

Small Tales

A Video Game of Vignettes

Maureen Sues

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Master of Fine Arts in Creative Technologies

Dane Webster, Chair

Simone Paterson

Thomas Tucker

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A Video Game of Vignettes

Maureen Suess

Abstract

Small Tales is a 2D video game designed for children ages 8 - 12, with hand drawn and painted assets that incorporates a series of vignettes centered on the collection of artifacts. Growing up, I experimented with and investigated a wide variety of media, such as Alice and GameMaker but ultimately decided to sharpen my fine arts skills and incorporate them into video game engines in this thesis. A variety of point and click adventure games such as the *King's Quest* and *Monkey Island* series inspired the development of this game due to their emphasis on narrative and player interaction.

This thesis developed from a series of earlier projects that helped me settle on four primary objectives: one - vignettted narratives, two - player choice and consequences, three - visual and text components working harmoniously, and four - replayability via randomized generation. A Processing sketch emphasized the need for strong visual assets in addition to text-based narrative; in addition to replayability via randomized strings or text for a unique narrative every iteration. Afterwards, a Twine game further encouraged visual assets working with text, but solidified a foundation in player choice and consequences. Finally, my first experiment in Unity with the Adventure Creator helped me establish a functional workflow to achieve my four goals listed above.

Small Tales itself revolves around a series of vignettes connected by the world of the player character. Players wander an unfamiliar neighborhood to find artifacts that at the end of the game reveal tiny stories about other worlds. The game was received well by players during my defense for its ethereal atmosphere and for creating an engaging story world. But a handful of suggestions from these same players could push the game to be even better. *Small Tales* will be available online after these critiques are taken under consideration.

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General Audience Abstract

Small Tales is a 2D video game designed for children ages 8 - 12, with hand drawn assets that incorporates a series of vignettes centered on the collection of virtual artifacts. Growing up, I experimented with and investigated a wide variety of media, but ultimately decided to sharpen my fine arts skills and incorporate them in to video game engines in this thesis. A variety of early adventure games inspired the development of this game due to their emphasis on narrative and player interaction.

This thesis developed from a series of earlier projects that helped me settle on four primary objectives: vignettted narratives, player choice and consequences, visual and text components working harmoniously, and replayability via randomized generation. After learning from these experiments, I settled on using the Unity game engine with the Adventure Creator toolkit to establish a functional workflow to achieve my four goals.

Small Tales itself revolves around a series of vignettes connected by the world of the player character. Players wander an unfamiliar neighborhood, using their mouse to navigate and find artifacts that at the end of the game reveal tiny stories about other worlds. The game was received well by players during my defense for its ethereal atmosphere and for creating an engaging story world. But a handful of suggestions from these same players could push the game to be even better. *Small Tales* will be available online after these critiques are taken under consideration.

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Introduction

“Most of us find our own voices only after we’ve sounded like a lot of other people.” - Neil Gaiman¹

This 2D adventure, titled *Small Tales*, encourages exploration and creates a sense of wonder through a series of 5 vignettes connected by an overarching story. In this game, I investigated vignettted narratives and how they can work together as a complete experience for the audience. Players explore a neighborhood, with the choice to collect specific objects that transport them into another world in the endings of the game, each with its own fragment of a narrative. Interactive elements and subtle animations within the scene engage the viewer and make the vignettes come to life. This unique, immersive game reflects my own interest in nostalgia and its role in creating stories through games. I hope to reflect on childhood memories and create new worlds that players can explore and lose themselves in the joy of adventure.

Small Tales is a point-and-click style game, meaning that it can be operated almost entirely with only a computer mouse and all interactions are based on clicking. Point-and-click adventure games represent the earliest iterations of narrative storytelling and have been prolific since the first, text based game: William Crowther’s *Colossal Cave Adventure*. Other notable titles in the point-and-click family include, Cyan’s *Myst*, LucasArts’ *The Secret of Monkey Island*, and Sierra’s *King’s Quest* series; the later two of which influenced me to create *Small Tales*.

¹ Quoted May 12, 2012 in his keynote address to the University of the Arts

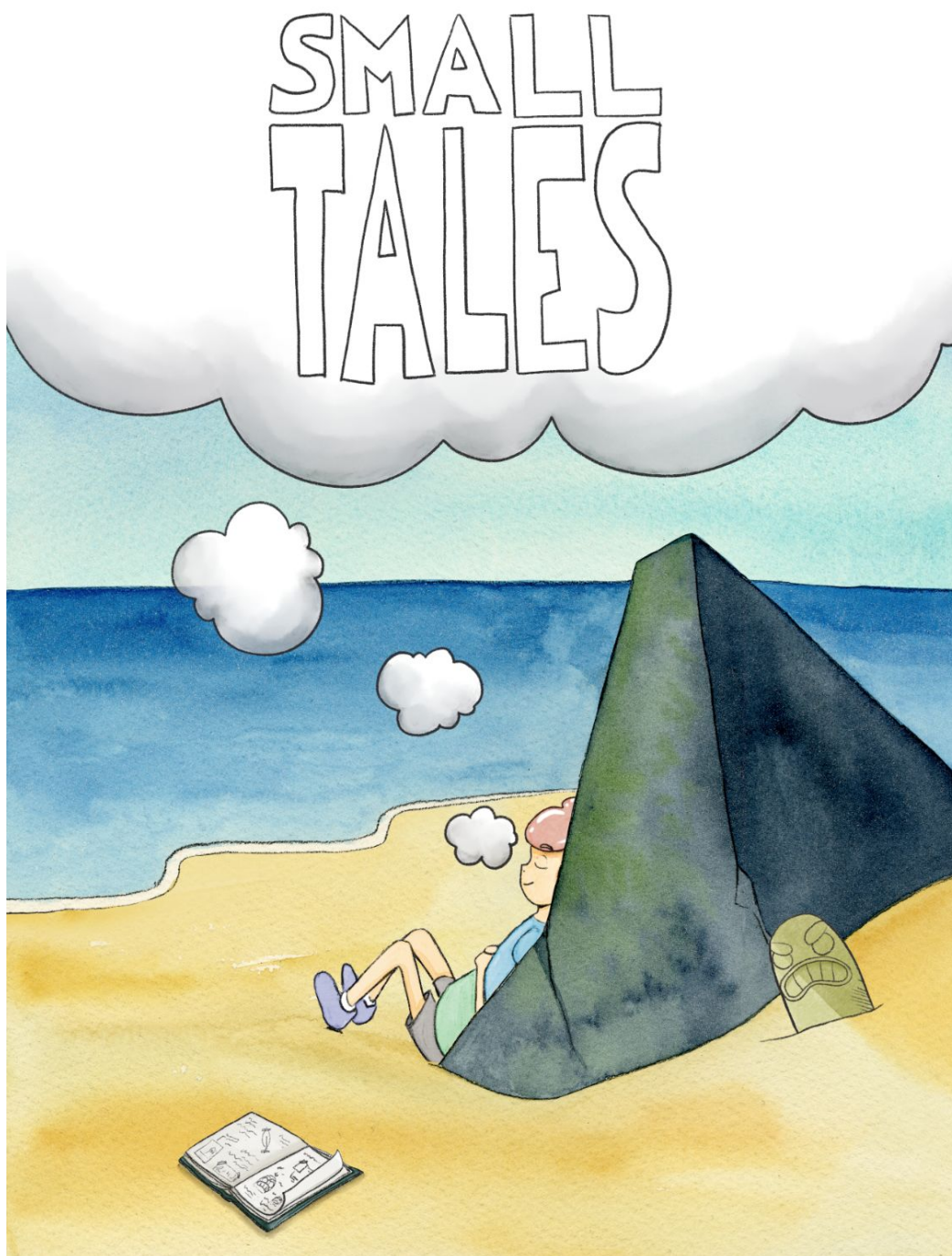


Figure 1.1: Title card for Small Tales

Growing up, I was constantly finding new ways to make: crafts, illustrations, new technologies and tools to work with. Drawing and writing stories about characters in other worlds wasn't enough. I wanted people to more directly get to experience these small stories and

ideas that I kept making. Around age 9, I developed a board game centered around monster

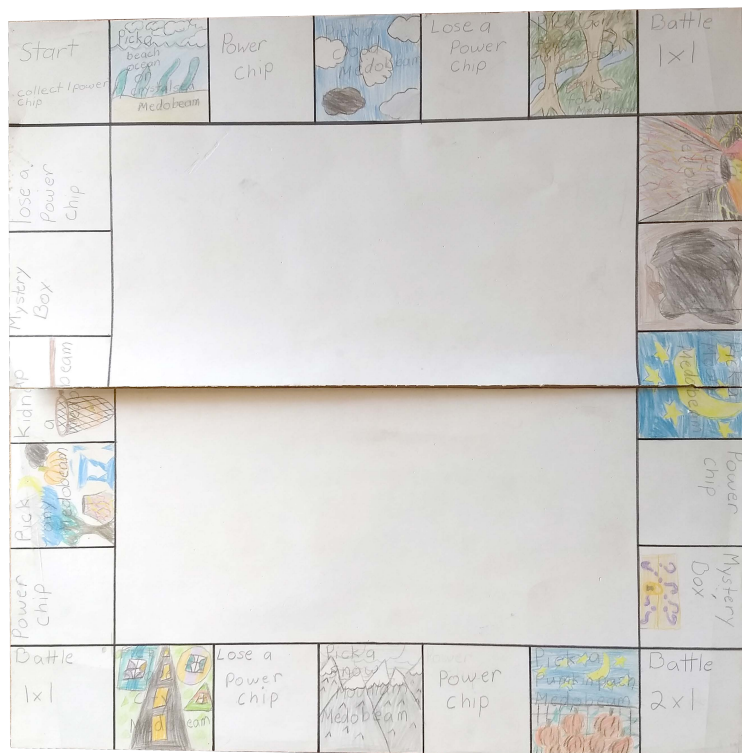


Figure 1.2: Board game I designed around age 9

pockets of other worlds and player interaction.

cards, influenced by Tecmo's *Monster Rancher 3*. I loved getting to draw each creature on a card, assigning abilities and values to it, individual cards like vignettes themselves. But I needed a way to let others play with these cards, so the board has environmental spaces and rules to actually play the game. This first game set up the rest of my artistic endeavors in finding a balance between creating

History of Point and Click Adventure Game Design as related to *Small Tales*

Since their initial development in the 1950's and later explosive popularity in the 1980's, video games provide engaging interactions with varying levels of immersion and storytelling for all kinds of users. Early games like Atari's *Tank* and *Pong* lacked the shiny, realistic graphics of today's games, instead relying on the player's imagination to fill in the gaps and interpret the representational pixels on the screen. Narrative, however, has persevered through the entirety of the adventure game legacy. The very first adventure games revolved entirely around text and engaging the player through their own imagination. Pixel graphics combined with text, would

still rely heavily on the player to use their imagination to flesh out the limited resolution of early games. Modern games tend to remove this need entirely, with the occasional “retro-styled” exception. Instead these games realize a vision of both imagery and narrative to achieve truly fleshed out experiences for players.

In the 1980’s, the Sierra (then On-line Systems) team of Roberta and Ken Williams developed a graphic and text based adventure for the Apple II called *Mystery House*². This game became a smash hit for its storytelling, a murder mystery based on Agatha Christie’s *And Then There Were None* and graphics. Limited by the capabilities of computers at the time, the game consisted of simple line work that outlined the basic idea of each background. Nonetheless, the game is engaging for players based on storytelling alone. This first game would later inspire the Sierra team to create the renowned *King’s Quest*³, recently revamped in conjunction with Activision, and *Space Quest*⁴ series with Roberta designing the story and graphics and Ken programming the interactions. The *King’s Quest* series, an adventure following the life of Sir Graham, completely revolutionized the world of interactive adventure games by changing how interactions function for the player. Instead of guessing or inferring commands to enter to a static scene, as in early *Space Quest* games, the player could now move the character around in animated 2D space to interact with objects.

² Williams, Roberta. *Mystery House*. On-Line Systems. 1980. On-Line Systems. Apple II.

³ Williams, Roberta. *King’s Quest I. Kings Quest Series*. Video Game. Sierra On-Line. 1984. IBM, Sierra On-Line. PC.

⁴ Crowe, Mark, Scott Murphy. *Space Quest: The Sarien Encounter. Space Quest Series*. Video Game. Sierra On-Line. 1986. Sierra On-Line. PC.

LucasArts would later create the iconic *Monkey Island*⁵ series, starting in the 1990's, bringing a new artistic flare to the visuals of point and click games. Odd angles, brilliant colors, and stylized characters gave new life to the previously predictable realistic-leaning visuals of earlier adventure games. Modern point and click games have the advantage of using vector based and higher resolution images in addition to creative gameplay integration. *Small Tales* seeks to continue in the vein of contemporary point and click games by incorporating unique hand drawn 2D visuals and engaging gameplay with emphasis on narrative.

Motivation

Section 3.1 Making

Making, both physically and mentally, composes a huge part of my life. Growing up, hours and hours were invested in making all kinds of objects and drawings, even making my own board game, just for the satisfaction of creating. Everything I ever made had a story as well, a thread that moved through the whole project. Having a story establishes a connection and investment between myself and the project while also giving me a guiding sense of “right” and “wrong” in terms of decision making for the work. If presented with a choice, I'd ask, “Does this serve the story? Does it help the viewer to understand the story better?” If the option does, it gets incorporated, if not, the idea is tossed. For me, story is essential to engaging the audience and transporting them into the arena of the world I developed.

Finding a perfect combination of making with my hands and imagination presents its own challenges. An idea or story might pop into my head, but if I can't articulate it with my own

⁵ Gilbert, Ron, Dave Grossman, Tim Schafer. *The Secret of Monkey Island*. *Monkey Island Series*. Video Game. Lucasfilm Games. 1990. Lucasfilm Games. PC, Macintosh, Atari ST, and Sega CD.

hands, I can't trust that the initial concept was solid enough to experiment with yet. There is a certain amount of patience and craftsmanship that comes with using traditional media that sometimes gets lost in the "undos" and expansive variety of tools available in creating digital media. Traditional media contains errors and faults that act as evidence of human hands involvement in the work and I believe that evidence is beautiful. *Small Tales* combines traditional and digital media, using the strengths of each: the materiality and beauty of hand drawn work with the versatility and accessibility of digital media. This led to the digital storybook look of the project; using traditional media to create a digital game blurs the line between physicality of the real world and imaginary spaces.

For me, authorship means using my own hands to create assets and environments. By making the work tangible, even only partially, it allows me to leave a very personal mark on the game. I feel it is important to have the most direct contact in creating any piece to iterate the clearest form of my idea. The farther making strays from my own hands, the more distant I feel from the work itself. Even for digital works, I start with pencil drawings on paper to make the concept real enough to continue working towards the final product. For *Small Tales*, I chose to show a hybridized work by using pencil and paper assets in a digital space. Paper assets are close enough to the real world to be manipulated quickly and with the beautiful mistakes that come with making irreversible choices in painting. On the other hand, digital game engines behave much like the human imagination, a completely blank slate where anything is possible and creativity is boundless.

Section 3.2 Escape & Immersion That Sparks Creativity

Reading fiction influenced my desire to build works around storytelling, from *The Count of Monte Cristo* by Alexandre Dumas to *The Old Kingdom* series by Garth Nix to *Brave Story* by Miyuki Miyabe. I love reading adventure novels about other worlds, places that spark my imagination and allow me to investigate someone else's world for a while. For *Small Tales*, I investigated these themes further and brought other people into this little world with the same vigor but vastly improved skill set over my younger self. The vignettted cutscenes are tied to artifacts scattered throughout the island. In the ending of the game, the player can experience one or all of these vignettes depending on whether the artifacts spawned or not. Through these snapshots, the main character reflects on an artifact, then imagination takes over to tell a story. My intention with these small tales is to imply a larger world at work within the limited snapshot the player gets to see. Then hopefully, it will inspire the player to dream of their own pocket worlds or explore the given ones with their own imagination.

Section 3.3 Nostalgia

“It is very good to copy what one sees; it is much better to draw what you can't see any more but is in your memory. It is a transformation during which imagination and memory work together. You only reproduce what struck you, that is to say the necessary.”- Edgar Degas⁶

While growing up I thought I wanted to be an animator, in practice I found that I just don't have the patience for it, but a deep respect for those who do. I absolutely love animated film and am deeply inspired by the works of Studio Ghibli and Pixar. But my thoughts and stories tend to be short and quickly articulated; just enough to give the idea form before seeking the next project. Video games give me a huge amount of freedom and flexibility, I can create

⁶ Sérullaz, Maurice. *L'univers de Degas*. H. Scrépel, 1979. 13.

everything from the assets to the interactions in a streamlined workflow and I think that opportunity makes for the most effective storytelling.

As a kid, I toyed with different game engines and tools to attempt to reach my goals of interaction and visual components. I first had the chance to try “Alice”⁷ as introductory animation and coding tool developed at Carnegie Mellon. This was a very difficult for my 8th grade self to get the hang of, but fascinating and engaging nonetheless. This stepping stone that got the gears in my head turning about the possibilities of storytelling and play. Alice also offers a visual coding system which is ultimately what I used in the development of *Small Tales*.

“GameMaker” became the second program I investigated. It’s a 2D game engine that made game development accessible to me at a young age. With it I made really short silly platforming games; sharks and cupcakes pacing back and forth while the player desperately dodged to keep their hit points. These experiments opened up an entire new means of making but I lacked the skill set to fully pursue video games until I reached undergraduate. Instead, I sharpened my fine arts skills till I had access to resources to build video games on my own. *Small Tales* incorporates fine art assets as a tribute to the time and effort I invested in drawing and illustration.

Section 3.4 On Vignettes

Vignettes are defined as a brief, evocative description, account, or episode⁸. By extension, for me, vignetted narratives are short stories that act as a window or peek into another world and have been a trend throughout my whole experience as an artist. I’ll get a flash of

⁷ Alice is a visual coding program that teaches animation and computer science by allowing students to “plug and play” pre-designed chunks of code into a sequence to make characters move and speak. Available here: <https://www.alice.org/>

⁸ As defined by Google search engine

insight and glimpse into another mini world and do my best to recreate that quick vision, but there the work stops and that's always been something I struggled with and disliked about my work. It didn't have the same finished or polished qualities as some artists seek in their own work. Once I had gotten the thought out of my system, I felt done. I sought to bring this out as a strength rather than a weakness in *Small Tales*. These vignettes are whole, complete, they do not need triple-a tier polish to be worthy and complete works. These pocket sized images represent my thoughts and inspiration as an artist and in developing *Small Tales* I've made a vessel for them to inhabit.

By hiding these vignettes in the ending of the game, the player gets to enjoy the feeling of having “earned” them by playing through the adventure and experiences the vignettes as a reward. My intention with this decision was to make these vignettes feel precious to the player as I felt they were while creating them.

Narrative Structures and Interactivity for Game Development or Storytelling and Player Choice

Section 4.1 How are Narratives Successful in the Larger Video Game Conversation

Narratives, in general, are successful when they connect with an audience. Video games, unlike other forms of media like books or movies, take the participant out of a viewer's perspective and give them an active role. A player must themselves interact with the virtual world around them to forward the story, much like turning the page in a book. Taking that power away from the director or writer and putting into the hands of the player can be extremely powerful. Suddenly, the player has choice and freedom to decide how much they want to invest in and participate in the story. From here, the game designer has the ability to control what

information is explicitly passed to the player: will the player understand the consequences of their choices before making them? Is this choice presented as the only option? Does this decision seem like a haphazard game trope until the consequences are revealed? These questions help designers discern how much they reveal about the gravity of a player's choice.

In the most engaging versions of this system, player freedom tends to come with a narrative price. For example, in Frictional Games Studio *Amnesia: Justine*⁹ the player has options when presented with a puzzle: solve the puzzle quickly but kill innocent prisoners or patiently figure out a work around while dodging death yourself. Some games expand even further on these consequences outside of immediate shock factor. In Arkane Studios *Dishonored*¹⁰, moral choices made by the player effects interactions with other non-playable characters (NPCs) and even the overarching story itself. Throughout the entire game, the player has lethal and nonlethal methods for accomplishing their mission goals. However, choosing predominantly lethal means causes negative responses in the interactions with characters throughout the entire game and even the game's ending. NPCs respond tersely or even become hostile towards the player for their decisions and the ending of the game is tragic and despairing.

In role playing games (RPGs), a basic language has developed over time and across games: levels, experience points, hearts or specific colors representing health of a character, all become a familiar structure to help players understand gameplay systems across different genres. *Undertale*¹¹, a recent "indie" hit, is an excellent example of subverting what is usually understood or a given in gameplay languages in addition to the consequences of the designer

⁹ Grip, Thomas, Jens Nilsson. *Amnesia: Justine*. Frictional Games. 2010. Frictional Games. PC, Mac, Linux.

¹⁰ Colantonio, Raphael, Harvey Smith. *Dishonored*. *Dishonored* Series. Arkane Studios. 2012. Bethesda Softworks. PC, Playstation 3 & 4, Xbox 360 & One.

¹¹ Fox, Toby. *Undertale*. Toby Fox. 2015. Toby Fox. PC, Mac.

leaving the player to discover the repercussions of their actions on their own. A player starts the game with the usual stats: “LV”, which a player recognizes as “level”, the tier of skill reached by a player, “EXP” or “experience points”, points awarded to the player for accomplishing tasks, collect enough of them to “level-up” your character. The player also begins with a familiar interface and attack system, with the bonus of some apparently silly or arbitrary actions that could eventually lead to showing “Mercy” to enemies instead of killing them. But why bother with the complicated when the obvious and quick presents itself? As the player makes their way through the game, uneasiness builds. Characters and enemies grow hostile and more vicious till the player reaches the last level of the game, where a friend from the beginning of the game reveals the true meaning of the players stats. “LV” never stood for “Level” but for “Level of Violence” and “EXP” is revealed to refer to “Execution Points” instead of experience points; deliberately reversing the established basics of gameplay while the player watches in horror at the results of their blasé decision making. Choices this dire create deep connections between the player and their player character. If a player character suffers in the game, the player exclaims in the first person “I died” or “I lost”, not “my character died/lost” indicating their deep level of immersion and connection to the player character. ¹²

Section 4.2 Early Experiments in Game Development

In becoming familiar with designing games, I developed a series of small prototypic works before arriving at *Small Tales*. These games would lead me to four ultimate goals I sought to bring out in *Small Tales*: vignettted narratives, player choice and consequences, visual and text components working harmoniously, and replayability via randomized generation of elements.

¹² Swink, Steve. *Game Feel: A Game Designer’s Guide to Virtual Sensation*. Burlington, MA: Morgan Kauffman. 2009. 11.

Vignetted narratives, as explained earlier, offer small insights into a larger world, contained within a cutscene pairing of illustration and text. Secondly, I felt the player had to be held responsible for their own decisions in playing the game, even if that decision was as simple as playing the game at all. Thirdly, visual and text components working harmoniously: my previous game investigations were heavily text based, which, while fun and engaging on its own, left me wanting a way to showcase my fine art skills as an addition to storytelling. Finally, I wanted the game to be replayable, encouraging the player to find out more about the world they were dropped into and randomization offered an interesting solution to this. The game is unique every time you play even if it's only slightly different. This was a goal I held on to from my early game experiments.

An early prototype during my undergraduate years reflected a lot of my nostalgia for pixel based graphic games. I designed and programmed the game from scratch, which gave me a great sense of the difficulties that would arise

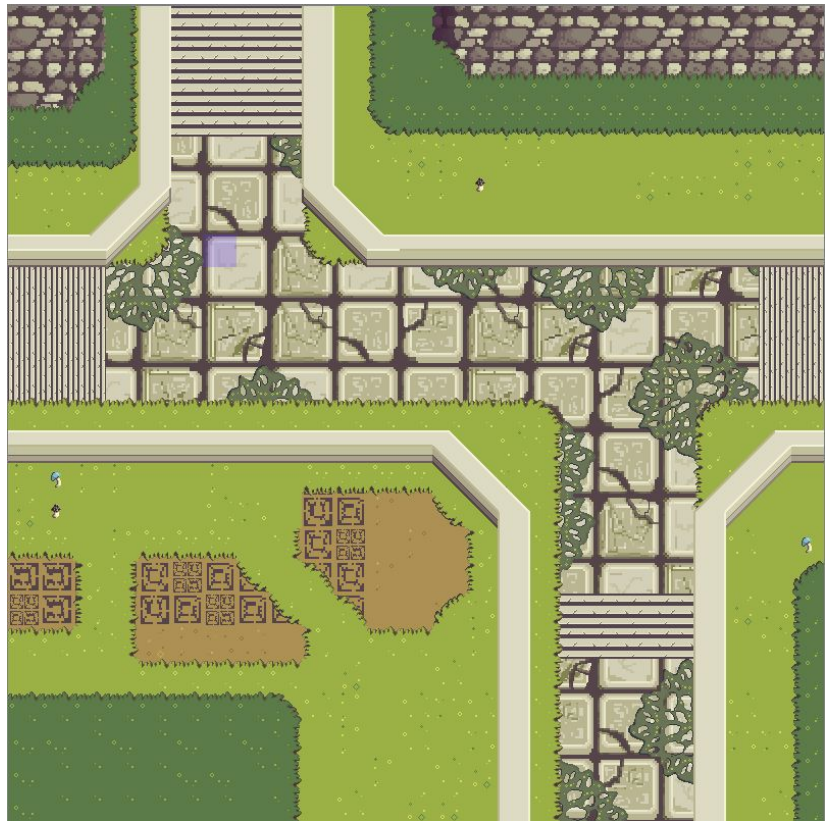


Figure 4.1: Background from an undergrad pixel graphic based game

trying to work on both ends of the game development. In investing so much in just getting the

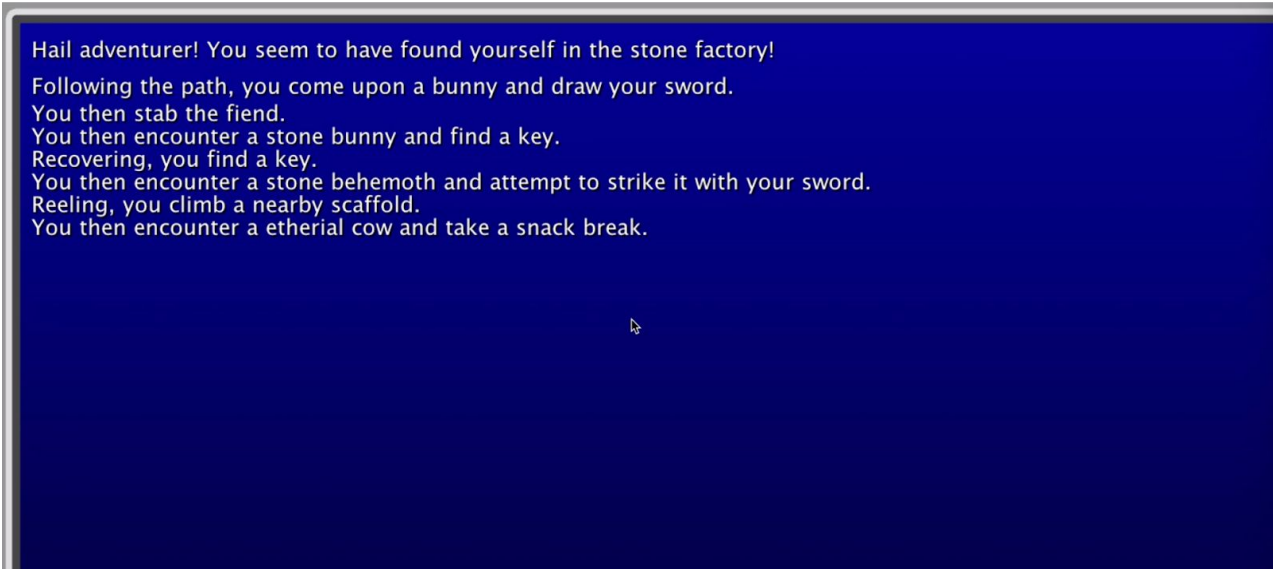
game to function, I lost the freedom to develop the storytelling aspects of the game due to the amount of time needed between making assets and programming.

After entering graduate school, I developed three projects that definitely led to the creation of *Small Tales*. The first is a generative text adventure game built in Processing. The game functions by pulling from .csv files to create silly strings of text guiding a player through an imaginary dungeon-like scenario. Ravi's Sweet Adventure, the second game, is built in a program called Twine but also revolves entirely around text for the reader to progress through the game. I built both of these games through programming languages, leaving me with limited options for visual component integration.

From here I decided that if I was going to accomplish a visually involved game on my own, programming had to be removed from the equation so I could focus on storytelling. I sought out a paid add-on for Unity called Adventure Creator, which uses a visual coding system to create point-and-click style games. This solution seemed perfect for my needs as I could focus on asset creation and story development instead of trying to cover or showcase too many skills at once. The prototype I built with this toolkit was the first to include hand drawn assets scanned in to Unity and gave me enough familiarity with Adventure Creator to use it for the development of *Small Tales*.

Section 4.3 Generative Dungeon Adventure

Two larger projects lead up to the development of *Small Tales*. The first is a randomly generated text adventure developed in Processing. Through *Generative Dungeon Adventure*, I incorporated elements that created a unique experience every time a player made their way



Hail adventurer! You seem to have found yourself in the stone factory!
Following the path, you come upon a bunny and draw your sword.
You then stab the fiend.
You then encounter a stone bunny and find a key.
Recovering, you find a key.
You then encounter a stone behemoth and attempt to strike it with your sword.
Reeling, you climb a nearby scaffold.
You then encounter a ethereal cow and take a snack break.

Figure 4.2: Screenshot from Generative Dungeon Adventure

through the game. The player started the game, with the opening premise “Hail, adventurer! You seem to have found yourself _____”; where the blank was filled in with an adjective and a noun randomly selected from lists connected to the program. With every click, the player made their way through the environment till they succeeded or failed, relying on their own imagination to flesh out the written world. The game gave every player a personal adventure and instilled curiosity to push on until the game’s end. While I achieved replayability, this game lacked visual engagement beyond simply reading text.

I built *Generative Dungeon Adventure* for a creative coding class, and in presenting it to classmates they seemed to enjoy playing it. But while it’s a different scenario every time the gameplay is very passive. There is almost no player participation outside of clicking the mouse to progress through the dungeon. As a result, I decided I needed to find a way to both encourage participation from the player and a way to incorporate visuals to flesh out the world.

Section 4.4 Ravi's Sweet Adventure

In the next project, nicknamed *Ravi's Sweet Adventure*, I used a program called Twine to create a branching narrative web. The story begins with Ravi, the kindly sweets vendor who has been summoned to create an amazing feast for a village of spirits. The branches of the game are structured the very simply as I was learning the basics of using the Twine engine. The player is given four main options: investigate the swamp, jungle, cliffs, or ruins, hoping to ultimately find the ingredients for the feast by selecting the correct series of choices within each area.

Behind the scenes the game is a web of nodes, with pockets of texted attached to each other by the highlighted words on each page; creating a huge mess of the engine's interface as

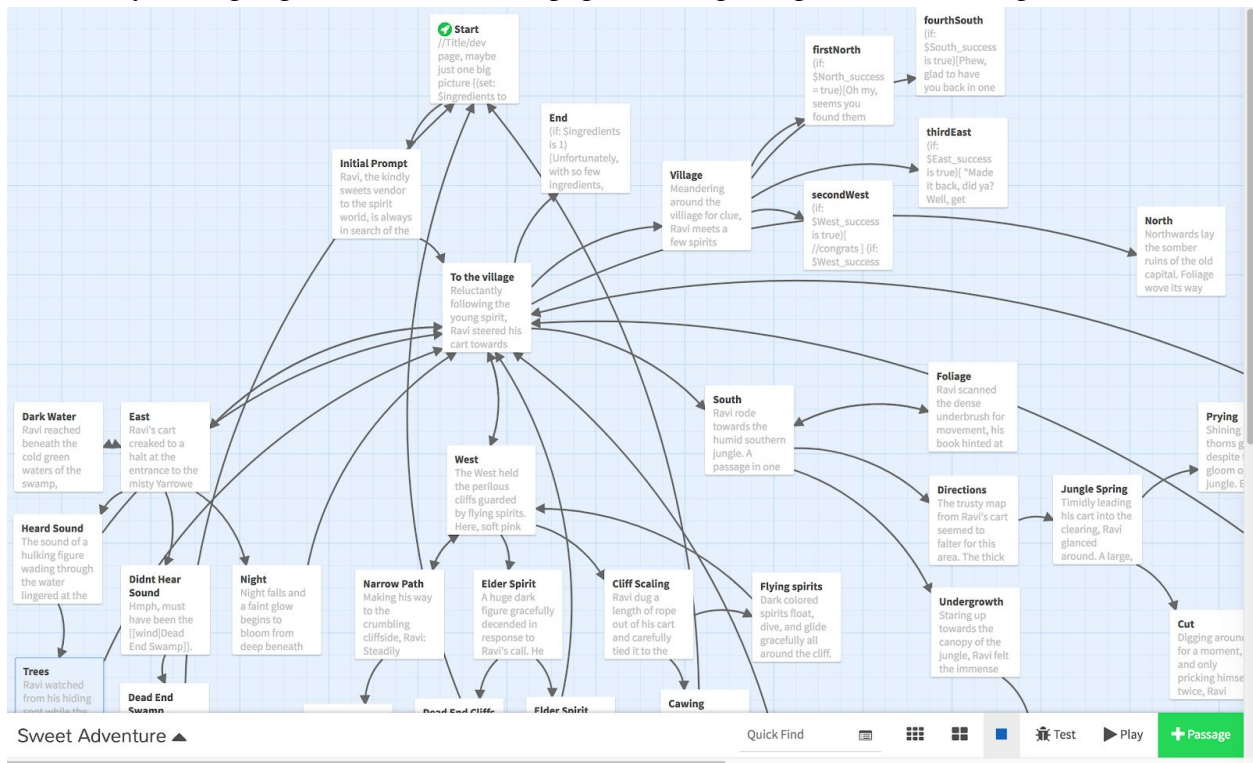


Figure 4.3: Twine's webbed node interface

the story developed. Twine did an excellent job of helping me reach my goals for player choice and consequences. Here the player could click their way through the story and even backtrack to find new solutions should Ravi meet an untimely demise. Looking back however, I think I would take away that ability to backtrack, forcing the player to commit to their decisions in the way that *Small Tales* does.

Random generation in this game wasn't really possible without getting extremely convoluted with some variables, but it did keep track of the number of ingredients gathered. I demonstrated this game in class and it was a blast seeing everyone interacting with it collectively, calling out decisions and arguing over which was the "right" answer. In *Ravi's Sweet Adventure*, the player could make decisions and follow them to their



Ravi's cart creaked to a halt at the entrance to the misty Yarrowe Swamp. His heart sank to his feet as the massive entrance yawned above him. Few who entered the swamp came back out, with all their limbs anyway. A cluttered signpost by the entrance warned of the perils a head, with old dangers crossed out and new threats nailed on top.

Moderately trustworthy rumors told of mysterious glowing berries seen at night beneath the surface of the dark, stagnant water. A suspicious spirit claimed the soft fruit tasted like honey, an ideal filling for Ravi's sticky cakes!

Stepping cautiously towards the edge of the water, Ravi:

Reached beneath the **dark water** in search of the berries.

Waited till **night** first!

Shh! Did you hear **that?**

Decided this is too risky, time to try a **different path**

Figure 4.4: Game interface in *Ravi's Sweet Adventure*

conclusion, whether they managed to get the ingredient needed for the feast or failed. Free exploration was encouraged, with easy resets back to the village should the player die on their quest. While this game was closer to my goal of incorporating player choice and storytelling, it still lacked a deeper sense of immersion, as only static images could be inserted among the sections of text.

Section 4.5 Rubedo

My first attempt with Adventure Creator, a project nicknamed *Rubedo*, was also my first attempt with hand drawn assets. While Unity is typically a 3D engine, it does support 2D games with ease by constraining an orthographic camera and using sprite based assets and animations. This game was extremely basic as I was just getting the hang of this toolkit, the player could do no more than click around on a still scene while the main character responded to their clicking on various objects. This experiment finally had the balance of visuals and text that I wanted, so I ended up hanging on to Adventure Creator for the development of *Small Tales* to see if I could achieve my other goals through this toolkit.

Small Tales

After all of these experiments and tests, I arrived at the solution that a combination of Unity, Adventure Creator, and hand drawn assets, combined with the knowledge and feedback I received from my Processing and Twine games, would best help me achieve my goals.

Adventure Creator alleviated the need for C# scripting, leaving me with the freedom to focus entirely on the art and interactions for the game. These earlier games also helped me settle on a narrative for *Small Tales*.

To achieve my goal of replayability via randomized generation, the game has 3 different endings, but with only a 70% chance for each artifact to spawn, the player will have to continue



to explore and investigate the world to find all of the vignettes. And even then, they always have the option to not pick up the artifacts they find and ultimately change their game's ending.

Small Tales is designed for a younger audience, as apparent in the age of the main character, about 10 to 12 years old. You, the player, start off in a new home, as indicated by one of the quips of the main character if you

click on the house. But you're then left completely alone, without any instruction and total freedom to explore the neighborhood. I felt this would best encourage the player to investigate every page of the world.

The artifacts may or may not appear, but if you choose to pick one up, a mysterious purple ooze leaks out to corrupt the grass the object was lying in. The player character offers no explanation for this, leaving the player to contemplate the consequences of their choice to tamper with the environment.

Figure 5.1: *Unnamed main character of Small Tales*

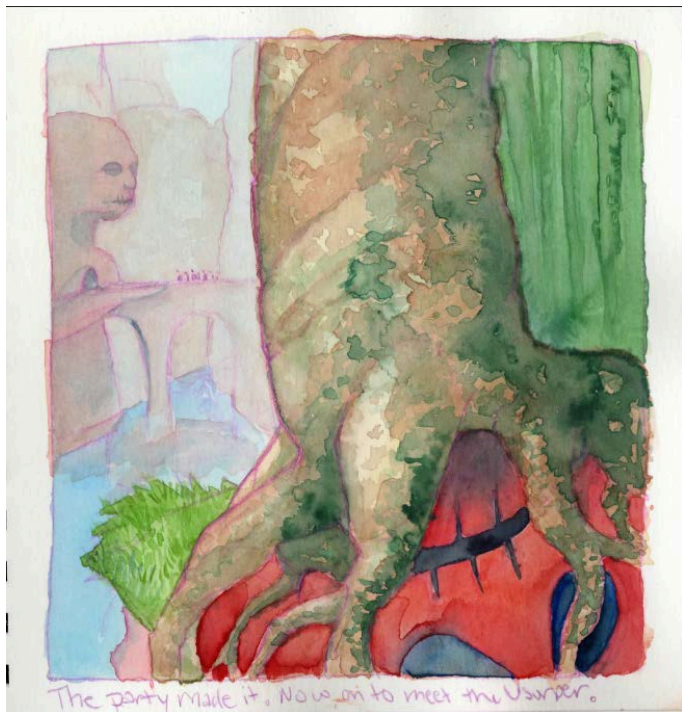
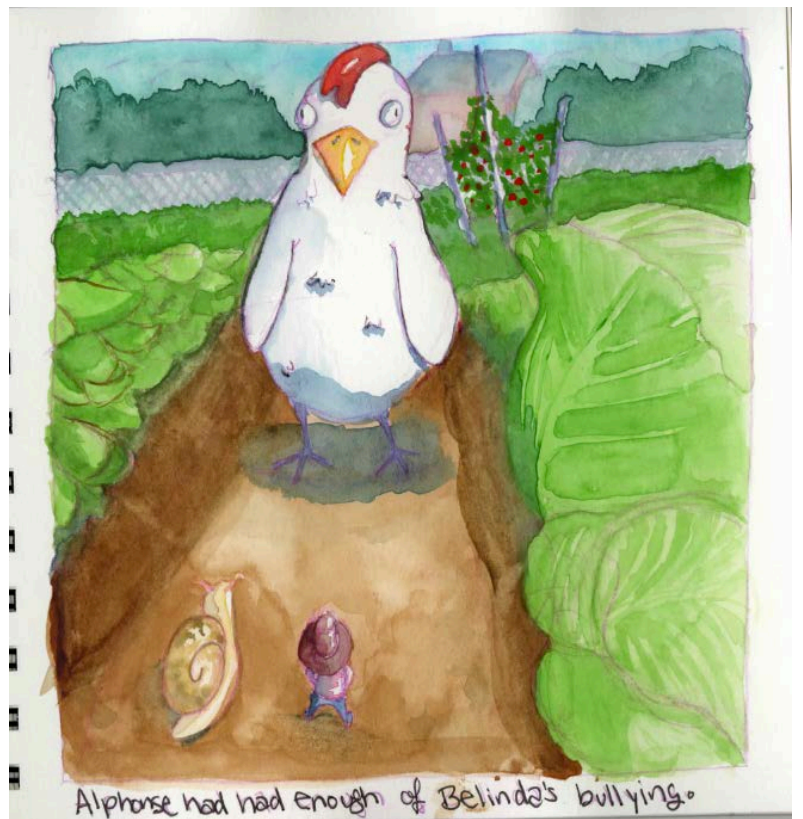
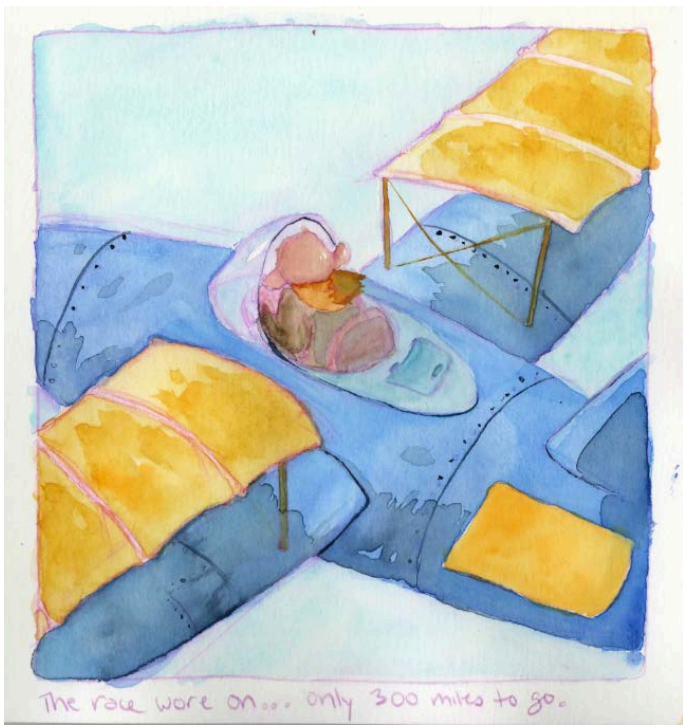


Figure 5.2 : The original sketchbook images of the vignettes

There are three endings to the game, all based on how the player chose to interact with the (up to 5) artifacts. Should the player choose to pick up none of them, not much happens when they reach the museum and decide to go inside. Should the player pick up one to four of the objects, the curator appears in museum, scoffing and the players inability to gather all 5, but allowing them to investigate just “their favorite” of the objects to receive their vignette. Finding all 5 earns mild interest from the curator, and the ability to watch all 5 of the vignettes in the ending sequence before the game resets.

Process



Figure 6.1: First iteration of *Small Tales* formatting/ backgrounds

The very first iteration of *Small Tales* incorporated an isometric, top-down view of the environment in order to evoke nostalgia after older Nintendo GameBoy games like Pokémon. While this view captured aspects of nostalgia, it revealed so much of the environment and made the main character quite small, removing the connection between the player and the character and

dissuading the level of exploration I sought to encourage. As a result, the perspective of the game switched to a frontal, side-scrolling 2D view more in line with typical point and click style games. With this camera angle, the player could only see the environment directly surrounding the now-larger main character. In hiding the rest of a detailed environment, the player is encouraged to explore from scene to scene and click around on objects to trigger their interactions.

Creating the final look of Small Tales took a variety of steps and techniques in both traditional and digital media. Pencil linework and watercolors were used to maintain the familiar, crafted look for the game. After drawing out a huge grid of nine squares, each square was given a distinguishing landscape feature and a specific interaction for that feature. Afterwards, the nine locations on the grid were drawn again as thumbnails; small guides for the final iteration. The final, full scale iteration of the background broke down into three parts: pencil lines, inking, and final trace. Because the watercolor paper is slightly unusually sized, the pencil lines and inking were done on similar, lower quality paper. The finished, inked version was then transferred to high quality watercolor paper through the use of a lightbox, pencil, and patience. With the pencil lines on the final paper, watercolors were used to develop the background.



Figure 6.2: *Unedited, scanned background drawing*

Next came the most important step, scanning. Scanning of each background happens twice; once with the lines alone, and again after being painted. The painting process dilutes the graphite line work; to remedy this, the scanned lines are laid over the finished painting in Photoshop to re-emphasize them. After several rounds of testing scanning with the pencil lines alone, 300 dots per inch (dpi) seemed the most appropriate level of resolution for this project.

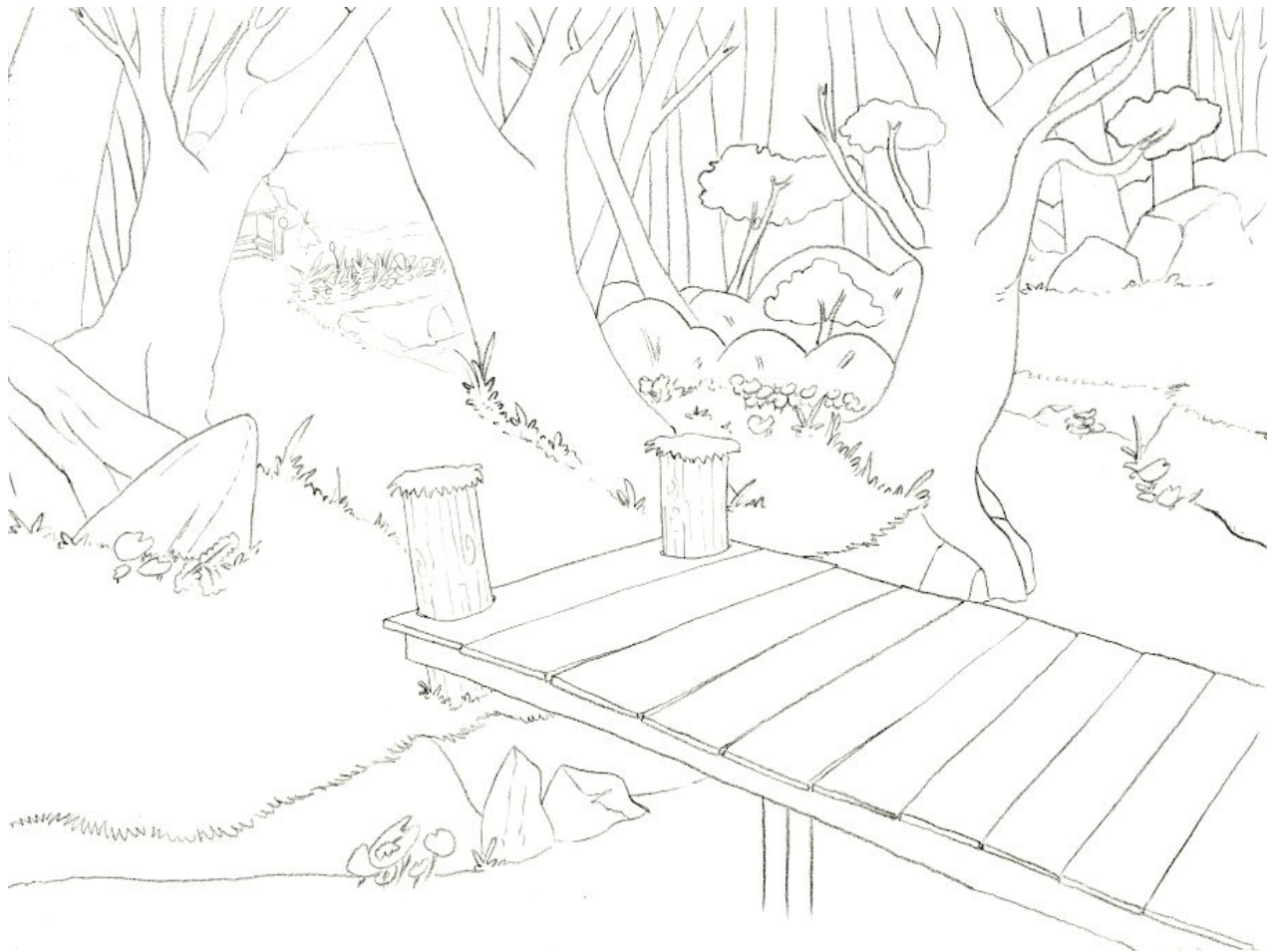


Figure 6.3: Edited background drawing, cropped and lines blackened

At 96 dpi, just above the recommended level for screen resolution, the scanner could not capture the the tooth or color of the paper and began to pixelate upon trying to scale up the image. The document weighed in at 643 kB, ideal in terms of file size, but the setbacks in resolution lead me to try a higher dpi. At 300 dpi, on par with the recommended dpi for printing documents, the scanner could capture the tooth but not the color of the paper, perfect for isolating just the linework from the pencil file and later maintaining the color of the painted file.

This file held up after scaling up several times and weighed 6.6 mB, not an ideal weight but not too heavy of a file size either. At 600 dpi, a final test to see what an outrageously high dpi would provide, captured perfectly the line work and the color of the paper but with so much resolution, keying out the paper color later proved difficult. While the 600 dpi file was beautiful, it weighed 26.1 mB, far too heavy for an image file and could potentially slow down the scene changes within the finished game.

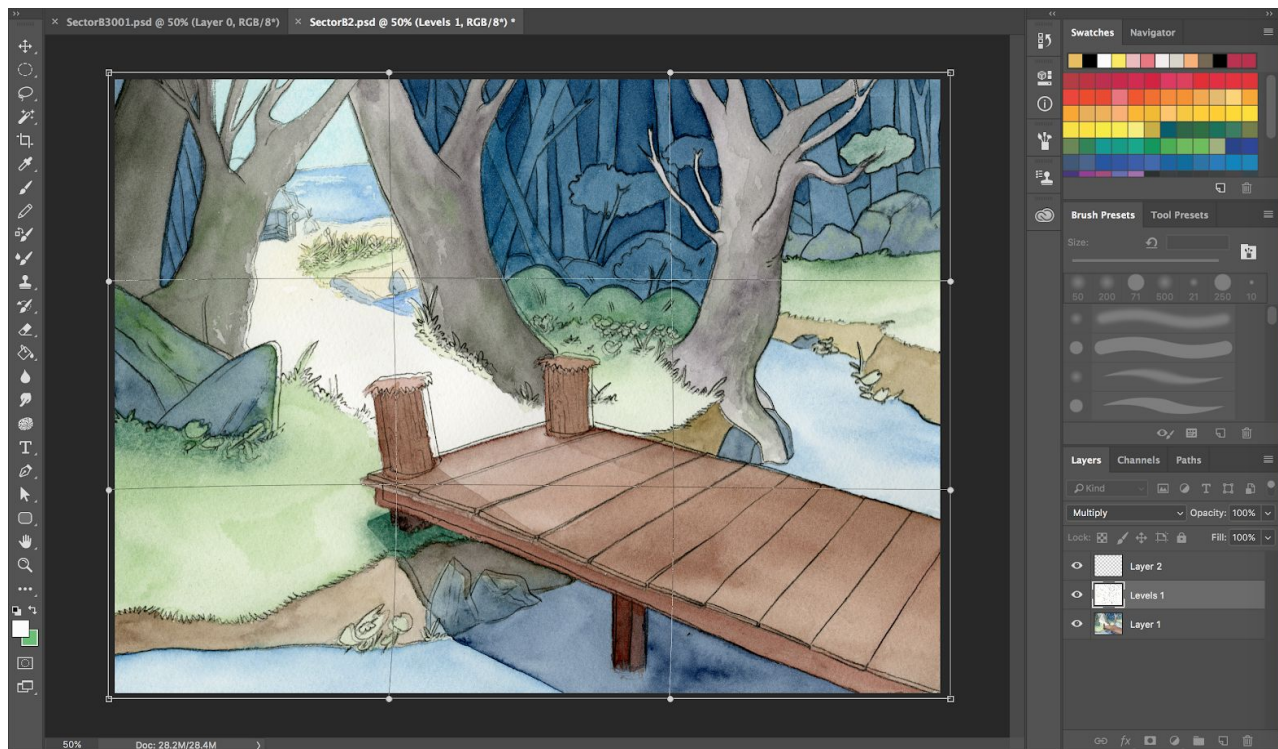


Figure 6.4: Photoshop interface; adjusting the linework back on top of the painted image

With all of the traditional work pipeline complete, the line file and the painting file for each background were brought into Photoshop. With this technique borrowed from artist Mateusz Urbanowicz, the careful pencil line work can be laid over the finished painting to create clean and dark outlines. Because the paper warps after being painted with watercolors, this step required careful realignment and stretching in Photoshop with the warp tool to match the scanned linework up to the painted scene again, but the result helped to emphasize the contrast in the scene and maintain the hand drawn look of the game world.



Figure 6.5: Completed image with the lines overlaid properly

With the assets and backgrounds prepared, I brought them into Unity and arranged them appropriately. Within Unity, Adventure Creator functioned as a visual coding aid. This toolkit as greatly abbreviated the amount of extraneous coding necessary so focus was placed almost exclusively on making asset art and organizing interactions for the player. In addition to the option for hard scripting, Adventure Creator has “action lists” that act as a kind of node based scripting system and I can look at these systems in a web-like or a linear fashion depending on what best visualizes the sequence. A series of actions that need to happen based on when in the game the player is can be organized with this system. The web in this figure controls what happens when the player picks up one of the artifacts in a scene, provided the artifact spawns. In this action list, I have a series of parameters, empty variables that game objects and other tools can be plugged into later.

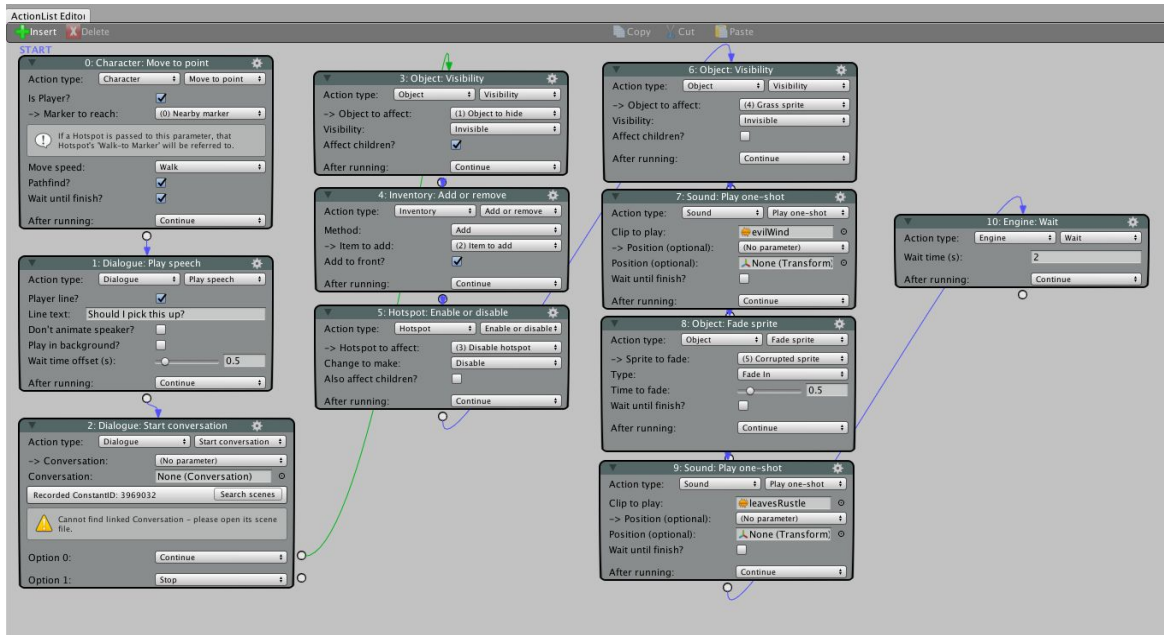


Figure 6.6: Webbed node interface for an Action List in Adventure Creator

After attaching this action list to one of the artifacts, I can plug in the appropriate parameters, like which of the corrupted grass sprites to spawn, the hotspot that needs to be disabled, and the artifact to be added to the inventory. This process saves me from having to write out this web for every single artifact. Instead, the game can call and run this action list. While there was definitely a learning curve in terms of finding where and what you need to manipulate to get the results needed in Adventure Creator. But visual coding helped speed up the whole process of designing interactions for the game smoothly.

Conclusion

Section 7.1 Future Plans for Small Tales

Moving forward with *Small Tales*, I'd like to incorporate some of the more constructive feedback from players. The inventory could be better improved to show either constantly during the game or while the mouse hovers over a corner of the screen. Another suggestion that I

definitely plan to implement includes a brief zoom-in or cutaway when the player first gets to interact with the artifacts they pick up. This would give the player some insight as the main character observes something like “Oh? This one is made of ____” where the blank could be filled in with a material related to the story the artifact triggers in the ending of the game. I also plan to make *Small Tales* available online through a platform like itch.io and seek out festivals to display it to make the game accessible to the general public.

Section 7.2 Reception of Small Tales

While showcasing *Small Tales* during my defense, I received some excellent feedback from people trying the game. Players loved its “ominous, ethereal, daydream-like atmosphere” and that the limited information about the main character left them wondering about the story behind the avatar. The players also felt that the world really pulled them in, I had one person say they wanted to “keep thinking these thoughts”. Players exclaiming at the end of the game said “woah, that artifact has my face”, my face, not the main character’s. Overall, *Small Tales* was very effective in creating the ambiance and storytelling I sought but some players offered more critical feedback that I plan to implement in *Small Tales* before making it available to a larger, online community.

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