

Andeta

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ABSTRACT

Andeta is an interactive novel created to explore the proper balance between story depth and player freedom when gamifying fiction. By putting the reader inside of a short story and letting the reader decide how they want to act when presented with various situations, Andeta changes and reacts accordingly to the reader's decisions.

INTRODUCTION

Traditional modes of storytelling tend to be linear and passive. The plot runs on a singular track and the reader has no influence on the story. Gamifying fiction by providing the reader with decisions on how they wish the story to develop increases engagement while reading the piece.

However, storytelling and gamification naturally tend to conflict with one another. Storytelling has a linear structure since stories require proper format and flow. Gamification that gives the player freedom to choose creates a non-linear structure in which decisions cause branching in the story to occur. Application of one of the two elements typically requires the sacrifice of the other. Giving the player freedom to affect the story can compromise the cohesiveness of the storyline, but forcing a structured storyline will lead to the player

feeling railroaded and sensing that their decisions do not matter.

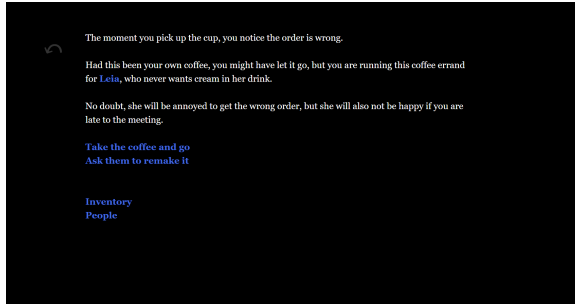
Finding the proper balance between story cohesion and player freedom is crucial to story gamification and is difficult to do for most who attempt it. Even major game companies can have trouble hitting the mark between the two elements, creating games that either are lacking in story depth or restrictive in player freedom.

For this project, I am attempting to find the balance between storytelling and gamification by creating a non-linear short story that allows the reader to participate in the storytelling process.

APPLICATION/PRODUCT

Andeta is as much a novel as it is a game. It offers the player a story to enjoy while at the same time providing a gameplay experience.

The novel has a simple click and choose mechanism. In its current stage, players are shown a page of story text with all clickable actions marked in blue, as shown below.



Once they reach a branching plotpoint, they are given decisions to make on how they wish to proceed. Once they make their choice, they move on to the next branch corresponding to that choice in the story.

BACKGROUND

Gamifying stories not only increases engagement, but also heightens interest in the story. Many players enjoy the idea of being able to influence and be a part of the tale. As Elise Favis wrote in *Opinion - Your Choices Don't Matter In Telltale Games*, the idea that a game could adapt to the choices that a player makes made her excited. "My choices, I thought, were going to change the game universe I was playing in and steer the storyline in new directions," [1].

There is no shortage of video games that offer player choice as they progress through the game, but as Tracy Fullerton, Chris Swain, and Steve Hoffman wrote in the article *Improving Player Choices*, "...you'd be surprised at how many games force the players to make choices that have no impact," [3].

This is not due to a lack of trying, but due to the inherent conflict between storytelling and gamification. Greg Costikyan looks into the cause of this conflict in his article *Where Stories End and Games Begin*. While many

consider the merge difficult, he takes a more extreme stance in believing that the gamification of a story is almost impossible because of the opposing nature between linearity and non-linearity. "...Story is the antithesis of game," he wrote. "A story is linear. A game is non-linear. Creating a 'storytelling game' is attempting to square the circle" [5].

Creating a story with branching paths and allowing the player to make choices increases the complexity of a story and exponentially increases the difficulty in making the piece. That is because with every option that a player is provided, the story must be able to morph, causing one story to become two and two to become four, all the while the creator must be able to maintain a cohesive storyline no matter what path the player takes. Furthermore much of the work that goes into the creation of a gamified story will go unappreciated because as Malindy Hetfeld speculates, "Unless the player completes the game again and sees every ending, they can't truly appreciate the weight of their choices," [2].

Telltale games is a major game company whose works are lauded for their well written storylines but even they are met with much criticism for lack of consequences for player actions. Elise Favis complained upon seeing the game warn her, "Clementine will remember that. Will she really? As it turns out, it didn't seem to matter," [1]. There are many complaints against the Telltale game's opening statement: "this game series adapts to the choices you make." Even *Detroit: Become Human*, a game I deeply appreciate

for its engaging branching story paths, relies heavily on whether the player can manipulate the game's controls rather than purely on player decisions.

Despite the beliefs by many that proper gamification of a story is near impossible, I wanted to try finding the balance myself. If story and game truly lies on opposite sides of the spectrum, then I would attempt to narrow down the scope through iterations of experimentation. By taking a short story and incorporating different levels of player freedom, I hoped to find the equilibrium that would provide enough depth for a satisfying story while simultaneously giving the player enough freedom of action to make for a satisfying game.

DESIGN

In my very first iteration of the project, I began by choosing a story and a system to create a simple prototype. With the help of playtesters, I got an idea of where on the story-game spectrum I had landed. With new knowledge on where I was lacking and what players wanted, I would begin another iteration, experimenting with new game structures and new storylines. After more playtesting and more data analysis, I attempted to get closer to the story-game equilibrium I was aiming for.

In the later iterations, I was able to gain a better idea of what players wanted, what elements of my previous iterations worked, and how things could be improved until in the final iteration, I could hopefully hit the

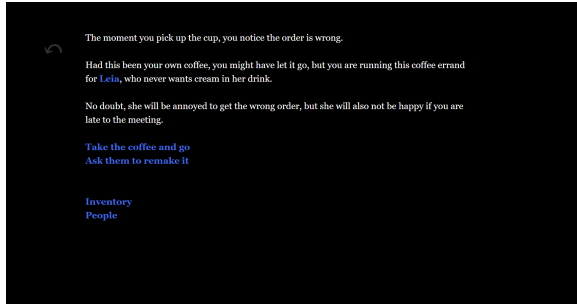
balance between story depth and player freedom.

IMPLEMENTATION

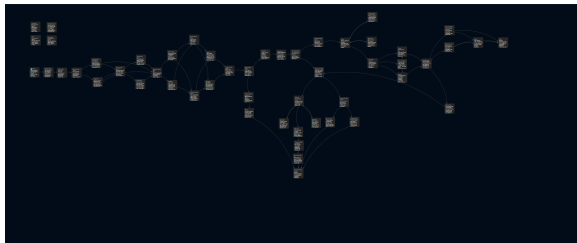
I began the first iteration of my project without much of an idea of where on the story-game spectrum I would land. After going through several story ideas, I picked one I liked and settled on a game mechanic I hoped would work.

The story was simple and short, centering around the player meeting a ghost and exploring some bakeries. The game mechanic was similarly minimalistic, relying on text and simple buttons to help the player navigate the story tree. This first iteration was created using Twinery which was specifically designed to help tell interactive stories. It enabled me to work in a branching tree structure where each tree node contained a segment of the story, and the nodes could be connected to one another via buttons. When reading a segment of the story, the player would see the buttons as clickable blue text. Clicking on it would take the player to the next corresponding node in the story tree.

For preliminary testing, I took a segment of the story, added branching options, and expanded the details until I had a portion of the project completed to see how testers would react. From a player's perspective, the interface appeared as below.



Survey results showed that the format was too linear and players felt restricted and railroaded. Complaints were made as the playtesters wished they had more options. Looking at the branching story tree behind the scenes, the linearity issue can be seen from the shape of the tree nodes converging too often and heading in a clear direction.



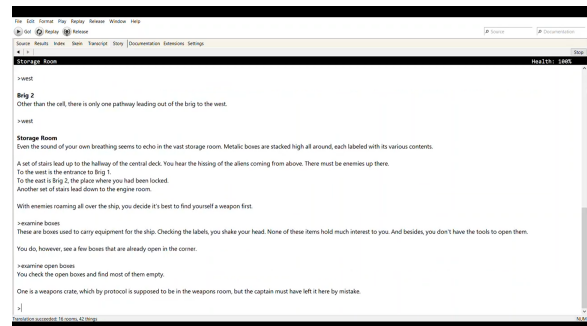
I realized only later that this iteration also failed due to another major reason. In his story-game analysis, Costikyan mentions that a key component of what makes a game different from a story is that a game gives the player a clear goal to reach. Stories, on the other hand, are much more passive. The reader has no goal other than to reach the end of the plot. The short story I chose to gamify was too meandering and the player lacked any strong incentives to do anything. The process of playing the game was merely to arbitrarily choose a decision and see where it led them, which made the prototype lacking as a game.

On the upside, feedback for the interface was overwhelmingly positive. The mechanics I went with were simple as my goal was to emphasize the story and the player decisions. The mechanics could not be overly complex so as not to distract from the reading. Testers liked how simple the mechanics were and how easy they were to pick up. No one had any issues navigating the interface despite there being no tutorials on how the game should be played.

On the story-game spectrum, this iteration landed much more heavily on the story side.

In the second iteration, I switched gears and looked into old school interactive fiction. In this mode, the player types out what action they want to do and the story responds accordingly. This attempt was made to address the issue of players feeling restricted in their decision trees. By letting the player type out whatever they wished to do, player freedom was much more heavily emphasized compared to the restrictive decision tree in the first iteration.

The prototype was made in Inform 7, a programming system designed for the development of interactive fiction. The interface appeared as below.



I also went with a different short story. The plot in this round revolved around the player trying to save their wounded captain on a spaceship overrun with alien pirates.

While the playtesting responses for this prototype were largely positive, I knew I had slid too far to the game side of the story-game spectrum. In giving the players freedom, this iteration sacrificed the story almost completely. It was near impossible to maintain any semblance of a progressing plotline when players could potentially go anywhere, do anything, and activate any story element in any order. In letting the player roam free, the story suffered.

While testing the prototype of this iteration, I also ran into an issue with the format. Interactive fiction is an older, more classic style of gaming so while it still maintains a sizable fanbase, most younger players are not familiar with how it is played. Many playtesters I worked with did not know how to navigate the story even after the process was explained to them. Though they eventually got the hang of how to play in the second half of testing, I felt this was not the minimalistic and intuitive game mechanic I was looking for.

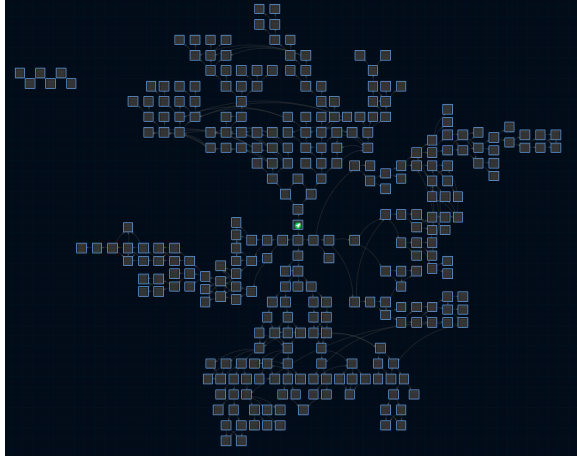
The storyline itself, surprisingly, worked well in this iteration. Though the story depth was sacrificed for player freedom, the overarching plotline was great to use in game form. There was a clear conflict: enemy pirates have invaded your spaceship. The player had a clear incentive: save the captain. While the story depth could be

improved, it gave the player a clear goal to reach for within the plot.

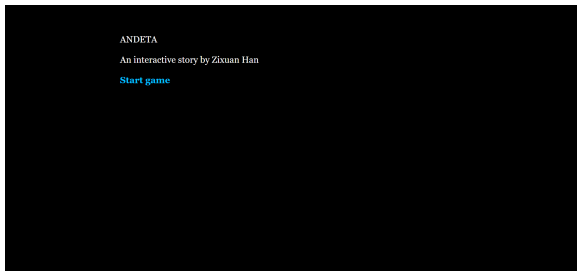
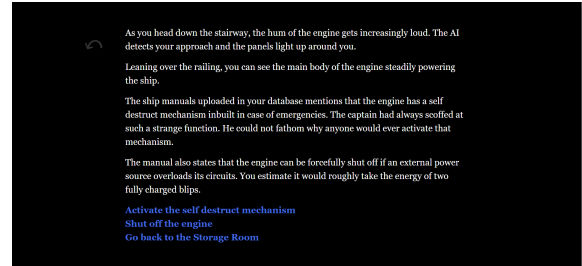
On the story-game spectrum, this iteration landed much more heavily on the game side.

In the third iteration, I had a much better idea of what I wanted. Though the first and second iterations did not work out overall, there were elements that I felt I could keep. For the game mechanics, I decided to go back to Twine. Playtesters felt the interface was intuitive, which was exactly what I wanted so as not to distract from the story. For the plot, I decided to use the one from my second iteration as a base to expand on. Because the themes of that story are rescue and survival, there are clear boundaries between win and lose states and have great gamification potential.

Since my issue with the story tree in the first iteration was linearity, I increased player options and enabled more player freedom, though not to the extent of the second iteration. See the mapping of the story tree below, where the player begins the story at the green dot in the center. The story nodes fan outward, leading to different story paths and different endings.



Clicking on the word will lead the player to a short blurb about the term. The player can then return back to the main text.

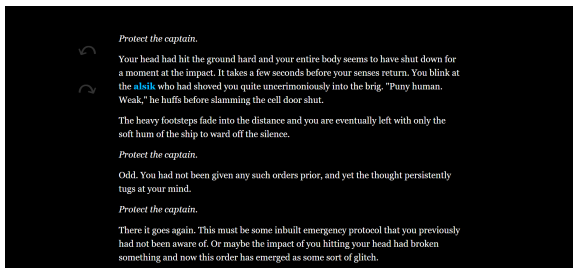


When the player reaches a branch in the plot, they must make a decision on how they wish to proceed. The choice they make will lead them to the next corresponding branch in the story tree.

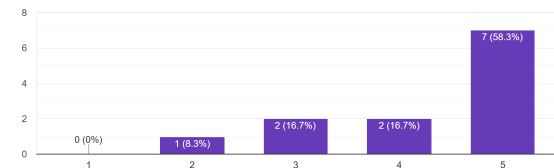
This is the title screen, as seen from a player's perspective.

ANALYSIS/VERIFICATION

12 players participated in the third iteration of the Andeta playtesting. Each player went through the game an average of 3.9 times.

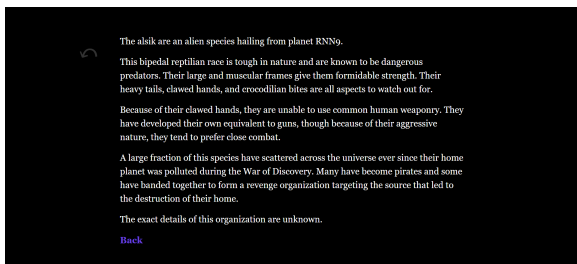


How would you rate the playability of the game mechanics?
12 responses



A page of the story. Clickable text is marked in blue. Here, the word alsik is an unfamiliar term that is marked as clickable text.

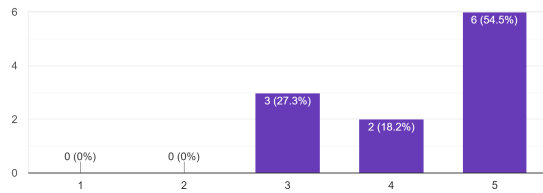
The game mechanics were rated at a 4.5 out of 5 average.



The playtesters expressed they liked the “straight-forwardness” of the game mechanic and thought it was very “easy to play”. They also enjoyed having the definitions for the unfamiliar terms on a separate page. However, there was dissatisfaction with having only text on the screen. There were suggestions about adding images and sounds to spice up the playing

experience. As it stands, the Andeta is too text heavy so players found it hard to stay focused.

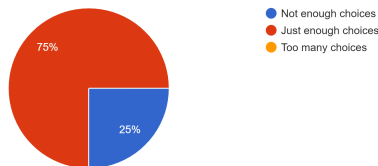
How would you rate the depth of the story?
11 responses



The story depth was rated at about 4.27 out of 5.

Players enjoyed the feeling of diving deeper into the plot the more times they played. Positive feedback revolved around the many different ways the players can proceed, leading to different plotlines and different endings. There were comments on how having choices in the story allowed them to “explore the world more than the typical style of storytelling”.

How would you rate the number of choices given to you at the story junctions?
12 responses



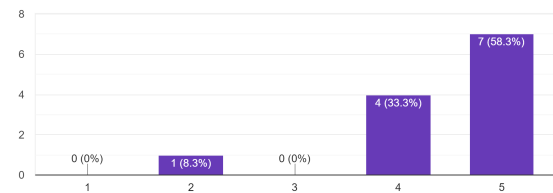
Branching paths in Andeta typically gives the player two options to choose from. Occasionally, there is a page that has one or three options. Players were asked what they thought of this range of freedom.

Some felt having mostly two options at each junction was just the right amount because it allowed the game to be more focused,

lowered complexity, decreased the possibility for confusion, and made choosing easier.

A quarter of the players felt two was not enough and would have liked to be given more freedom to act differently within the story. There was particular dissatisfaction when only one choice was given, causing the players to feel like they were not given a choice and forced to do something.

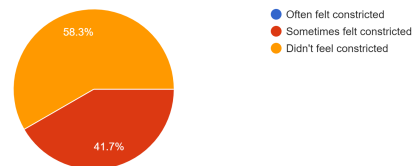
How much did you feel your decisions influenced the direction of the story?
12 responses



Players were asked how much they felt their decisions influenced the direction of the story. Andeta got a score of 4.41 out of 5 as most playtesters felt the story was pretty responsive to their decisions.

This survey question coincides with the next, when players were asked if they felt restricted by the options presented when playing the game.

Did you ever feel railroaded (constricted by limited options) when playing?
12 responses



Almost half of the players felt railroaded at some point in the story.

Players voiced that they felt like there was sometimes “a right and wrong choice” which forced them to choose one option over the other, detracting from player freedom. The feeling that only one path led to winning controlled the choices of the players because they would feel compelled to choose the choice that led to the path of survival.

Additional comments on Andeta as a whole included dislike for the differing story lengths. Some paths caused the story to end more quickly than others, which the players felt broke uniformity and detracted from the playing experience. Some story paths had more exciting plotlines than others, causing those with less action to feel underwhelming. Some players felt the reading was too long, making it difficult to play through. Others felt the stories were too short and wanted the plotlines to be longer.

On the story-game spectrum, the third iteration of Andeta should fall closer to the equilibrium than the first and third, though unfortunately it is still leaning toward the story side. It is far from perfect, and playtester responses showed it is still lacking in the game element. The story was well received, but player freedom was still too restrictive.

INTERDISCIPLINARY CONNECTIONS

The Andeta project is an artistic piece built on a technical foundation. Story and screenplay writing skills were implemented to form the short stories that make up

Andeta’s content. Having an engaging storyline is half of the essence of a story game.

At the same time, research and implementation of game design was also an integral part of creating Andeta. Player choices were mapped out within the game following the research of how choices should exist within a story game. The tracking of the various nodes within the story tree also required use of coding.

A variety of interdisciplinary skills were combined to create this project, which is what makes it different from pure linear stories and non-story games. In giving the player choices, the stories can become fluid and non-linear, making the player feel more immersed in the story. In giving the game story, player actions gain more meaning and immersion within the story world can be heightened.

RELATED WORK

As I stated before, there is no shortage of games with player choice.

The style of game that first comes to mind when researching for my game is choose-your-own-adventure style books. However, these books tend to limit the scope of the tales to extremely simple storylines.

Japanese visual novels are another game type that is similar to Andeta. This style of game offers deep storylines and ample player choices while typically providing some visuals. These games, however, differ

in that the vast majority are of the romantic genre. The main goal of the player choices revolve around deciding which character the player wishes to pursue in a romantic relationship. Many complain of player choices not having an impact on the story other than the picking of a partner.

Paper role playing games like D&D are combinations of story and game as well. However, these games typically require real time narrators who can weave stories for the players. Furthermore, since the main goal for many players of this genre are problem solving and role-playing, not much emphasis is given for story cohesion. The high level of ad-libbing and impromptu player decisions can also get in the way of story depth.

Old school interactive fiction are a similar line of story gamification, though these games also have trouble finding the balance on the story-game spectrum. Of note are classical interactive fiction games such as Photopia, which despite being a wildly successful interactive fiction is a work that is more novel than game. Though it offers a deep and intriguing plotline, players can be left feeling their actions have no effect on the story. On the other hand, Zork, arguably the most iconic interactive fiction of them all, offers almost all game and no plot.

Even after years of game development, modern day games of the industry still have a hard time finding that delicate game-story balance. Games like Final Fantasy or Assassin's Creed offer players decisions to make throughout the game, but as the storylines tend to be largely linear, these

decisions are not as impactful as many players would like. Even the TellTale Games, whose main selling point is that the choices of the players impact the story, end up with the issue of too much linearity, downplaying the decisions that the players make.

Limiting player freedom for story cohesion and vice versa is a reasonable sacrifice. Expanding on either increases workload and difficulty exponentially, as I have come to personally experience throughout the making of this project. For larger, longer games it is even more difficult. However, for my project, I hoped to find that balance and still have the project remain within a reasonable scope by working with a short story rather than a longer one. By shortening each route, I could expand on the size of the story tree to offer players more freedom of choice. By limiting the player choices to clickable options, I could focus on predetermined story paths to increase story depth.

FUTURE WORK

In its current stage, Andeta is far from finished. The prototype is playable, but not yet complete.

Some playtesters said they wanted to see more choices rather than just the usual two within every node. While I may not be able to completely satisfy this demand considering the feasibility of this task, I do feel I can add some extra options to make the choices a bit more interesting.

The current options within the story need to be edited to reduce the sense of railroading. It is also necessary that I comb through each story paths to ensure uniform quality so that no matter which path the player chooses, they will experience an equally exciting story as any other path.

Longer passages of text need to be broken up, and the game needs to be fine tuned to make the playing more smooth and immersive.

The writing is in rough draft form, meaning even though the story is completed, there are still grammatical and spelling errors that I have not yet caught. Going back through every node and fixing those small yet detrimental mistakes will, I believe, make the experience much better. At the very least, players will not be distracted by the writing mistakes while playing the game.

I have also received feedback from several playtesters that they would like to see ambiance added to each node to heighten immersion. This includes elements such as music and sound effects that can beef up the world building as well as heighten immersion.

CONCLUSION

My project goal was to explore the proper balance between story depth and player freedom when gamifying fiction. After going through three iterations of Andeta, I feel I have achieved my goal.

I have now personally experienced the fact that finding the proper balance between player freedom and story depth is as difficult as it is essential to make a successful story game.

From the player feedback, I can see that a game that lands at the perfect equilibrium between story and game is what players want. They demand an exciting and engaging story, and they want the ability to freely influence that story. Furthermore, they want that story to remain a good story no matter what they do within it. In the end, the story depth cannot be sacrificed, and the player's freedom needs to be preserved as well. To satisfy player demands, the story game needs to be at that perfect center.

The more I work on this project, the more I realize how difficult it is to hit that perfect center, but at the same time I feel it is not impossible. After three iterations, though I am not there, I've gotten closer to that equilibrium than I ever have before. That is evidence enough for me that it should be possible to get there, even if it is squaring a circle.

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