Roger Callois’s four “fundamental characteristics” of play: competition, change, mimicry and thrill. Genvo observes that the general structure of Greimas’s “canonical narrative schema,” can be used to evaluate not storytelling, but rather the players’ “goal-oriented” action (139).

The different theories mentioned above serve to highlight this essay’s the necessity to clearly delineate its terminology in order to explain the way in which Chrono Trigger is understood as text, and therefore provide with a positive example of Jesper Juul’s proposed new type of playable tragedy. In the subsections that follow, I will be delving into the particular terms selected for the discussion of Lucca’s quest, and systematically exemplify these terms with material from Squaresoft’s game.

First, a summary of Aarseth’s typology as presented in Cybertext is provided in order to present the way in which Chrono Trigger set it apart from traditional print text literature. Second, an exploration of Galloway’s “Four Moments of Gaming Action” is included, in order to account for the dramatic resources observed in the analysis of the quest that is a proposed example of Juul’s new type of tragedy. Third, I will offer commentary on the narrative theory used to analyze this quest by looking and Seymour Chatman’s work and Aarseth’s proposed narrative theory. Fourth, I will explain the lineaments by which I justify the selection of a single, minimal segment of the game as an object of study and present the arguments for presenting it as a meaningful structure compatible with the archetypal models studied by Jeff Howard. Finally, we will look at the qualities of Chrono Trigger that make it a “playable” structure in the terms proposed by Sebastián Genvo.
3.1 Chrono Trigger as Cybertext

Aarseth works from a definition of text as “any object with the primary function to relay verbal information” that cannot “operate independently of some material medium” and “is not equal to the information it transmits” (69). He calls this information “a string of signs,” which is composed by two distinct elements. The first he calls “scriptons,” or the strings of signs as they appear to the users. The second are “textons” or the strings of signs as they are in the text. Through what Aarseth calls a “traversal function,” or the actual act of participation in text (playing, reading or viewing), scriptons are generated from textons and presented to the user. To exemplify: Chrono Trigger, as a whole delivered product, contains twelve different endings. These can be considered textons because they are an integral part of the game. However, every time someone plays the game from beginning to end (effecting a traversal function, or traversal) users will experience a string of signs featuring only one such ending. The ending that they see in the particular traversal is one of the scriptons of the string of signs.

Aarseth’s subsequently propose a set of seven variables that “allow us to describe any text according to their mode of traversal” (69). These are: dynamics, determinability, transiency, perspective, access, linking and user function. Each of these variables can have a certain value shown in the table below that may appear in all texts.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Possible value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamics</td>
<td>Static, IDT, TDT</td>
</tr>
<tr>
<td>Determinability</td>
<td>Determinable, Indeterminable</td>
</tr>
<tr>
<td>Transiency</td>
<td>Transient, intransient</td>
</tr>
<tr>
<td>Perspective</td>
<td>Permanent, impermanent</td>
</tr>
<tr>
<td>Access</td>
<td>Random, controlled</td>
</tr>
<tr>
<td>Linking</td>
<td>Explicit, conditional, none</td>
</tr>
<tr>
<td>User function</td>
<td>Exploretive, configative, interpretative, textonic</td>
</tr>
</tbody>
</table>
The typological study, allows us to observe that *Chrono Trigger*, during the “Tragedy of the Entity” is a static text because the scriptons are constant: the story is presented linearly, and every traversal function will follow the same sequence of scriptons. However, “The Comedy of the Sages” shows a degree of “intratextonic dynamics” (IDT) because the contents of scriptons changes to reflect the players’ choices and skills, although the number of textons, or action course available to players, remains fixed.

In regards to determinability, *Chrono Trigger* is majorly determinable. According to Aarseth, a determinable text is one where “the adjacent scriptons of every scripton are always the same” (63). Every action taken during “The Tragedy of the Entity” produces the same response to a given situation for the sake of the story that developers wish to tell. There are a few quests in “The Comedy of the Sages,” such as Lucca’s quest, where the degree of determinability is reduced to encompass more unrestricted elements (though not random), such as user physical skills over the controls, which make the result less predictable.

*Chrono Trigger* is mostly an intransient text. Aarseth tells us that transient texts are those where “the mere passing of the user’s time causes scriptons to appear” (63). As a game, players must continually act in order to reveal the scriptons, and the game is interesting because players become invested in discovering them. The game of itself will do nothing unless activated by the user, and will await user input in almost complete stillness. There is an exception, however. If the “active battle” option has been chosen at the beginning of *Chrono Trigger*, the battle system is changed from turn-based into a less static model in which characters act periodically in direct relation to their “speed” attribute. In such case the game will quickly end in loss if enough time passes while the user is inactive.

A text can include variables regarding user personal permanence in the world described by the text. Aarseth calls this “perspective.” A text is of permanent perspective if “the reader is required to play a strategic role as a character,” if not, then it is impersonal (63). *Chrono Trigger* has a degree of such permanency: throughout the majority of the text, players must play the strategic role of the hero, Crono. However, they are not at all times quite responsible for what happens to Crono throughout “The Tragedy of the Entity” because most of the events have been predetermined by the game developers. However, during the “Comedy of the Sages” Crono’s return to life depends very much on the players.
At all times *Chrono Trigger* is of controlled access. This is because the scriptons of the text are not “readily available at all times” and users must “follow an arbitrary path involving other specific passages before you get what you want” (Aarseth, 63). This was quite significant in the collection of primary source material for the present discussion. In order to build up a complete semblance of Lucca’s quest, numerous play sessions of the whole game had to be completed in order to understand the textons of the very specific moment that is the focus of this discussion. In contrast, Patrick Holleman’s “Reverse Design: Chrono Trigger” is (thankfully) a random access text. This is because all the scriptons (information) contained in Holleman’s text is readily available at any time, and a reader is able to simply flip a few pages to find herself at the precise place she means to.

*Chrono Trigger* is a text with much conditional linking. Conditional links “can only be followed if certain conditions are met” (64). This is a core principle of the game that defines its access. The game can be said to work as a system of variable detection that is relative to the player’s advancement of the quest. As they play through the quest, players encounter events and items that work as switches that trigger a 1 or 0 value in an abstract variable. The game system then reviews the value of those conditional variables and displays content accordingly following simple, conditional clauses of the type “If variable X is ..., then ...” The variable system serves as an abstract resource that allows the game to check player progression, opening up new areas, and altering the dialogue of the fictional characters in the game.

For example, during the starting scene at the Millennial Fair, players are allowed to explore the area and interact with the characters and objects. One such object is a noticeable pink bag on a table. Players may choose to eat the contents or leave the bag alone. The bag, as an item has a variable number, that for the sake of this example we will call X. If the content of the bag is left alone, the value of X is 0. If the content of the bag is eaten, the value of X will change to 1. At a later scene, called “The Trial” a hearing is had to account for Crono’s character. In it, the event script is conditional and subject to the variables activated in the Millennial Fair. If the value of X is 1, a man will come forth to denounce Crono as a thief. If the value of X is 0, he will not appear.

The same mechanic is used to signal progression through the game. For example, when Crono walks into the Millennial Fair grounds, Crono is told to visit Lucca’s exhibition, but
can’t do it because two men stand in the way. Once Crono meets Marle and she has joined his group, Crono must speak to a shopkeeper, whose script contains the variable Y trigger that causes the men to move. This differs from a text with “explicit linking,” such as the present essay and most print literature, where readers know to follow paragraph to paragraph, from ending to beginning. The same principle applies for most traditional literature.

However, conditional clauses are present in some print literature. Books of the genre “choose your own adventure” include such clauses. What makes *Chrono Trigger* and other games different from these books is that a game engine is able to manage a greater number of variables and results because it is not limited by physical paper. In addition, the conditional variables can respond to both choice and the success and failure of tests of the player’s real-life skills such as reading comprehension, observation, physical agility, finger strength and overall reflexes.

An example of the different kinds of conditional clauses available to games is the moment in which Crono, the main character, is tasked with obtaining a red stone from Ayla, the leader of a prehistoric village. Ayla says she will give Crono the stone if he beats her at a drinking contest. The player is then informed that she must press the A button as fast as they can in order to emulate the drinking. If the player is able to press the A button at a preset rate, Crono will drink faster than Ayla and she will grant Crono the red stone; therefore allowing the story will continue. If the player is not, Ayla will keep the stone and invite Crono (and therefore the player) to try again, thus preventing the story from moving forward. In this scene, the story’s continuity and Crono’s success is contingent with the player’s personal success. If the player fails, Crono fails, therefore evoking the sense of “complicity” in the story that Juul calls “the general contract of gaming” (2013: 455).

By contrast, print literature of the “chose your own adventure” kind is physically limited to a lesser number of tests of reading comprehension and decision-making, and is therefore unable to include the thrill of reflex and physical tests that games can feature. By means of resources such as the one seen in the red stone episode described above, *Chrono Trigger* is able to include variables that have direct results on the nature of the story by rewarding and punishing not only the players’ choices, but their skills as well.
This is where Aarseth’s “user function” variable comes into place. Aarseth proposes four different functions that texts require of their users in order to be realized. The main function is what he calls “interpretative,” which involves “the decisions about a text concerning its meaning” (64). Aarseth argues that the “interpretative function” is present in every text, but that some texts can in addition afford explorative, configurative and textonic user functions. To Aarseth, the explorative function is that in which “the users must decide which path to take;” the configurative function is that in which “the scriptons are in part chosen or created by the users;” and the textonic function is that in which “textons or traversal functions can be (permanently) added to the text” (64).

Describing the predominant user function in Chrono Trigger is not a simple matter. Markku Eskelinen argues in Cybertext Poetics that Aarseth did not discuss the relations among the four user functions he proposed (42) other than to say that the “interpretative function” is always present. Eskelinen argues: that games “raise a question concerning the dominant user function” but concedes: “The rule-based manipulative activity central to games could be called configurative” (43) Eskelinen defends his choice to work on this asseveration by citing Montfort (2005: 28) when making the observation that “the user’s commands and directives become scriptons in the resulting log” of gaming actions (Eskelinen, 43).

In Cybertext Theory, Aarseth sums up his views of the variables for text description we have just discusses in direct relationship with his concepts of “ergodicity” and “linearity.”

Table 1.2: User functions and their relation to other concepts. (Aarseth 1997: 64)
Aarseth’s table represents with an arrow the flow of information between text and user, and depicts the quality of ergodicity in a text defined as the quality of discourse where “At least one of the user functions, in addition to the obligatory interpretative is present” (64). It also depicts the feedback loop between text and user which represents the “non-trivial work” users must realize in order to traverse [a] text” (1) which necessarily features alternative paths towards completion. Thus, the ergodic text is differentiated from the traditional literary object (static, determinable and intransient that may or not feature semantic ambiguity) by the feedback loop between user and text (10).

Following Aarseth’s typology, Chrono Trigger can be placed in one of Aarseth’s proposed 576 “unique media positions” which identifies it as belonging to the specific genre. That is, it is an ergodic text which is mostly static but has episodes of intra textonic dynamics, mostly determinable, mostly transient, permanent perspective, controlled access and conditional linking that allows user exploratory and configurative action. The description allows readers to observe general characteristics of Chrono Trigger as a game.

The present discussion is centered on a very small section of Chrono Trigger, and therefore requires more specific terms in which we can describe it. Nonetheless, Aarseth’s typology is important because it provides with the terms in which we can properly describe the nature of the analysis by which it is sought to exemplify Juu’s new type of tragedy. It is important to note that this analysis is not analyzing a single traversal function of Lucca’s quest in Chrono Trigger. A single traversal function can be understood as a sequential log of events and happenings (scriptons). This discussion centers on the textons that allow Lucca’s quest to develop, which has been called “intrigue” (see Aarseth 1997: 97). The textonic analysis is deduced throughout a number of text traversals, in order to create a discussion of the dramatic effects that the possible scripton logs can feature.

### 3.2 Chrono Trigger as an Object of Study

Having established the primary nature of this analysis, the current section seeks to clarify its object. To this effect, we turn to Alexander Galloway’s “Four Moments of Gaming Action,” a typological work that discusses different active resources that a game is afforded in order
to facilitate the information loop between text and user that is characteristic of the video game medium. In this work, Galloway proposes a typology that hopes to categorize different activities according to their agent (either the player or the game system) and according to their relationship to the fictional content included in the game.

Galloway begins with the definition of a game as “an activity defined by rules in which players try to reach some goal,” and proceeds to discuss them as a “cultural object, bound by history and materiality, consisted of an electronic computational device and a game simulated in software” (1). Galloway’s description is akin to Aarseth’s emphasis on the necessary relationship between user and text. To Galloway, “the operator and the machine play the video game together, step by step, move by move. Here the ‘work’ [of art] is not as solid or integral as in other media” (2) reinforcing the conception proposed by Aarseth of games as process.

Thus he makes his first crucial dichotomy: the machine actions “performed by the software and hardware of the computer,” and the operator actions as “acts performed by the player.” Galloway calls this an artificial division, in which

The operator and machine work together in a cybernetic relationship to effect the various actions of the video game in its entirety. The two types of actions are ontologically the same. In fact, in much of gameplay, the two actions exist as a unified, single phenomenon, even if they are distinguishable for the purposes of analysis. (5)

In Aarseth’s terms, the feedback loop necessary for the successful game traversal can be analyzed systematically by focusing on the agent that effects determinate actions. This permits the observation of concrete units that are then subject to commentary, although they lack meaning when not represented in the broader context of the game.

Galloway’s perspective, however, focuses also in the “separate, semiautonomous space that is removed from normal life” that game systems afford players. But far from limiting himself to the study of them as mechanic systems; he leans on Roger Callois’s and Joahn Huizinga’s work to defend the perspective that games are “algorithmic cultural objects” (6). Therefore, he proposes a second dichotomy of actions: Those that encompass “The total world of narrative action,” called “diegetic” and those that encompass “Those elements of the gaming apparatus that are external to the world of narrative action,” which he calls non-diegetic (7).
Galloway’s conception of diegesis is based on Gérard Genette’s *Narrative Discourse: An Essay in Method*, in which Genette proposes the term extradiegetic to “designate the narrating instance,” which can be exemplified by the writing of a literary work. This contrasts with the term “diegetic, or intradiegetic” which refers to the events that occur “inside” the narrative (128). For the purposes of this discussion, Galloway’s adapted term of the diegetic is preferred because it highlights the idea of the “diegetic” as descriptive quality that may or not be present in gaming actions.

Galloway proceeds to propose a classification of four distinct possible actions: User diegetic or non-diegetic game acts, and machine diegetic or non-diegetic acts. These combinations function much like Aarseth’s variable categories of text description. By analyzing distinct moments in several games, Galloway proposes distinct possible values to these four possible categories of gaming moments. These are illustrated in the chart below:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movement act</td>
<td>Ambience act</td>
</tr>
<tr>
<td>Expressive act</td>
<td>Machinima</td>
</tr>
<tr>
<td>Acts of configuration</td>
<td>Disabling Act</td>
</tr>
<tr>
<td>Setup Act</td>
<td>Enabling act</td>
</tr>
<tr>
<td>Machinic Embodiments</td>
<td>Machinima</td>
</tr>
</tbody>
</table>

The variable categories represent an invaluable resource to describe and qualify the individual actions that make up the whole structure of Lucca’s quest as a playable system. They are explored in greater detail below.

Machine diegetic acts occur when the game system portrays the game as a “purely aesthetic object” (26). In *Chrono Trigger* such acts include the display of a whole town, such as Truce Village at the beginning of the game, or the presence or absence of background music. “Machinima” occurs when “The machine is put at the service of cinema” (26), and players are presented with a scene or video that they cannot control. To describe them in Aarseth’s terms, machine diegetic acts can be considered linear text transmitted directly for the text for
the user’s interpretation. However, they are devices meant to elicit either the explorative or configurative user functions at later times.

When Galloway explains his operator diegetic acts, he distinguishes the different ways in which users can enact the explorative and configurative functions of a game. Galloway proposes “movement acts” that occur in *Chrono Trigger* when players move Crono throughout the world and “Expressive acts” are those that allow players to interact with it. *Chrono Trigger* is limited to a single expressive act, which is the “interact” command. In the 1995 Super Nintendo version, it is signaled by pressing the A button. In the 2011 iOS version the “interact” command is issued by tapping the screen). The command tells the system that a player wishes to interact with the character Crono is facing, therefore indicating her own participation in the game-world.

Non-diegetic machine statements include enabling and disabling actions, and machinic embodiments found in the game. Disabling actions are “any type of aggression or gamic deficiency that arrives from the outside world of the game and infringes negatively on the game in some way” (31). These include, for instance, bugs, low polygon counts and crashes. One such example in *Chrono Trigger* is dying, which results in a game reset and the loss of unsaved game-progress. The narrative of the game can sometimes cover machine actions that are disabling. By contrast, enabling actions are those that “grant something” (31) to the operator, such as pieces of information, gaining a level or a progress save-point.

Machinic embodiments refer to the gaming system’s quality and limitations. *Chrono Trigger*, being limited to the 16 bit *Super Nnitendo* console, has limited capabilities for graphic art, which results in a characteristic form to the characters. Mitsuda (2015) complained that he would have preferred to use original strings for the aural theme of Truce Village, “Peaceful Days.” However, the machine’s sound card is limited, and therefore the strings have a rougher sound than he had originally intended.

Another important example in *Chrono Trigger* of such machinic embodiments is the presentation of dialogue and text. Unlike the consoles of today, the Super Nintendo had no voice capability, so both text and dialogue were presented with a large, grey square at the bottom of the screen. This is significant because in order for text to make sense, the speaker is indicated at the top left corner of the dialogue square. In order to progress through longer
dialogue sequences players must to signal they are ready to continue reading by issuing the “interact” command.

The best way to understand Acts of Configuration in Chrono Trigger is to look at its battle system. During battle, players are not afforded full control of their characters, and must execute battle commands “using interfaces and menus that are not within the diegetic world of the game” (29). Other such acts include the selection of equipment and the party selection menu. Galloway contends that the strong reliance on configurative acts orients the player towards the “understanding and executing specific algorithms” (30).

The structural approach used in this study, however falls short in the consideration of user non-diegetic acts. Operator non-diegetic statements are those actions that are “executed by the operator and received by the machine. They happen on the exterior of the world of the game but are still part of the game software” (27). Galloway proposes two kinds. The first, the Setup Acts include opening a menu, or hitting the “pause” button. These actions are called non-diegetic “precisely because nothing in the world of the game can explain or motivate it when it occurs” (13). Other such examples include the use or cheats of game hacks. Although these are built into the game (Chrono Trigger was one of the first games to include a large data base of cheat commands) and they greatly affect game-play, these commands are executed on the real world in relation to the users individual preference. Therefore a structural model cannot accurately predict their use.

Adopting Galloway’s typology provides this discussion with an adequate toolset to observe and describe every single action that system and operator can perform in the context of the textonic analysis of Lucca’s quest. The resulting analysis would solidly pinpoint the “complicity” that Juul’s new type of tragedy must necessarily feature. That is, in order to be complicit, it must be an action of significant diegetic impact that is objectively enacted not by the machine but by the user.
3.3 Plot and “Intrigue”

An overall analysis that accurately represents a game’s diegetic content requires that one is able to identify the core elements of its plot, including both the “process” and “stasis” statements that play a part in it. As described in the preceding subsection, these can be observed by registering the sequential action-response cycle of game action moments by observing Galloway’s typology of user and machine actions. Such an analysis would constitute a plot overview; and in it, the clear differences between the “linearity” and “ergodicity” proposed by Aarseth should be apparent. In this subsection, I will explore these differences and justify the decision taken to present an analysis of such a short sequence in Chrono Trigger.

Chatman’s structural, semiotic approach to narrative and discourse (1978) informed much of Aarseth’s work on narrative theory for games. Chatman proposed that stories are told with statements that are either “stasis” or “process;” where the former include the objects, settings and characters included in the fictional world of the narrative; and the later indicate the actions and happenings that constitute the plot when organized sequentially (34). Chatman contends that process statements are conveyed either mimetically (by implication) or diegetically (by representation.)

In the case of Chrono Trigger a list of stasis statements would include a catalogue of all the objects, characters and settings included in the game. This would include not only important character figures such as the main characters, and the objectified plot devices, but also the sort of object created and displayed by the game engine in order to graphically represent the world around Crono. By contrast, a list of process statements that wishes to portray the totality of the story would have to include all the meaningful actions effected throughout the whole narrative. Chatman tells us that process statements describe “a change of state brought about by an agent or one that affects a patient” (44).
Chatman conceived the narrative logic of a plot as a linear path composed by sequential process statements (actions or happenings) that stretches from the beginning of the narrative, to the end. These process statements can be thought of as either “kernel” or “satellite.” Kernel statements, illustrated in the diagram with the squares, are those that “cannot be deleted without destroying the narrative logic” (53) and which exert a degree of determinacy over narrative blocks, represented by the circle. The black dots on the line represent the “satellite” statements, which are not “crucial in this sense” and are subject to the “workings out of the choices made at the kernels” (54). The black dots outside the lines, with arrows attached, are satellite statements that are anticipatory or retrospective of later or earlier kernels. The oblique lines represent the “possible but unfollowed narrative paths” (55).

With this representation of his “event dimension” or plot, Chatman argued that story and discourse “operate at a deep structural level, and [are] independent of medium” (54). Chatman described the sort of text that presents the cybertext qualities “linear” and “static” described by Aarseth (1994: 63) and that is conveyed by print literature, comic books and images. Frasca called these sorts of media “representational” and proposed that games could not be appropriately understood in the same terms because of the qualities they share with “simulations” understood as systems that “maintain to somebody some of the behaviors of an original system” by reacting to certain stimuli according to a set of conditions (2003: 3).
Frasca contends that the creation of plots for representational media are limited to creating single “fixed sequences of events” because their chosen media “lack the ‘feature’ of allowing modifications to the stories” (5). On the other hand, he proposes that the authors of games or simulations know how their creations “might behave in the future, but they can never be sure of the exact final sequence of events and result” (7). Frasca therefore suggests that game developers find expression through the game’s rules rather than through the perceived sequential nature of its components.

Aarseth used Chatman’s semiotic approach in his discussion on the study of adventure games as objects of literary study (1997: 114). However, Aarseth notes that, Chatman’s proposed event dimension, which relied on the successive presentation of events as a sequence of kernel process statements, is insufficient for the proper representation of ergodic texts. Aarseth explains that Chatman’s conception could be interpreted as a chronological log of actions and happenings, which does not observe the ergodic quality of player participation in the game-as-text. Aarseth proposes the adoption of the term “intrigue” which can be used to refer to the event dimension of the ergodic text.

With intrigue Aarseth refers to “a scheme which depends for its success on the ignorance of gullibility of the person of persons against whom it is directed” (113) Aarseth notes that whereas in drama “intrigue” occurs at “an intra fictional level as a plot within the plot,” the term is applicable to describe the relationship between a game designer (as intrigant) and player (as intriguee). This term adoption seeks to emphasize the idea of ergodicity: while a narrator conveys concretely sequenced actions to a narratee, an intrigant will propose or allow several options to the intriguees and have the text respond accordingly.

Aarseth then argues that “intrigue is not locatable on any particular level of the text, or as a separate module, but it may be surmised from the overall construction” (114). This total construction is parallel to Chatman’s concept of story, the thing that is transmitted by the text. Therefore, I seek in this discussion to examine the quest in such a way that its overall structure can be observed. The resulting graphical representation is more akin to a workflow diagram than it bears resemblance to Chatman’s ideal plot representation, which suggests that Aarseth’s “intrigue” can be represented graphically in such a way.
3.4 Quest Analysis

The preceding subsections of the literature review deal with the abstract concepts proposed by Aarseth, Galloway and Chatman to describe the particularities of the videogame as a medium. Their work is cited because it provides with good concepts for reference when performing an analysis of the discourse by which Lucca’s quest, my proposed example of Juul’s new type of tragedy. The terminology, explains the descriptive approach meant to explain what happens when we read, play, or traverse a text in general, and what happens when we play Lucca’s quest in particular. However, it does not contribute to a critical discussion of the dramatic effect of the narrative content of the game.

The narrative theory used for the description of game content is still in its infancy, although different authors have proposed theories and methodologies. Espen Aarseth, in “A Narrative Theory of Games” called for the critical assessment of literary and narrative theories before they are applied to game study. He then draws a proposed common ground between games and stories by looking at four fundamental, independent dimensions of ludo-narrative content design. Aarseth’s typological approach to narrative theory proposes the description of these dimensions, which gives values to world, objects, agents and events according to the level of player influence in them (2012: 130). Aarseth also proposes that games can be classified according to the degree in which their kernel and satellite statements are determined or variable (131).

Aarseth observed that game-worlds differ from each other greatly when classified according to the qualities of the story’s plot (as a sequence of events and happenings) and the flexibility of said plot’s kernel and satellite process statements. He proceeds to describe four different game types using this: The linear game, with fixed kernel and flexible satellites (games that follow a single main quest, and present optional side-quests); the hypertext-like game, which presents a choice between kernels but has fixed satellites; the “creamy middle” quest game, with a choice between kernels and flexible satellites; and the non-narrative game, with no kernels and a flexible discourse.

While Aarseth’s “A Narrative Theory of Games” helps in establishing the nature of the kernel and process statements in Chrono Trigger, and classifies it as a quest game, the theory
he proposes is not in itself helpful in the critical analysis of the diegetic content in order to
determine whether it is indeed tragic, or if the tragedy is ergodic. Therefore, different
action-oriented models were needed and, based in Jeff Howard’s study of the structural
qualities of the quest as a meaningful action, this study draws upon the structural description
of the quest as described by Joseph Campbell.

In *A Hero’s Journey*, Joseph Campbell describes the quest as “a magnification of a
formula represented in the rites of passage: separation-initiation-return: which might be
named the nuclear unit of the monomyth” (28). He furthers this by explaining that a quest
can be understood as a series of archetypal phases or steps that indicate a separation from
the regular world, the penetration to a sort of power, and a life enhancing return. Christopher
Volger, one of the most often referred to monomyth theorists summarizes these phases
with the following diagram, which includes possible satellite acts amid the circular structure
proposed by the three kernel action statements: separation, initiation, return.

1.5 Cristopher Volger’s graphical interpretation of Campbell’s Monomyth from *A Writer’s Journey*.
Campbell envisioned the monomyth, often called the hero’s journey or quest as a paradigmatic action line that could include specific types of actions, characters and settings at specific points of a story’s plot. To do this, he looked at myths and fairy tales from around the world to find structural similarities, which express “a transcendent psychological and spiritual truth” (Howard, 6). Howard notes that designers of quest systems (such as games) Extend Campbell’s middle phase of “initiation” and Frye’s “minor adventures” in order to put the primary focus on player action, and they repeat the “separation-initiation-return” pattern iteratively to allow for prolonged, varied gameplay (10).

This allows for the conception of games as “quest systems” in which every significant gameplay action performed by a player follows Campbell’s paradigm, while allowing a number of imaginative actions to take place, and is therefore subject for critical interpretation.

However, there is a pronounced difference between the linear narrative conception of Campbell’s myth, and Howard’s study. Quests in games “require players to actualize the potential of the story through goal-oriented actions in simulated space,” referring to the necessary ergodic quality of said games: multiple completion avenues must be open, and meaning of the game must be enacted, or created by the player in a simulated world through the overcoming of specific challenges (Howard, 1). Although Aarseth clearly describes the mechanics of such enactment in Cybertext with his analysis of user function and textual mechanics; Howard’s Quest draws a structural “relationship between meaning and action, revolving around the issue of significant gameplay” (19).

To Howard, games offer three sorts of different “meanings.” The first alludes “the impact of the players’ accomplishments on and within a simulated world,” including the acquisition of power, altering the world physically, morally or socially. The second relates to “a narrative backstory that conveys emotional urgency by revealing why the player-avatar is performing an action and what effects this action will have.” The third concerns the “expressive, semantic and thematic meaning” (25). Juul’s proposed new kind of tragedy would have to be meaningful in some, if not all, of these levels.
3.5 “Playable” Narratives

The idea of the game a structural system of quests, which justifies the extensive analysis of minimal game content, seems to resonate in Sebastiéd Genvo’s “Understanding Digital Playablity,” where he explains the “ludic attitude” as a particular mental process by which players agree to be engaged in game that can be achieved using the modalities of play mediation proposed by Roger Callois. It is Genvo’s view that playability can be described and evaluated using Algirdas Greimas’s Canonical Narrative Schema, as it allows for the prediction of game moments that elicit this mental process. Genvo’s method of analysis proposes to identify the ways in which an action structure is playable, and provides with a solid typology to explain how.

Genvo begins with a discussion that seeks to define what he calls “the ludic attitude,” or the part of the games that will inspires to adopt the “metaphorical process,” or the “curious state of affairs wherein one adopts rules which require one to employ worse rather than better means for reaching and end” (134). He contends in order to understand how games are playable, we must “analyze the way in which its components are designed to make sense with regard to the ludic attitude” (137–38). He then proposes four features any given structure can elicit from game players: competition, chance, mimicry and thrill.

He suggests, that by the use of Algirdas Greimas’s semiotic approach to narratives, we can understand “some specificities of the ludic mediation when it occurs in a context of digital play (and the) modeling a goal-oriented action” (139). As such, he proposes Greimas’s model as a descriptive approach of digital playability, based on the premise that a narrative is the realization of a project in which “a subject goes through a conflict because he desires something” (141). This leads to the identification of four stages “found in any video game” (142) observed in the relationship of the actants observed in Greimas’s original actantial model. Greimas’s actantial theory is a byproduct of his work in semiotics, and is a concept akin to the semiotic roles identified in case grammar as discussed by Herbst (176). Both theories seek to identify archetypal elements and categorize them according to their relationship to the semantic action of a given utterance, irrespective of the linguistic (textual) encoding.
Louis Hébert in his *Tools for Text and Images* explains that actantial model is based on the theories of Vladimir Propp and is a tool that can theoretically be “used to analyze any real or thematized action” (Hébert, 71). Its main premise is that any action can be analyzed into six components (actants) and that these may be assigned into roles according to their relationship to the action. Greimas proposes the term “actants” in an effort to make a difference between actors (characters) as he realized that the role functions could be fulfilled either by concrete characters, or by situations or abstract concepts.

The six actants as proposed by Greimas are subject, object, sender, receiver, helper and opponent. These can be understood in three axes of opposition: the axis of desire, or “the relationship between subject and object, active and passive which is also called a junction,” the axis of power or “the relationship between helper and opponent centered on the subject” and the axis of transmission or “the relationship between sender and receiver as it relates to the object” (71). Hébert comments that the “narrative canonical schema” relies on the study of the junction, the action that links subject and object, and that can be classified as either conjunction or disjunction.

For Greimas, each action took part in four stages. These are Manipulation, Competence, Performance and Sanction. Genvo observes that these stages occur as modalities of doing that involve different actants. The following image includes *Genvo’s* (143) interpretation of the canonical narrative schema as well as a helpful list of concrete game moments to exemplify it.

<table>
<thead>
<tr>
<th>Modality</th>
<th>Manipulation</th>
<th>Competence</th>
<th>Performance</th>
<th>Sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Persuasion, Informing or Compelling</td>
<td>Having-to-do</td>
<td>Doing (or failing to do)</td>
<td>Conditional consequence</td>
</tr>
<tr>
<td>Actants</td>
<td>Sender-Subject</td>
<td>Subject</td>
<td>Subject</td>
<td>Sender-Subject-receiver</td>
</tr>
</tbody>
</table>
Although Greimas’s work is widely used to understand narrative, Genvo proposes to use it to use the narrative semiotics to “fully understand some specificities of the ludic mediation when it occurs in a context of digital play,” therefore separating himself from the understanding of “storytelling” and striving for process of “modeling a goal-oriented action” (139). Genvo then proposes to study game actions considering the player as the actantial subject of the multiple game actions and that “Each goal of a game can be framed by using this four-stage sequence depending on the complexity required by the analysis” (142).

Genvo points out that the model applies for the understanding of actions in general. Following this, the model can be used to evaluate the ludic features of the game, particularly through the analysis of the stage of competence, which stresses that the player, as subject “must have the necessary competencies beforehand and must become qualified” (142) to complete the goal that is the focus of the analysis. As such, Genvo proposes to analyze the relationship between the modalities of potentialization, or the ‘having-to-do’ or the goals of the game and the ‘willing-to-do,’ which concerns the player’s freely adopted decision to play; and the modalities of actualization, which concerns the knowing-how-to-do and the being-able-to-do, that is, the players knowledge and physical ability to manage the interface. In Chrono Trigger, the “having-to-do” rests on its qualities as a quest or adventure game in which players “experience an acute desire for progression that manifests itself as an almost instinctive sense of where to go next” (Howard, 45). The game reveals to the players a story as they overcome tests of skills and discover new active locations and items that respond to the only command they are given (interact).

The willing-to-do, which corresponds to the ludic attitude of players, or their will to play, revolves around the different moods that the game affords players. The discovery active locations and items corresponds with Callois’s “alea,” or chance, as players do not know during their first play through how items will respond to them, and what the consequences of their actions might be. Chrono Trigger also features mimicry, as players “play to make believe or to be made believe” (138) that they are in fact the personalization of Crono, the main character, and therefore share his values (as brave and heroic) and his interests (as his friendship with Lucca or his desire to save his world). The game, however, does not really feature much competition, as noted by Holleman who argues that the game’s difficulty decreases as the game progresses (19).
Regarding the “knowing how to do” and “being able to do,” Holleman argued that part of why *Chrono Trigger* is such a masterpiece is that the designers were very careful to introduce, prepare and then text every long-term skill the player would need to use to achieve success going forward in the game (8). In many ways, the experiences and rules of the game the players experience in earlier dungeons foreshadow the challenges ahead. The most notable example of this is the final battle with Lavos, who switches from time to time into the present strengths and weaknesses of the previous main challengers the players have faced in battle, making it a point to elicit previous knowledge of the game in order to defeat him.

*Chrono Trigger* as a whole, simplified unitary game with the object of defeating Lavos ends with a sanction of success, or the ending, which is qualified by the actions the player has taken to reach it. It features twelve different endings to correspond to the moment where the player has faced Lavos, the place where he has fought him and several other factors. As such, the end of the “acute desire of progression” described by Howard characterizes the “sanction” stage: the quest is completed successfully, and the game has therefore ended.

The simplification of *Chrono Trigger* serves to exemplify Genvo’s conception of the game from the perspective of the player as an entity in the real, non-diegetic sense. While Greimas’s approach can be used to describe the actions that occur in the diegetic space of the game, Genvo’s adaptation can be used to describe what occurs at the level of the player, and these theories can help explain Juul’s idea of “complicity” as a necessary feature of his proposed new type of tragedy where the motivations of the player and the character would thus coincide.

### 3.6 Testing a Quest

In the sections that follow, I will be presenting and analyzing a three-minute long quest sequence from Squaresoft’s *Chrono Trigger* that I have called “Lucca’s Quest.” The analysis of this moment, which has been highlighted by reviewers and commenters as one of the most memorable moments in the game, hopes to serve as a theoretical description of the devices to achieve this emotional impact. This is done with the belief that it might be akin to the new type of tragedy that Jesper Juul theorized in *The Art of Failure* as he studied the capabilities of videogames to tell tragic stories.
Jesper Juul tells us that complicity, or the quality of games that give players a sense of shared responsibility for an action performed by an in-game character can be used to tell tragedies that differ from regular tragedies. The fundamental difference, he writes is that “with complicity, the player shares with the protagonist the feelings of being flawed” (1449). Juul explored empirically several games looking for a game that would feature a tragic ending involving the death of a first person character. While Lucca’s quest does not feature this, I argue that the sense of complicity in the tragic result of a truly ergodic moment in Lucca’s quest that fulfills Juul’s criteria for this kind of tragedy: first, the action is structurally and objectively tragic. Second, the player is fully responsible for the outcome of said action. Third, the action is subject to the player’s efforts. Fourth, it has a protagonist with whom players are able to identify with.

Lucca’s quest was singled out as the most outstanding moment in Chrono Trigger, and is presented structurally as a quest unit of a game that constitutes a “system of quests” as proposed by Jeff Howard, and it can easily be analyzed using Frye’s structural description of tragedy. This quest is one of the most representative moments of Holleman’s conjecture that Chrono Trigger is a game based on deception and revelation. To Juul, this quality “opens up a whole range of new experiences, where the discomfort of having worked for something unpleasant turns out to be a strong emotional device unique to games” (1387).

In order to detect this, this analysis hopes to test the qualities of Lucca’s quest. The first test is the test of ergodicity. In order to be presented as an example of Juul’s proposed complicit tragedy, Lucca’s quest must be recognizably ergodic. That is, it must be a text that recognizably demands both the “interpretative” and the “configurative” functions from the player in order for a successful traversal to be completed. This test is quite simple, but laborious. It demands the collection of its textons (structural components). These can be deduced by observing what Alexander Galloway called machine diegetic acts, machine non-diegetic acts and player diegetic acts. By collecting this material into a progressive graphical sequence, we would see an “event-dimension” that differs significantly from Chatman’s paradigm of plot. If this is the case, the structure should be branching, and might graphically represent what Aarseth called an “intrigue.”
The second test is to identify key kernels and compare their sequential structure with the archetype of Frye’s mythos of tragedy. The discussion should therefore reveal the thematic quality of the quest’s components, and help determine whether they are indeed tragic or not. Although Juul worked with Oscar Mendel’s definition of tragedy, Northrop Frye’s approach to tragedy is used here because of its compatibility with the structural scope of this discussion.

The third test is to fully explore the sense of complicity in the tragic action: actantial analyses as proposed by Greimas should reveal whether or not the structural components are indeed playable. The first actantial analysis should consider the fictional character, Lucca in relationship with her mother. The second would consider the player, in relationship with the goal of the situatios. The modalities of potentialization and actualization should be present in order to reveal the junction, or the act of saving Lucca’s mother as a playable structure.

The detailed structural analysis should allow for an accurate description of the emotional devices that make up both play and story. Following the conclusions I reached in the presentation “Playable Tragedy” (T. Meza, 2014) Lucca’s quest is presented in this discussion as a positive example of Juul’s new type of tragedy. The criteria used to create Lucca’s quest should clarify resources used to evoke an emotional reaction from players would be clear. This would be useful for the creation of similar emotional moments in other games, or for the detection of other such examples of Juul’s theorized mode of dramatic expression in games.
4. Lucca’s quest

4.1 Setting Analysis

Truce Village is the starting point of the game. As Crono and Lucca’s hometown, it is a very simple, colorful location that adds a bit of dimension to both characters. Truce village is characterized by its general beauty and peace. *Chrono Trigger* starts when Crono awakens with anticipation to attend the Millennial Fair. On his way there, Crono is given the opportunity to explore the village and interact with the people there. Players find a very calm and beautiful starting area, where people are generally friendly, cooperative, and helpful. As such, Truce Village is the perfect place to hide a tragedy, although in this analysis we will see that the set-up for it is in the unanswered question, “Why does Lucca’s mother not move?”

Truce’s most salient feature is its musical theme. When players are in Truce, the melody “Peaceful Days,” composed by Yasunori Mitsuda, plays continuously. In order to explore how music affects Truce as a virtual location, specialists were consulted. Musicologist Einar Tryggvason described the melody as structurally executed in theme by a flute. Violinist Ari Vilhjálmson noted that there is a countermelody led by strings, and underscored with diatonic harp fragments. Composer Hreiðar Ingi Porsteinsson noted that the theme is freely repeated in a jazz-like manner. Pianist Judith Pamela Porgbergson-Tobin pointed out that the lack of development other than the instrumental switch in between theme and countermelody may be meant to express stability and order. All the specialists consulted, none of which were familiar with *Chrono Trigger* or a large body of Mitsuda’s work, agree that the song is meant to evoke happiness, child-like innocence, warmth and tranquility, as indicated by its A-major key.

Eventually I consulted Mr. Mitsuda who agreed to respond to my questionnaire. He agreed with the musicians’ assessment of the song, and added that although the game’s content was created before he composed the song, he wanted “Peaceful Days” to make an emphasis on Crono’s relationship with his mother. To do this, he writes, he overlooked the rough quality that the Super Nintendo sound card gave to the string countermelody, which he used to evoke a sense of impending departure. He was able to express the
gentleness of a mother with the woodwind in the first section of the song, and then express
the general sense of comfort and security of the town with the woodwind staccato in the
second part of the song (Mitsuda). Mitsuda believes that he successfully created a sound-
space that would inspire in the players a sense of “home.”

Independent of the music, Truce Village is depicted as a peaceful, idyllic place that
fits perfectly with the archetypal birth of the Hero. It is filled with inviting settings and
seemingly friendly characters that are willing to help the hero, and introduce the player to
the mechanics of the game. Norman links this place with Frye’s summer archetype of the
hero’s birth-place by alluding to the bright colors, mellow settings and calm images of water,
and representation of the animal kingdom as a harmless realm (18). The sense of the idyllic is
further strengthened by Mitsuda’s “Peaceful Days,” meant to express the idea of happiness
and youth. While in Truce, non-player characters address Crono as a child, express happiness
and hope at the celebration of the Millennial Fair, and are shown walking (or expressing desire
to walk) over to Leene Square, where the celebration is held.

Norman’s study on the mythical-archetypal nature of Chrono Trigger concludes that
Truce serves as a metaphorical touchstone; that is, it serves as a contrast of right against
wrong. The generally carefree attitude of the other characters and the tranquil setting that
is unique in the game helps players identify the wrongs that can be righted in the rest of
the game’s settings. In these other settings, conflict grows as the nature of Crono’s quest
is revealed. Norman underscores that the peacefulness in Truce is so exaggerated that the
characters in this setting only exhibit boredom and apathy as their most conflictive trait. The
idea that this is a deliberate design choice seems to be confirmed by a maid in one of the
villages who says, “A peaceful world is a boring world.” The thought of monotony seems to be
further stressed by the music, which repeatedly reinforces its happy – and short – main theme.

This monotony allows designers to create situations that stand out and direct the
attention of the player to certain characters and situations. As noted above, the inhabitants of
Truce will often complain about Lucca’s drive for innovation and lack faith in her inventions.

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2 The original 16 bit can be heard at <https://www.youtube.com/watch?v=KI3PtLCC8WE>
As if this were too little to set her apart, the map itself shows Lucca’s home on an island that is connected to the village by one bridge:

Lucca’s house in the picture on the right is set apart from the main town and on an island. This can be seen as a prompt for players to explore the location, which differs from Truce’s residential square. The interior of the house is also different. It is a larger setting, including five rooms, all of which display a disarray of books and machinery. Players are not able to interact with any objects here. This is notable because other houses generally have a minimal expression, and are mostly defined by the characters inside them.

The only character inside Lucca’s house is Lara, her mother. Lara stands out as a character because she is the only character in the game who remains immobile. Other characters are seen to walk around, or pace in the same place. Crono’s mother, for example, is seen to walk from her fridge to the sink and inside the rest of the house as if she were doing housework. In contrast, Lara remains immobile, sitting on a chair next to her window and close to her bed. The first time the player interacts with her, she will tell Crono where to find Lucca. Thereafter her dialogue seems to become more apathetic as she says, “Lucca and Taban only care about their silly toys!”

Further along in the game, when Crono’s group learns of the mystics and their relationship to Magus and the main antagonist, Lavos, the group returns to Truce village via an undersea passage. The exit is located next to Lucca’s house. If the player walks in and enters
Lara’s bedroom, a very short scene will play, showing Taban, Lucca’s father, enter the room, approach Lara and say, “Here’s what we earned today at the fair!” Lara responds, “You’re so thoughtful.” The scene is meant to underscore the fact that Lara will not leave her room or go to the fair.

Norman’s main thesis is that Truce, as an ideal peaceful place, serves as a point of contrast to identify the problems and adversities found in other of the game’s settings. Although there are a few things in the village that are far from perfect (Norman himself points out Marle and her father’s fallout), players that interact with Lara will find the encounter memorable because it fails to conform with the general atmosphere of celebration, peace and quiet that characterizes most of the non-player characters in Truce. The fact that there is no explanation as to why Lara does not move makes room for the revelation behind Lucca’s quest.

4.2 Agents: A Character Analysis of Lucca

Players know Lucca as an intelligent but misunderstood inventor, who helps drive the story when her invention the “telepod” malfunctions after coming in contact with Marle’s pendant. The blunder results in the discovery of time travel, one of the most important events in Chrono Trigger. As a character, Lucca is built and developed throughout the gameplay in a traditional, literary sense, although several other dramatic resources are successfully employed.

Players first hear of Lucca at the beginning of the game, when Crono’s mother calls her “that inventor friend of yours.” The first image of her is that of a smiling face, with purple hair and a big pair of eyeglasses. The glasses are a predominant feature of her face and they denote an intellectual orientation.

In the events leading to the revelation of Lucca’s telepod at the Millennial Fair, non-player characters will sporadically comment on Lucca’s new invention saying things like: “I hear Lucca and her dad have another invention. I hope it doesn’t blow up like all the others.” The tone set by these comments is mainly pejorative.
Another character says, “That brat, Lucca, says she’s made the discovery of a lifetime.” After Crono meets Marle, the third main character, the player is able to access the part of the fair where Lucca will unveil her invention. Another character comments, “Lucca's inventions never work right.” Lucca reveals her invention, a teleportation device, and invites Crono to try it out. The reaction of the other characters is surprise, indicated when the spectators jump in place. After Crono reappears the dialogue chains to show comments such as “I guess even HER inventions have to work sometimes.” Taban, Lucca’s father, who is in the scene says, “It... WORKED?! I CAN’T BELIEVE IT! ...uh, er. A thrilling display of science at its best, ladies and gentlemen.”

Lucca understands how Marle’s pendant caused her disappearance and discovers a way to control time-travel, deducing Marle’s real identity as the princess of Guardia. Therefore it is Lucca who reveals to the player that Marle disappeared because her ancestor, Queen Leene, is in mortal peril and how she can be returned. These revelations showcase Lucca as a problem solver. When the group saves the Queen in 600 AD, and is ready to return to 1000 AD for the first time, Lucca explains how the time-gates work, and revels in her achievement in her most iconic moment. As Lucca reveals her invention and opens the gate to return home, her musical theme, composed by Yasunori Mitsuda, plays for the first time. Holleman notes how the musical theme identifies a snapshot moment that carries on throughout the game to characterize Lucca. The following is an excerpt of Holleman’s discussion of Lucca’s musical theme:

We have a straight fanfare for the first 4 seconds, after which comes what we might call the actual “theme.” That theme consists of three parts [...]. The trumpet, playing the melody, continues a fanfare theme: it sounds impressive, showy, and victorious. On the other end, the baseline plucks out a steady, mechanical, orderly eighth-note cadence that grounds the tune. These are both qualities you’d expect from Lucca at a time like this: showy genius and logical composure. [...] The organ plays an irregular beat. The eighth and sixteenth notes are syncopated and their phrasing is irregular,

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3 The capital letters are kept from the original script. They express changes in character’s tone of voice. In this case they indicate that Taban is also surprised by his daughter’s success. Then there is a mid-sentence change of address toward the audience.

4 It can be heard at <https://www.youtube.com/watch?v=v1YKC8cNXR8>
relative to the rest of the tune; then they terminate in a straight triplet. It has a kind of
stuttering, frenetic feeling. Between Lucca’s brash achievement and her coolly logical
scientific side, you can hear the barely-controllable nerdy giddiness that she really
doesn’t want other people to see. But what nerd hasn’t felt that way, trying to seem
cool while handing out some serious knowledge – even though it’s more exciting to
you than the audience? (70)

Holleman argues that the theme aims to remind players of this moment of achievement
as Lucca achieves the impossible by repairing machines, mastering future technology, and
understanding puzzles. This supports Holleman’s assertion that the character construction in
Chrono Trigger is “one-dimensional” (70) and relies on snapshot moments such as this one,
with characters showcasing their usefulness to the protagonist. Thus, players know Lucca
as the one who specializes in problem-solving, and who provides Crono (and therefore the
player) with important information needed to complete the game’s quests.

Lucca’s relationship with advanced science and technology is further illustrated by
means of the specific equipment and skills designed for her. Whereas Chrono and Marle use
seemingly medieval weapons, a sword and a crossbow, respectively, Lucca is seen to use
guns, establishing a contrast between the general conservative approach of the villagers
of Truce and other characters towards innovation and Lucca’s progressive attitude. Lucca’s
most powerful armor in the game, are the suits that her father devices and perfects for her,
emphasizing the importance of engineering and inventiveness. When it comes to skills, other
characters rely on magical powers or on superhuman strength. In contrast, Lucca is shown
with devices such as bombs, chemicals, and flamethrowers that establish her as a more
science-oriented individual in a world where magical skills are the norm.

With the exception of Crono, Lucca is the only character who does not appear to
have a personal stake in the quest to defeat Lavos. Her quest is one of discovery, and as the
story progresses, she develops her skills when dealing with problems and devising solutions.
When Crono’s group finds itself in the future age, Lucca is able to interact with machines,
and successfully repairs Robo. Her affinity with technology is further reinforced when Lucca
advocates for her choice to fix Robo against all advice, saying that machines “are evil only
when people make them that way.”
The analysis of Lucca’s quest raises an important point for this character analysis. The central game event seeks to offer an explanation of Lucca’s passion for science and technology, and does so by informing the player that her inspiration comes from a critical moment she lived in the past. As players are given the opportunity to go back in time to that moment and enact it, it can be argued that Lucca is at least partially a result of the players’ actions and choices during Lucca’s quest. As such, at the textonic level, the developers of *Chrono Trigger* created three versions of Lucca. The first is the natural one, the girl who grew up with the grief and guilt caused by her mother’s accident. The second and the third are only possible depending on the outcome of the game’s quest as a successful Lucca develops a more optimistic approach to science, while the unsuccessful Lucca will carry with her the guilt of a having met this second chance with failure.
5. Event Analysis: The Quest’s “Intrigue”

The analysis of events constitutes a detailed test of Lucca’s quest as an instance of text that features the quality Aarseth called “ergodicity.” This is done in order to test the discourse used to tell Lucca’s quest and to determine if it shares the qualities that Juul theorized that his new type of tragedy should possess. In order to establish that it is an example of complicit tragedy, Lucca’s quest must be recognizably ergodic. That is, it must be a text that recognizably demands both of Aarseth’s user “interpretative” and “configurative” functions from the player in order for a successful traversal to be completed. This test is quite simple, but laborious. It demands the collection of its textons (structural components). These can be deduced by observing what Alexander Galloway called machine diegetic acts, machine non-diegetic acts and player diegetic acts. By collecting this material into a progressive graphical sequence, we would see an “event-dimension” that differs significantly from Chatman’s paradigm of plot. If this is the case, the structure should be branching, and might graphically represent what Aarseth called “intrigue.”

In this section, I will begin by discussing Lucca’s quest in a concise an objective manner in order to give readers a general idea of how a successful traversal would look like. It should be noted, however, that this is an abstract, introductory discussion that does not completely illustrate the ergodic quality of an actual traversal. However, it is expected that this short discussion will help readers to understand the graphical representation that collects Galloway’s components of the gaming action. The second sub-section discusses the particular way in which Galloway’s work is used to create a graphical, all comprehensive collection of machine actions (diagetic or not) and possible user actions (called here player action affordances). Thereafter, subsections discuss objective segments of the quest. These highlight the resources used to create a branching narrative that depends on user functions other than the “interpretative”, and are therefore ergodic.
5.1 Analysis of Lucca’s Quest

Lucca’s quest occurs after an iconic conversation that Crono’s group has while sitting around a campfire. The conversation follows the recovery of Robo, who stayed behind in 600 AD to be recovered four hundred years later. The conversation touches on the subject of regret. Lucca refuses to share her regrets. The scene ends when all the characters decide to go to sleep, and a fadeout follows. There is a fade-in, and Lucca is shown to awaken before everyone else, as an unusual music plays in the background. A single opening is presented to exit the forest clearing where Crono’s group has set up camp. Lucca follows to find another forest clearing, and a peculiar, red colored time gate. It is the only object with which players can interact.

Upon interacting with the time gate, Lucca finds herself in her bedroom, and asks herself the question, “Did I make it back to that moment?” Control is given back to players who might find in the room notes that offer the answer: Lucca has traveled to 990 AD, ten years prior to the beginning of her quest. Lying on the floor there is a page from Lucca’s journal which includes the assertion, “I hate science,” an uncharacteristic statement from Lucca, who advocates throughout the whole game her love for science.

5.1 Lucca’s journal

"6/24/990AD
Dad promised to go hiking with me, but blew me off again, due to his work. I hate science! I loathe it!”
As players explore Lucca’s house, they might come across a note from Lucca’s father, Taban that says, “The password is the name of my lovely wife. Use it in an emergency.” Upon using the lower exit of the walkway room in the middle of Lucca’s house, players will find a short scene play out. A younger Lucca plays with her toys, while her fully mobile mother cleans the house. She approaches a big machine, and finds herself stuck in it. The machine starts itself, and a conveyor band begins to draw her closer to an engine. She screams for help and the younger Lucca tries unsuccessfully to help her. Lucca’s mother, Lara, helplessly cries out, “Lucca, enter the password. Stop the machine!”

Lara’s call for help

After this interaction, players are given a small window of opportunity to detect a glowing spot to interact with the machine. If they do this, they are given the opportunity to enter a password by using the keys in the controller. If they realize that they are able to enter the password with this unusual mechanic, and know that Lucca’s mother’s name is Lara, and know to press the keys L, A, R and A, they will successfully stop the machine and save Lucca’s mother. If they do not, there is a fade-out and a scream is heard.

Lucca will then find herself back in her room, lying against the bed. Depending on the result of the scene, players will find content to explain why Lucca became interested in science. If they failed, new journal entries will appear that depict Lucca’s regret at having failed
at saving her mother. If they succeeded, the journal entries will show Lucca dedicating herself to science and machines in an effort to stop further accidents from happening. Players may also return through the time gate in Lucca's room. Robo will be waiting behind.

5.3 Unsuccessful Lucca's journal entries.

5.4 Successful Lucca's journal entry.

If the player has failed at the puzzle, Robo will offer Lucca his own legs to replace her mothers'. Lucca will thank him and say, “You’re a good friend.” Robo will then be thankful for this consideration and offer her a special gem called “Green Dream.” If the player has succeeded, Robo will congratulate Lucca for having resolved an issue that was weighing on her, and offer her the “Green Dream” gem as a token of his friendship.

This quest is a game sequence that reveals Lucca’s background. Through it, players are able to see not only how the accident of Lucca’s mother affected Lucca character, as well as the source of her passion for the science and machines that allowed the story to be possible.
Although the game sequence is short, it is very significant both in terms of the understanding of the game’s story and as an example of the successful integration of narrative in a game. Lucca’s background is revealed by more than simple disclosure, as is often the case in role-playing games. Instead, it is revealed through the presentation of a situation that reveals scriptons according to the players’ actions.

5.2 An Analysis of Textons

An overall representation that surmises the diegetic content of Lucca’s quest requires that one is able to identify both the process and the stasis statements that play a part in the scene. While the stasis statements are easy to identify simply by listing the items, settings and characters involved, process statements can be more problematic. Many process statements can be easily observed in the responses of the programmed game (what Alexander Galloway calls “machine”), but others require one to consider the possible actions that both the game’s operator and the game system can perform. In order to represent this accurately, I draw from Alexander Galloway’s “Four Moments of Gaming Action,” a typological essay that helps identify actions and events in relation to their agent.

The representation, which is akin to a workflow chart, looks to Galloway’s proposed four different kinds of possible actions from both player and system based on his conception of “diegetic content,” which he understands as “the total world of narrative action” (22). However, this discussion seeks to visually represent the objective totality of the text that allows players to perform multiple traversals of “Lucca’s quest.” In this spirit, the present section aims to represent the totality of textons in the sequence. Aarseth developed the idea of textons by drawing attentions to the distinction between “strings of signs as they appear to users and strings of signs as they exist in the text, since these may not always be the same” (69). The clearest example is that while Lucca’s quest allows players to either fail or succeed, players will exclusively see the strings of signs that are consequent with success or failure, even though both strings are integral to the quest’s text.

Before I begin with the chart analysis, I will briefly explain my selection of symbols and their significance in the reading of the chart. It should be mentioned, however, that the
diegetic display functions of the machine, particularly those related to ambience (such as
display trees, show characters, graphically render rooms, doors, objects etc.) are not listed
with words, but rather as pictures. When such a picture is shown, it is to be understood that
the game system simultaneously performs a diegetic function to display the things depicted
in the picture. These are called “setting” in the discussion and they have been numbered from
one to fifteen for convenient reference.

5.5 Workflow chart legend

These symbols represent both the start and the end of the
relevant string of signs in order for this string of signs to make
sense as a unitary, structural quest.

The square represents the diegetic and non-diegetic actions
made by the system that are more complex than the display
function. This includes machinimia, where the system will change
sprites so as to make characters appear livelier. These are mostly
represented by descriptions such as “Lucca arranges her glasses”
in which the system will cause the character sprite to do so.

The diamond represents player action affordances, or those
among the stasis statements that require that players interact
with them for the story to progress. These include doors, quest
items and relevant characters.

Text written within such squares with a curved bottom represents
the text and dialogue function of the game engine. The material
there written has been copied with fidelity from the original
game. These include character dialogue and notes among other
system messages that draw up a grey box.

Hexagons represent the start and finish of a section of the
workflow diagram, as well as action loops that connect to a
previous segment. These are only seen in the segmentary
analysis section.

It must also be understood that arrows pointing downwards represent the logical direction
of the story progress. As the game is intransient, the direction of the arrows do not imply
the passage of time, and players may spend an indefinite amount of time in each of the
settings unless otherwise indicated by a timer variable, represented also with the square as
a diegetic system action. Therefore, arrows do not represent the traversal function (reading
or performance) of the text. They are the paths available of story logic, and the record of a traversal function may fail to observe some of the settings and include repeated instances. When connected to a player action affordance, represented by the diamond, the logical flow of the story stops and does not continue until the player has interacted with one of them.

In order to facilitate references to specific moments of gameplay, the settings (rooms) in which the story takes place have been given a number, shown in the top left corner of the image. The player actions affordances are shown as diamonds stemming from these settings, indicating the items or situations that the players can effect through action, inaction or interaction. Lucca’s quest features fifteen different settings, some of which are variants of the same setting that have been shaped by previous decisions. It also features around eighty system actions and thirty-one player action affordances, some of which cause the diegetic content of the quest to loop. The resulting comprehensive diagram is included at the end of this essay as an appendix, and is henceforth discussed in four segments.

5.3 Diagram Analysis: Segment One

Segment one can be abstracted as two single kernel action statements: “Lucca wakes up” and “Lucca finds a time gate to travel to the past.” It should be noted that the isolated abstractions do not account for the complexity of the player experience as the diagram does. The diagram allows us to appreciate the number of systemic actions, and the affordances (options) available to the player, represented by the diamond shapes. A fraction of the song theme “Singing Mountain” plays in loop. This theme is particular because it involves the continual repetition of notes by a synthetic chorus, the sound effect used throughout gameplay to represent the wind, and an elongated rising and falling note to indicate something unusual is happening. This loop continues for the duration of the next scenes.

When player agency is enabled, players are able to explore the setting to try to see if they can interact with the characters, the tree and the fire. However, the only player action affordance that is available in setting one is the exit in the lower right corner of the room, which leads to the next setting. It should be noted that the player is only given command over Lucca, which is unusual for the standard three-character group they usually have. Whether or
not they choose to explore the first setting, players will inevitably proceed through the only available exit and find themselves in setting two.

By this point in the game, players will have learned that *Chrono Trigger* is a game with a component that rewards the search for player action affordances, and a great part of the game relies on the discovery of doorways to new settings and in-world items that could trigger diegetic system actions (such as revealing story content) or non-diegetic system actions (such as the discovery of special items). Players may therefore choose to remain in the campfire setting to attempt interaction with the items in setting one in order to discover whether or not the existents there will add to the content of the scene.

This is significant because players may choose to take the exit first, and then try and return to the previous setting to see if they can trigger a response from the setting. As sequence segment one, we see the first of many possible action loops, which the players may perform ad-nauseam. Although these loops are not in any way significant in terms of plot, they add a dimension to gameplay: they provide the illusion of freedom. Players may choose to advance or return, although the return is completely unrewarding.

It should also be noted that the string of units describing time travel is a composite sum of machinic events that has served throughout the game to indicate this story device. Player agency will be disabled; the time gate will expand, revealing a blue-white circle of moving lights. Then the characters will enter this circle, which will then contract to its original shape, seemingly swallowing the character. An animation will follow, with bright lights over a bright background moving from the center towards the edges of the screen to simulate forward movement. There is also a characteristic time-gate activation sound. This should bring the player’s attention to another detail: this time gate will be red when expanded, and not blue as usual.
Loop ambience music: Spring Mountain

1

Lucca stands up and looks around.
Enable player agency

Exit: lower right corner

2

Time gate
Play sound sequence
Disable player agency
Lucca enters time gate
Time travel animation
End of Segment 1
The first segment is an introductory sequence, meant to connect the campfire scene where characters discuss their views, and it is meant to mystify the player and raise questions such as, “where am I going?” “What will happen next?” The absence of companions for this journey might also be reminiscent of the game’s first quests, which are arguably more difficult than the latter, when a full group of three fights enemies.

5.4 Diagram Analysis: Segment Two

This sequence segment is much more complex than the previous one; however, it can be observed that much of its content appears secondary to the straight chronological main sequence. This, however, is a deceiving perception. After the time travel animation, Lucca will look around and wonder “What is this?” this question is, however, a result of the newer translation seen in the more recent iOS Chrono Trigger release. The original Super Nintendo version had Lucca ask “Have I made it to that time?” In both cases the question serves so as to instill the situation with a sense of suspense.

We will see that setting 3 contains three player action affordances. The first, the note on the floor is a letter containing a page of Lucca’s journal. This is interesting because she says, “I hate science!” which is an uncharacteristic statement from Lucca as she has been known throughout playtime. The second is the staircase in the lower right corner which leads to the following setting (4) and the third is the lower left exit that leads to setting 5. Upon observation, it will be noted that the letter and the staircase are the most prominent player action affordances in the room. The lower right corner exit is however, hidden by two objects, which might also make it attractive, as it is seemingly disguised. Seemingly disguised entrances, in Chrono Trigger often contain treasure or other rewards for the player.

Setting five is however, the fastest way to begin the conflict that is central to this quest. Upon entering and approaching the veranda (moving in any direction that is not back) will trigger the puzzle sequence of Lara’s accident. This sequence is discussed in the next sequence segment. I will instead focus on setting four, a highly representative setting of Chrono Trigger that exemplifies it as a playable structure and the ways in which this game helps understand the differences between a narrative’s plot and a game’s intrigue.
The password to deactivate the device is the name of my one true love. Use it an emergency. –Taban

June 24, 990
Dad promised to go hiking with me, but he blew me off because of his research.
I don’t get it. But whatever. Who cares about stupid science anyway? Girls don’t need to know about that stuff.

Lucca walks into Setting 3
Time gate disappears
Lucca fixes her glasses
Lucca: What is this?
System enables player agency

Start of Segment 2

Staircase: left
Staircase: right
Door: upwards
Exit: below

Exit: lower left corner
Approach veranda
Door behind

System disables player agency
Shifts camera focus down

End of Segment 2

Note on the floor
Note on table
The arrangement of the second diagram sequence is quite deliberate. Readers will appreciate that there is an almost straight line from the start of the segment to its end as the only possible way in which the narrative logic can move forward. While paths do fork at setting four, they converge again to take the player on to setting eight, which is scripted into the story. While it is possible to reach section eight without reaching either section number six or seven, sections four and five are prerequisite but mutually exclusive. Here we see that Lucca’s text offers alternative ways of reaching the next kernel action statement. This kind of alternative is the defining trait of Aarseth’s concept of intrigue, which marks the most crucial difference between Chatman’s linear event dimension (see section 3.4) and Arseth’s concept of intrigue.

Gonzalo Frasca argues this difference in his comparison between representational and ergodic media. According to him, narrative authors can only work with “a fixed sequence of events” (5), while simulation authors (such as game developers) may, through rules, incorporate “a degree of indeterminacy.” Chatman’s model observes “the possible but unfollowed narrative paths” (56) with its oblique lines. However, the game developers that worked on this quest created paths that can be followed, and furthermore attempt to lead and/or mislead the player choices.

In sequence segment two, the kernel sequence of events that leads to the advancement of the story is indeed linear and espouses the idea of sequential kernel process statements. However, a straight traversal function that follows settings three, fourth and eight would be quite unlikely. The settings are crafted in such a way that determinate player action affordances will attract the player’s attention. One such example is the inclusion of notes, an item that is rarely used in other moments of Chrono Trigger. We should also notice the layout of setting four, in which the door towards the kitchen (setting seven) is placed in the middle of the room, flanked by the two staircases as if to draw attention to it.

This segment features an abundance of available loops in the logical flow of the text. In setting four we will observe that players are able to use the upwards door to proceed to setting seven, where they may or not read the note on the table which provides the first clue for the password. The only other possible action is to use the exit downwards in setting seven to return to four, and players may do this an infinite number of times. Setting six functions likewise. And setting five functions like that as well, although approaching the veranda will
cause the machinic expression that begins the following segment. These loops add to an illusion of freedom of choice: players may choose to thoroughly explore certain rooms, and repeat their actions several times before they are engaged in the necessary flow of the story logic, which is the only possible avenue in the long term.

Setting four is a simple room with four possible exits. However, it is remarkable because it exploits everything the player should know about the game at this point. One of these doors will have a reward players password clue. The second loops back to the previous room (setting three), and the third leads to an empty room (setting six). The fourth one contains the advancement in the story. The room is beautifully crafted to highlight the center exits leading both to the reward and the advancements. Players will instinctively know that the exit to the outside world is on the bottom. Nonetheless, the complete room points towards the door in the middle.

As can be appreciated in the diagram, Lara’s room (setting 5) contains no player action affordances. By contrast, the exit leads to setting 8, and the beginning of the accident scene. Entering the middle door, however, will result in the first of two clues being given to the player if they notice the letter on the kitchen table. This clue is not concrete. It reads, “The password is the name of my lovely wife.” This is interesting because it also requires the players to think at a meta-level. Lucca never says what her mom’s name is, and the information is never conveyed at the narrative level as one would expect, as when the character is formally introduced, or she introduces herself, or even when she is referred to by other characters. Instead, players must show an understanding of the mechanical ways in which the game handles dialogue.

One of the most notable machinic embodiments of Chrono Trigger are the gray dialogue boxes that cover part of the screen to relay onto the player the content of notes and character dialogue. In order for the player to know who is speaking, their names will always appear on the top right corner, and a characteristic sound will play when the dialogue starts. When Robo speaks, a machine-like sound with lots of beeps can be heard. His dialogue will appear preceded by the word “Robo:” to signify that the character Robo utters the information relayed in the gray square. So, when players are given the clue, “the name of my lovely wife,” they will have to have seen dialogue with Lucca’s mom in order to see that her name is
Lara. Thus, in order to know what the password is, players must have three distinct pieces of information:

1. That the password is the name of Lucca’s mother. Players may or not learn this if they find the note.
2. That Lucca’s mother is Lara. Players may or not learn this by noticing the name that appears in the grey dialogue boxes that appear as she speaks.
3. That they can input the name by hitting the L, A, and R buttons in their game controllers.

### 5.5 Diagram Analysis: Segments Three and Four

Sequence segment three is the representation a machinic expression. It serves as the context of the main puzzle in this quest. It involves the transformation of setting 8 to 9 through the witnessing of the sequence. It begins with Lara observing how dirty the machine in the center of the room is, and proposing “It can do no harm in tidying up a little.” As she approaches the machine, her skirt becomes stuck in the band. As she calls for the child’s help, which can be understood the Lucca at a younger age, they discover the skirt cannot be freed. A sound is displayed to indicate the machine is turned on, the band begins to spin towards the motor, and Lara is slowly drawn towards the machine. As this happens she yells out “Enter the password!” Thus enabling a timer, which gives the player a limited time to respond, and four different player action affordances that the player can use or activate in order to respond to the situation.

In the few seconds that this sequence spans, players are offered the complete explanation of Lucca’s past and are told why Lucca’s mother is not able to walk. This can be abstracted as follows “As a child, Lucca’s mother had an accident while cleaning one of her father’s machines. She called out for help, but she was unable to stop this accident. As a result, she became unable to walk.” This revelation is short, but can only be understood in the broader context of the game: players must have talked to Lucca’s mother in 1000 AD in order to appreciate what is happening. As argued before, it is very likely that players will have noticed Lucca’s mother: she’s a character with a unique disposition, found in a noticeable location in Truce Village. The short scene should immediately clarify her situation and better
explain what happened. However, the general commitment that players may have to the character might alone be able to emotionally engage players with the gravity of the situation: Lucca’s mother is in danger, and they might be able to stop it.

This is why, even though setting 8 and 9 happen in the same room, I argue that there is a fundamental transformation. While players walk into a room of which they know nothing, the setting is transformed by the events that they witness in it. While setting 8 is a simple static room, setting 9 is an active moment: Lucca’s mother is being drawn in towards the machine’s motor, and player action affordances become active that weren’t before.

It should be noted that the password console glows only once, with an almost imperceptible blue blink. This makes it difficult to predict if it will or not draw the attention of players, although this blink is used elsewhere in the game to indicate the position of rate items. This means this position is not supposed to be readily identifiable for inexperienced players. Another thing of interest is that there is no clear indication of when player agency is restored. This is perhaps one of the largest problems that this scene has as a dramatic piece: some of the people who offered their comments in Chad Concelmo’s article (“The Memory Card: The Fate of Lucca’s Mother”) were surprised by the information that she could have been saved, as they assumed that the subsequent puzzle was part of the machinic expression in segment 3.

Segment three is ended at setting nine for the sake of convenience, which is why it is both the ending of segment three and the start of segment four. Setting nine is the main conflict in this quest, and it is qualified by everything that the player has seen in this quest, and everything that the player may know about Lucca’s mother. This setting is ideal for the exploration of the idea of “intrigue.” Several non-diegetic user actions will affect the outcome as either a success (ending A) or failure (ending B) many of which are observable in the design of the quest. First, the conflict requires players to react rapidly to an unusual situation. Second, there are many more chances that the player will fail at this puzzle the first time she has tried it. Third, the use of rare mechanics (such as the password console, and the console glow) are designed in such a way that only experienced players are likely to notice them, rather than players that traverse this text for the first time.
Lara walks and reaches the mechanic band
Lara sprite change: surprise
Young Lucca walks towards Lara with speed
Pause 1 second
Lucca sprite change: surprise
Camera cante shift: downward
Lara walks rightwards
Young Lucca steps in place
Lara: What is this thing anyway? Taban said to keep away from it, but it’s so dusty. Surely it wouldn’t hurt to tidy up a little.

Lara walks and reaches the mechanic band
Lara sprite change: surprise
Lara: Dear Me! My skirt, it’s –I’m stuck! Lucca! Lucca! Help!
Lucca: I can’t pull it out
System: play sound: device activation
Band begins to spin
Lara: Oh, no! Lucca! Enter the password! Stop the machine!
Start sequence 1: draw Lara closer to the spinning engine.
Display: glimmer in the lowe eight corner (blink once)
Check Location
If location 5
Normalize camera focus
Enable player agency
If location 8
Star timer: 5s
Enable player agency

Lara walks and reaches the mechanic band
Lara sprite change: surprise
Lara: Dear Me! My skirt, it’s –I’m stuck! Lucca! Lucca! Help!
Lucca: I can’t pull it out
System: play sound: device activation
Band begins to spin
Lara: Oh, no! Lucca! Enter the password! Stop the machine!
Start sequence 1: draw Lara closer to the spinning engine.
Display: glimmer in the lowe eight corner (blink once)
Check Location
If location 5
Normalize camera focus
Enable player agency
If location 8
Star timer: 5s
Enable player agency

Loop to segment 2, setting 5.
Glowing Location
Timer is 0
Variable B is 1
Enable: keyboard function
Wrong Password
Check Timer
Timer is 0
Timer is not 0
Lara reaches the motor
Fade Out
Play sound: Scream
Lucca (player) is teleported

Loop to Setting 4
Change variable B=1
Pause Sequence 1
Door Behind
Right Password
Pause Sequence 1
Stop Timer
Young Lucca approaches Lara
Lucca: Monny... Thank goodness!
Lara: Lucca... Oh, Lucca...
Fade out
Wait 1 second
Lucca (player) is teleported

Connect to 13
Connect to 15
Robo: That was always weighing on your mind, was it not Lucca? You are always thinking of others.

It required 400 years and a lot of pressuarization to make. I hope you’ll find it useful.

Robo: You can give her my legs! They are lightweight, with a highly compact form factor and exceptional balance.

Robo: You could mount some treads on me instead. Anything would be fine.

Lucca: Thank you. You’re such a good friend.

Robo: A good… friend? You called me your friend? But… I’m only a robot.

Lucca: Robo… You’re so sweet. Thank you.
A successful traversal that leads to ending A will necessarily require players to have seen the note in the kitchen (setting 7) which states that the password is the name of Lucca’s Mother. It will also require that players are familiar with the glow that indicates where they may input that password. As stated before, this glow is seen elsewhere in the game, but only in rare situations where it indicates hidden treasure. Third, players must be aware that they must input the password by pressing the correct buttons in their controller. This mechanic was seen only once before, far back in the natural progression of the game’s story. Thus, this puzzle is quite demanding when played without the aid of non-diegetic user actions: if players consult an online guide, they are more likely to find success in this quest.

Setting nine allows for the qualification of player responses at four levels. First, players who have successfully identified that their agency has been restored by use the door behind in order to better explore the house and find the password. This gives the players one last chance to attempt to enter the right password before Lara reaches the machine motor and meets her fate. Players may also remain inactive, and simply fail automatically (which was often the case with those that did not know their agency was restored). As seen before, this puzzle has a larger number of action affordances that lead to ending B. Objectively, this is a very difficult puzzle to succeed at.

At this point, the logical sequence of the text bifurcates, and two distinctly separate sequences can be seen in settings 11 and 14. Although they structurally mirror each other closely, the main difference between them is the textons that they can offer the scripton log. In setting 14, players will find that Lucca’s journal pages express sadness and above guilt. Players learn that throughout her life, Lucca has been carrying around a feeling of responsibility for what happened to her mother. As a child, she was unable to help her. By contrast, in setting 11, players will see that Lucca’s journal pages express joy and a determination to avoid other such accidents. The plot bifurcation here offers to possibilities to explain the way in which Lucca embraces science. The first is tragic, colored by her “If only I’d known more about machines. Then mom would still be okay. It’s all my fault.” The second is more optimistic: “I think I’d better study a little bit more about machines in case anything like that ever happens again.”
5.6 Diagram Analysis: Conclusions

This analysis shows that Lucca’s quest is a text that is structurally different from the traditional plot as described by Seymour Chatman. By abstracting the event dimension of “Lucca’s Quest” into abstract statements using Alexander’s Galloway typology of gaming actions, the text is here represented as a workflow diagram that features a totality of the process statements in order to discern the structure of the plot. This study finds that the structure is different from the plot as proposed by Chatman, and is more akin to Espen Aarseth’s concept of “intrigue.” This means that it fulfills the first requirement of Juul’s proposed new type of tragedy, because it’s structure features a branched story-line that is contingent on the player’s actions as the logical flow of the story is conditioned by player action affordances as seen in the diagram’s setting nine, the main conflict of this quest.

The diagram discussed here is built on several of Chatman’s notions of the constitution of a Following Chatman’s (55) diagram of the “event dimension”, or plot, Appendix 1 was created following a skeleton of kernel statements, indicating sideways the satellite statements made in the quest as they become available, keeping in mind Galloway’s typology of gaming actions. The result is a diagram that represents an organic whole of the quest’s available content. The term proposed by Aarseth “intrigue” is preferred to describe the resulting abstraction. The main difference is that while Chatman draws oblique lines that stem from satellites and represent “Possible, but unfollowed narrative paths” are unexistent in the objective text analysis of “Lucca’s quest,” because all paths are contained in text, whether the user follows them or not. This results in a structure that both loops towards certain moments in the game and provides alternative ways of reaching kernels further along the logical flow of the story.
While Chatman considered such oblique lines as satellites that “can be deleted without disturbing the logic of the plot” (55). In this particular case, they lead to rooms and areas that players can safely skip. Here, visiting or failing to visit some of these rooms has a direct result on the outcome of the main puzzle. If players do not visit the kitchen room (setting 7) they will not receive the clue to what the password is, and therefore, they are more likely to fail at the main puzzle presented in setting 9. This consideration of likelihood indicates that there is more to consider in Lucca’s quest than the simple traversal of the story through interpretation, but that there are other factors to consider as well.

The traversal of “Lucca’s Quest” invites the use of the exploratory function described by Aarseth, which allows players to decide “which path to take” (64). This is observable in setting 4. Part of the Chrono Trigger’s exploration mechanic includes walking through recognizable forms of doors. These “doors” include gaps between sidewalls or upward facing walls, graphic doors against downward facing walls, staircases and shiny time-gates. Lucca’s house in this quest can be considered a challenging puzzle: in Lucca’s room, using the lower left corner exit results in an automatic failure. Using the staircase results in the “walkway room” which can lead to the password clue, the inconsequential room, or directly to the accident zone. While players are likely to have visited the house before (and therefore know the zone’s layout), in which downward doors lead to zone–exits (and thus progression).
Thus, the player action affordances described after setting 9 constitute scripted conditional statements that rely on a success/failure clause, in which three out of the four possible action affordances lead to failure. However, this failure is absolutely dependent on user configurative action. Aarseth writes that the configurative action is observable when the traversal of a quest includes actions that are “in part chosen or created by the users” (64). In this case, the traversal of the text is not really a selection, but it is created by variables that depend only on the reaction of the user, and are arguably “created” by them through the test of their knowledge and ability at playing Chrono Trigger. Success requires players to remember the password mechanic, seen at the beginning of the game. It requires players to also notice where the name of characters is written. It also requires players to always be in the lookout for the rarity, blue glow that signals where the password console can be found.

In this, we see that although developers clearly wish players to experience Lucca’s failure to save the mother, they approach this by introducing a strong likelihood of failure speaks of a situation carefully crafted to allow players to experience this loss. The fact that a .25 chance of success exists makes the whole design slightly more real. Success is possible (Ending A), which further qualifies Ending B as a very real loss within the game. The fact that the “intrigue” bifurcates at the puzzle moment further serves to exemplify that this quest is “complicit” in the way that Juul proses his new type of tragedy should be: a failure that leads to ending B necessarily requires the player to fail. In this sense, Lucca’s failure and the Player’s failure is simultaneous, and the feelings for losing a challenge are coupled with the dramatic representation of Lucca’s personal loss.
6. Structural Analysis of the Tragic in Lucca’s Quest

In chapter 5 Lucca’s quest is analyzed as an automated system for the consumption of signs through a graphical representation of Lucca’s quest which evidences its structure as ergodic. Although the analysis successfully demonstrates that Lucca’s quest possesses a branching structure, and that its traversal is fully dependent on the players’ enactment of a narrative structure, it does not prove that the playable structure is indeed tragic. In this section, following the work of Jeff Howard, I turn to the work of Joseph Campbell and Northrop Frye on archetypal criticism to show that the diegetic content in Lucca’s quest is tragic in the classical sense.

In A Hero’s Journey, Joseph Campbell describes the quest as “a magnification of a formula represented in the rites of passage: separation-initiation-return: which might be named the nuclear unit of the monomyth” (28). He furthers this by explaining that a quest can be understood as a series of archetypal phases or steps that indicate a separation from the regular world, the penetration to a sort of power, and a life enhancing return. Christopher Volger, one of the most often referred to monomyth theorists summarizes these phases with the following diagram.

5.1 Christopher Volger's graphical interpretation of Campbell’s Monomyth from A Writer’s Journey.
Lucca’s follows the paradigm presented by Campbell closely. At the campfire scene, we see for the first time an image of what an ordinary night must be for the adventuring group. A call to adventure (point 1 in Volger’s representation) is seen when the discussion turns towards the regrets Lucca might have. Marle asks her “Is there anything in your past that you would change.” This is an invitation, or call to face her own past (see point 2), and Lucca refuses to do this (see point 3) with the answer “I’d rather not talk about it.” Once this is done, the scene closes and we hear the mysterious music “singing mountain.” Here we can see several of the archetypal roles fulfilled, included that of herald (Marle’s question serves to indicate there is an unresolved issue) and the song “singing mountain” heralds the coming of something different.

As Lucca heads onto the forest clearing, she beholds the unusual time-gate at the center. This is the first sign that the player has left the “ordinary world” where they have been questing, and that they are heading somewhere different, a special world. The phase could arguably be equated with the Crossing of the Threshold. Howard argues that phase 6 in quest games is usually purposely elongated to provide for conflicts that will make up the totality of the game quest. In more normal quests, players will be faced with a dungeon, filled with enemies, where each one will be considered a test.

This adventure, however, is different, and Lucca is only tested with knowing where to go. In this phase of this quest, there are really no deterrents other than the ludic unlikelihood of success at finding the helping note (see setting 7 in the graphical representation), and the high chances of having to phase the main ordeal without the proper preparation. Phase 7 in the monomyth diagram is seen with the scene that shows how Lara is made stuck in the machine and a younger Lucca approaches to try and help her. Seeing her failure, Lucca is presented with her ordeal (phase 8) of having to input the password.

While the initial stages neatly correspond to Campbell’s conception of the monomyth, the bifurcation that occurs with the condition of success or failure is difficult to map, and here is where the archetypal analysis shifts toward Northrop Frye’s theory of archetypal myth. Whereas a traversal function of the text that leads to the successful ending (A) is structurally comic and therefore is compatible with Campbell’s object of analysis (and understandable through the subsequent phases of Christopher Volger’s chart) the tragic ending (B) is better
described by Northrop Frye. To Frye, tragedy is structurally similar to comedy, the mythos of summer, with the slight difference that the ordeal must end in failure. Frye proposes in “Theory of Myth” four stages of tragedy presented in chart 5.2.

### 5.2 Lucca’s Tragedy as an instance of Northrop Frye’s mythos of tragedy.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Definition</th>
<th>Particular moment in Lucca’s quest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>The central character is given the greatest possible dignity in contrast to the other characters.</td>
<td>Throughout gameplay, Lucca is seen as a master engineer, able to fix any machine, present or future. She is proud of these achievements, which power much of <em>Chrono Trigger’s</em> main quest, including the invention of the time-key.</td>
</tr>
<tr>
<td>Youth</td>
<td>Innocence in the sense of inexperience.</td>
<td>Lucca is always shown successfully solving problems, providing solutions, helping to repair the group’s companion robot, and understanding technological problems.</td>
</tr>
<tr>
<td>Ordeal</td>
<td>A strong emphasis is made on the success or completeness of the hero’s achievement.</td>
<td>Lucca is then given a chance to travel back in time and change the fate of her mother. This culminates in the sequence that follows the setting 9, represented in the workflow diagram.</td>
</tr>
<tr>
<td>Fall</td>
<td>Typical fall of the hero through a fatal flaw. We reach a point of demonic epiphany, where we see or glimpse the undisplaced demonic vision.</td>
<td>When presented with the machine that hurts her mother, Lucca is unable to work the solution (enter the password) for a second time. Her inner-sense of guilt is revealed. At the end of the game, Lara is shown sitting, unable to dance.</td>
</tr>
</tbody>
</table>

In contrast, ending A continues Campbell’s monomyth in ending A. Lucca is rewarded with the knowledge that she has changed the future, and a more optimistic approach to science as indicated by her note: “There will be no more accidents around here!” By contrast, in Ending B, Lucca is met with the realization that her genius is developed by the guilt she felt at being unable to save her mother, as indicated by her note “If only I’d known more about machines, then mom would still be okay. It’s all my fault” (Sequence segment 4). This guilt is hinted at further into the main quest of *Chrono Trigger* every time the player sees Lara in her home. Players no longer wonder why she doesn’t walk. They now know that her immobility is a product of Lucca’s failure. Lara appears one last time at the end of the game to remind players of the fact that Lucca did not save her mother because she didn’t know all about machines.
The scene can become problematic to conceive because it involves time travel, and it is therefore useful to conceive two Luccas in order to clarify this. The Lucca that players know throughout the game and up to the moment of her quest respects an original timeline, where Lucca failed at saving her mother as a child. Her failure to save her, represented by the machinic expression that follows the setting 8 represented in the workflow diagram, necessarily inspires her to develop the guilt and sorrow that made her into the science genius that players get to know as they play *Chrono Trigger*. Ignorance of technology is her hamartia, or tragic failure. Thus, Lucca dedicates herself to engineering and the understanding of machines, which allows her a second chance to once more attempt to survive this ordeal. If she succeeds, she is transformed into a second Lucca, who dedicates herself to science with a more positive inspiration. If she doesn’t, she remains the same.

Observing the “hamartia” in this tragedy is quite significant to the discovery of Juul’s new type of tragedy. The original Lucca, as a child, failed at saving her mother because of an ignorance that was given to her by the developers of *Chrono Trigger*. However, players who traverse Lucca’s quest enact this tragic flaw: players who fail do so because they are ignorant. In this respect, they share the responsibility of the mother’s inability to walk. As they traverse this quest, they learn that Lucca failed to save her mother due to ignorance. If they fail at this quest, they themselves fail to save the mother due to ignorance. And they get to witness Lucca fail at this quest for the second time because of the player’s own ignorance. On the thematic level, as a relationship between child and mother, Lucca’s quest plays on a very universal emotional subject for the broad audience range of players that *Chrono Trigger* reached.

In this sense, the Aristotelian pity and fear that are a requisite of tragedy are observed in the identification of Lucca’s relationship to her mother, and the players’ relationship to their own mothers. In this quest, Lucca has failed her mother. As spectators we can appreciate the guilt that she may carry and feel pity at this fact. However, the prospect of failing or disappointing our own parents is a source of anxiety in many children; and this quest’s general theme might remind us of that. The tragedy of Lucca is observable in that she, despite her brilliance and genius she has let her mother down because of her own ignorance and unwillingness to learn. And the sequence, as discussed above lets us share in that feeling.
7. Three Tragedies

In chapter six, we identified how the structural analysis of the game’s content shows that three tragedies act together in Lucca’s quest. These tragedies are observable because the failure to succeed at the quest’s central challenge, identified in workflow diagram setting 9, owe to a dramatic flaw, or “hamartia” that is shared not only by the main character featured in the work of art, but also by the player that traverses it. While this suggests that Juul’s sense of complicity is indeed shared in the tragic, ergodic representation of Lucca’s past, the present section seeks to offer a more concrete objective representation of how the relationship between Lucca and her mother is fully complicit. To do this, I will be looking at Sebastián Genvo’s methodology for the description of game a structure’s playability, and using Algirdas Greimas’s actantial analysis to study the motivations behind the junction relationship between Lucca and her mother.

Genvo’s “Ludic attitude” takes form in Chrono Trigger as a structure because it elicits from players varying degrees of chance, mimicry and thrill. In Lucca’s quest, we can see how the game relies on chance when players must arbitrarily decide where to go. At every turn, they can find unexpected things behind any door. This is mostly observable in the workflow diagram’s setting four. Here, players have four distinct directions to take. And they have no way of knowing which way is forward. Mimicry takes place because players must adopt Lucca’s values and act in the game world as if they were she. Thrill is observable in the complex puzzle set before them in workflow diagram setting nine, in which they are given a short span of time to figure out how to save Lucca’s mother. These three aspects in combination constitute a description of what Genvo called “Ludic attitude.”

He suggests, that by the use of Algirdas Greimas’s semiotic approach to narratives, we can understand “some specificities of the ludic mediation when it occurs in a context of digital play (and the) modeling a goal-oriented action” (139). As such, he proposes Greimas’s model as a descriptive approach of digital playability, based on the premise that a narrative is the realization of a project in which “a subject goes through a conflict because he desires something”(141). This leads to the identification of four stages “found in any video game” (142) observed in the relationship of the actants observed in Greimas’s original actantial model.
6.1 Genvo’s interpretation of the canonical narrative schema and the particular instances in this quest.

<table>
<thead>
<tr>
<th>Modality</th>
<th>Competence</th>
<th>Performance</th>
<th>Sanction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Persuasion, Informing or Compelling</strong></td>
<td>Having-to-do</td>
<td>Doing (or failing to do)</td>
<td>Conditional consequence</td>
</tr>
<tr>
<td><strong>Willing-to-do</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Knowing-how-to-do</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wanting-to-do</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actants</th>
<th>Game Moments</th>
<th>In this quest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sender-Subject</strong></td>
<td><strong>Introductory sequences, trailers, game-studio prestige.</strong></td>
<td><strong>Game system display images and tells us about Lucca’s past.</strong></td>
</tr>
<tr>
<td><strong>Subject</strong></td>
<td><strong>Training levels, Manuals, NPC introduction. Presentation of Rules.</strong></td>
<td><strong>Enact Lucca. Adoption of character values</strong></td>
</tr>
<tr>
<td><strong>Subject</strong></td>
<td></td>
<td><strong>Input password to save Lara</strong></td>
</tr>
<tr>
<td><strong>Sender-Subject-receiver</strong></td>
<td></td>
<td><strong>2 possible outcomes: Success and failure which qualify Lucca as a character</strong></td>
</tr>
</tbody>
</table>

Genvo points out that the model applies for the understanding of actions in general. Following this, the model can be used to evaluate the ludic features of the game. In *Chrono Trigger’s* case, the Manipulation phase comes from both the prestige of Square-Enix as a studio specialized on games that tell stories. Players are inspired to take part in the story, and therefore engage in a ludic attitude that features mimicry or the enactment of the actions taken by fictional characters (the forced adoption of Crono, Lucca and Marle’s values) as well as a degree of chance (the exploration of the world in order to make discoveries).

As a manipulation phase in Lucca’s quest, the game system (when conditions are met) will place the player at the campfire scene, thus forcing the quest onto the player. This is a non-negotiable action that the players must complete in order to continue the game. At the level of competence, players must identify what they “have to do”, be willing to do it and know how to. When placed upon Lucca’s house in diagram setting three, players will have to explore the setting in order to identify the way to progress. They are willing to do this because they wish to continue to progress the quest and acquire the diegetic story content that is
available, and will be able to do so provided they have knowledge at a meta-level of the system.

Players will then be presented with the puzzle when Lara asks them to “enter the password!” And they will succeed if they have acquired the necessary competence to do so. As mentioned before, this can be done if the house was thoroughly searched, and the player knows to look for the rarity markings including the glow on the password console and if they remember that passwords are entered by pressing keys of the Super Nintendo controller. Depending on their success or failure, they will be rewarded with conditional diegetic content, success and failure as well as the item “Green Dream” which will empower them in succeeding in the completion of Chrono Trigger’s main quest.

The action can be understood as meaningful at the player–system level by drawing an actantial relationship between player and quest, and regarding the action “traverse” as the relevant junction. The term “traverse” is preferred to alternatives, as it is reminiscent of the “traversal function” by which, as described before, the diegetic content of the game is revealed by the player. This is a term preferable to “play” or “enact” because it is more inclusive, and aims not to be open to debate, but rather to signify the player’s (as subject) participation in the development of the quest from start to finish.

The graphic should show the semantic process by which a player is engaged as a willing participant in the development of the story. Now, readers will note that this is the representation of a subject–object relationship that is not classified as tragic or not. This is because the model looks at the action “as it happens” and it helps to understand the motivations behind the traversal of the quest. As noted, the player is inspired, manipulated by the game system, including all the previous diatomic content in order to traverse this quest successfully. The idea is to communicate the diegetic content, which can or not be tragic depending on the outcome. The player is helped by previous diegetic content and their non–diegetic knowledge of the system, and, as discussed before, is hindered and tricked by the design of the settings.
6.2 Actantial analysis: the general relationship between player and this quest

In this diagram, the idea of “quest” summarizes the total diagram as drawn in the appendix and discussed in chapter six of this discussion. This quest, however, can also be understood as a relationship of diegetic objects of the game system in order to discern the characters and settings that a player participates in when he takes up the playing attitude described by Genvo. This is observable in the relationship between Lucca as an object, and her mother, Lara as an object.

In this second actantial analysis, we see the relevant semiotic action that constitutes the quest, along with motivational factors. Here we will appreciate that the axis of power remains unchanged from the analysis of the player involvement in the quest. This is a result of the game-avatar coinciding with the character of Lucca (which is an autonomous character, in contrast to the main avatar of the game, Crono). In this case, the junction (save) has the potential of being either comic (successful) or tragic (failed) as observed in the bifurcated endings. In the axis of communication we see the need to save Lara awakened by marle’s question “Is there anything in your past that you would change?” and therefore highlighting Lucca as the receiver of the action – saving Lara will transmit relief from a regret that deeply affects her and refuses to share with anyone else.
Actantial analysis: the relationship between player-controller Lucca and her mother.

The coincidence of these two actantial analyses is not without precedent. In Jesper Juul’s *The Art of Failure*, Juul observes that games are built around a general contract, in which “We promise we will be unhappy if we fail and happy if we succeed” (429). Thus the goals of the player are aligned with the goals of the protagonist, and when the player is successful, the game character is successful too. However, in this specific quest, the goals of the character are explained through the character through the machinic representation of the same quest, in the same setting and at the same time which fails tragically.

Upon entering the setting 8, where the accident takes place, The players see younger Lucca try and fail to save her own mother as the approach the main ordeal of this quest. This action is intentionally and inherently tragic, or wrong. With this short scene, developers make an ominous statement to the player: “this is a tough quest that has already been failed. Can you succeed?”

The fact that the younger Lucca failed in this quest directly explains present day Lucca’s very linear character traits, including her love for science, her adherence to her father and his work. It is to be considered that this actantial analysis of the failed quest clearly explains how, with a few seconds of game actions, developers are able to answer questions
the players may have had from exploring the 1000AD setting, where the game starts. Lara can’t walk because Lucca failed to save her. This inspired her to conquer her contempt for science, and possibly gave her great guilt.

6.4 The relationship between system-controlled younger Lucca and her mother.

Now, the analysis of these three actions is important as they are simultaneous events happening in the screen at the same objective time, and they are more significant as we observe their Sanction CNS. As the player fails to complete the junction to traverse the quest successfully, Lucca fails to save her mother. This alone reflects Juul’s conception of the general contract of game playing and its implications for tragedy. However, the revelation of younger Lucca’s failure to save her mother at the same time tragically tells of a tragic accident that could have been averted, but wasn’t. In this case, Lucca’s quest allows the player to experience three tragedies: one is the personal knowledge that he has failed, the second is the diegetic knowledge that younger Lucca had failed at saving her mother, and the third is the realization that she has failed for a second time.

By contrast, the successful completion of the action junctions by the player leads to a righting of this wrong. Of course, the satisfaction of completing it will be greater for players who had already faced this defeat themselves. In this case, players will also be motivated
by a previous failure, and thus become more engaged in the traversal of this text sequence segment. The observation of these three actantial analyses allows for the appreciation of the very rich meaning that is produced with a single two-minute quest, and the emotional potential of Juul's proposed new type of tragedy. By mirroring the general desires of the player to the general desires of the character and conditioning two distinct outcomes to a player’s success or failure, the developers of Chrono Trigger created a tragedy in which players can participate and share the responsibility for the tragic flaw.
8. Conclusion

This has been a work dedicated to the exploration of Lucca’s quest from Squaresoft’s *Chrono Trigger*. This analysis seeks to methodically highlight it as a positive example of the new type of tragedy proposed by Jesper Juul in *The Art of Failure*. This was done under three specific premises. The first is that an instance of such quest should prove to be structurally ergodic, and must possess a branching narrative structure and that has conditional links that respond to player’s actions. The second is that the quest must be thematically tragic. The third is that this tragedy must be objectively observable not only at the level of the game’s fiction, but also at the objective level of the player.

To show that Lucca’s quest is structurally ergodic, this discussion draws from the work on Espen Aarseth to show that an ergodic text functions as a text in which the user performs other functions beside the “interpretative” one. In Lucca’s quest, players are required to perform both the exploratory and configurative functions in order to successfully traverse the quest. This illustrates a feedback loop between text and operator: the quest reveals content (scriptons) to the player in direct relationship to the places they choose to visit, and the actions that they take. Following Aarseth’s analysis of quest games, this discussion also sought to explore the “event dimension” of Lucca’s quest in order to determine if the organized sequence of events would appear to be as a classical plot, or as Aarseth’s proposed “intrigue.”

To concisely observe the event dimension, this discussion drew on Alexander Galloway’s work in order to abstract the process statements that constitute it. By abstracting both machine diegetic and non diegetic acts, as well as player action affordances (the possible actions that players can take) a workflow diagram that encompasses the totality of the event dimension of Lucca’s quest is drawn and discussed as a playable structure. With this diagram, we can observe that the game behaves differently from the plot: while a plot flows directly from beginning to end, Lucca’s quest features both loops and fully plotted narrative alternatives to reach the ending. It also features two possible endings, which causes the logical flow of process statements to bifurcate towards the ending. These possible endings are entirely conditional to player performance at the main challenge of Lucca’s quest, and the diegetic content that follows is directly related to the success or failure at this challenge.
Having thus presented Lucca’s quest, I turn to Northrop Frye’s theory of myth to determine that the can be considered tragic. As a quest with two possible endings, Lucca’s quest can be considered either a tragic or comic experience. When the player successfully completes the quest, Lucca’s quest can be said to be a comic experience. In this case, the quest is structurally compatible with Joseph Campbell’s monomyth, as it features most of the phases of his “hero’s journey.” When the player fails at the quest, Lucca’s quest can be said to be a tragic experience. In this case, the quest is structurally compatible with Northrop Frye’s mythos of winter, tragedy, and it features all the archetypical phases. In both cases, however, the tragedy is prevalent because it is an unalterable characteristic of Lucca.

Lucca’s quest is found to be tragic in the classical sense because it is a system of rules that imitates an action that is, as Aristotle put it, “serious, complete and of a certain magnitude” that excites “pity and fear” (Poetics, 23). The quest explores a dysfunctional relationship between child and mother, where the child (Lucca) dedicates her in an unhealthy way to a relationship with machines and technology driven by guilt and sorrow because she fails to prevent the accident that rendered her mother unable to walk. This failure occurs due to a tragic flaw (harmartia) in Lucca’s character: As a child, she was not interested in learning about science and technology. This quest reveals how this accident changed Lucca’s mind and gives her a love for science and machines that borders on obsession.

This study finds that the tragedy is indeed “complicit” in Juul’s terms because the central challenge of this quest mirrors this tragic flaw in the unsuccessful player. The quest is carefully created so that a traversal that leads to the comic ending requires players to know several rare mechanics. Therefore, the unsuccessful player shares in Lucca’s tragic flaw: ignorance and lack of experience with the object, quest. This reflection plays on the universal theme of the relationship mother-child and therefore elicits the sense of complicity that Juul theorized for his new type of tragedy. When the player fails, the character fails. When Lucca writes in her journal “It’s all my fault,” the player can share in that feeling. It is his fault as well.

Through the use of Greimas’s actantial model, this is clearly observable. The main challenge of the quest requires that the relationship between Lucca and her mother, and the player and Lucca’s mother very closely resemble each other. At the moment of Lucca’s quest, the player’s success, the general gratification of the game, is at stake as much as Lucca’s
mother’s well-being. Because the game invites players to adopt Lucca’s values and emotional states because of its nature, failure in this quest is an invaluable resource to allow players to connect with a fictional videogame character.

*Chrono Trigger* sets itself apart from other games of its time and genre by the fact that these variables have direct results on the nature of the story by rewarding or punishing players’ actions. Most modern games, including *Final Fantasy XIII* and *The Elder Scrolls V*, struggle still with finding a way to allow players’ actions to have direct results in their world. *Chrono Trigger* shows that failure is a meaningful dramatic device to qualify the diegetic playing experience that should not be limited to a resulting disabling action on behalf of the system (dying) and reverts players to a point in the past where players lose select non-saved game progress. Instead, some of these failures should be allowed to have a meaningful effect on the general game-world and lore.


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