

Shrine in the Woods

Rachel King | Creative Seminar II, Spring 2017 | Undergraduate Thesis Draft I

I. Project Summary

“Shrine in the Woods” is an interactive narrative piece. It uses software, narrative design, user choice, and imagery to explore ways in which these elements, along with their overall presentation, could make a person feel immersed in a story. It is designed to tell that story and lead these interactions in a powerful and minimalistic way. Through this it aims to make people feel empathy and ownership toward the narrative by allowing them to piece elements of it together themselves, and to more directly incorporate their own personal experiences into the narrative presented to them.

The narrative presents the story of a supernatural guardian - whose voice and choices are controlled by the user - and its village constituents. The villagers come to the guardian with questions and problems displayed onscreen and the user is presented with a series of choices by which to respond. Responses selected influence future events and effectively allow the user to shape the world through their interactions. The story presents a dichotomy between positive and negative involvement with the villagers. In effect, this involvement spells either growth or stagnation in their community.

This project builds on a tradition of exploring the immersive potential of storytelling through technological mediums. There is a rich history of interactive narrative and games that seek to achieve this through methods that all involve unique approaches to narrative, interactive, and visual design. I chose to build upon this foundation by employing my own combination of design choices. Namely: I implemented a state-driven narrative to provide an illusion of dynamic choice, wrote a narrative context in which progression was determined by a user’s empathetic connection (or lack of) with the story, and made distinctive visuals and audio that both provided feedback about the user’s progression through that story and provided an immersive context in which to progress.

I made this project as a tool for myself. I wanted to use it and this class as a means to explore a medium of storytelling that I haven’t attempted before. I have had peripheral experiences with game development and possess the artistic and technical knowledge to create something that married the two skillsets, so it felt like a logical forward step in my growth as an artist.

More holistically, I believe that the wellbeing of the community is inseparable from that of the self. As humans we achieve greater things through our interactions with others than we ever could independently. In the context of American cultural and political bias towards individualism, I

thought this was a meaningful message to try and convey, and narrative an effective medium for empathetically communicating that message.

In a kind of serendipity I also found this connection demonstrated as I developed this project in class. Though created for my own individual needs, I could not have taken this step as an artist without the community I found in my classmates and others in the arts department here at RPI, with their incredible kindness, generosity, and depth and diversity of experiences and knowledge. “Shrine in the Woods” is as much a story of about the value of community as it is a product of it. Nobody achieves anything alone.

II. Project Description

The story of “Shrine in the Woods” takes place at the guardian’s woodland shrine and through their stationary, limited perspective. Villagers approach the shrine with glowing offerings to ask questions or voice their troubles. Their dialogue ranges from small personal requests, to questions about the way the world works, to requests about larger scale problems they face. With each interaction the guardian is given a set of responses. Some of these responses are direct, actionable advice; others are abstract and interpretive. As the guardian responds in ways that grow the community, offerings are left on-screen at the shrine and the scene grows brighter. If the user’s choices have negative impact, the scene grows darker and stills.



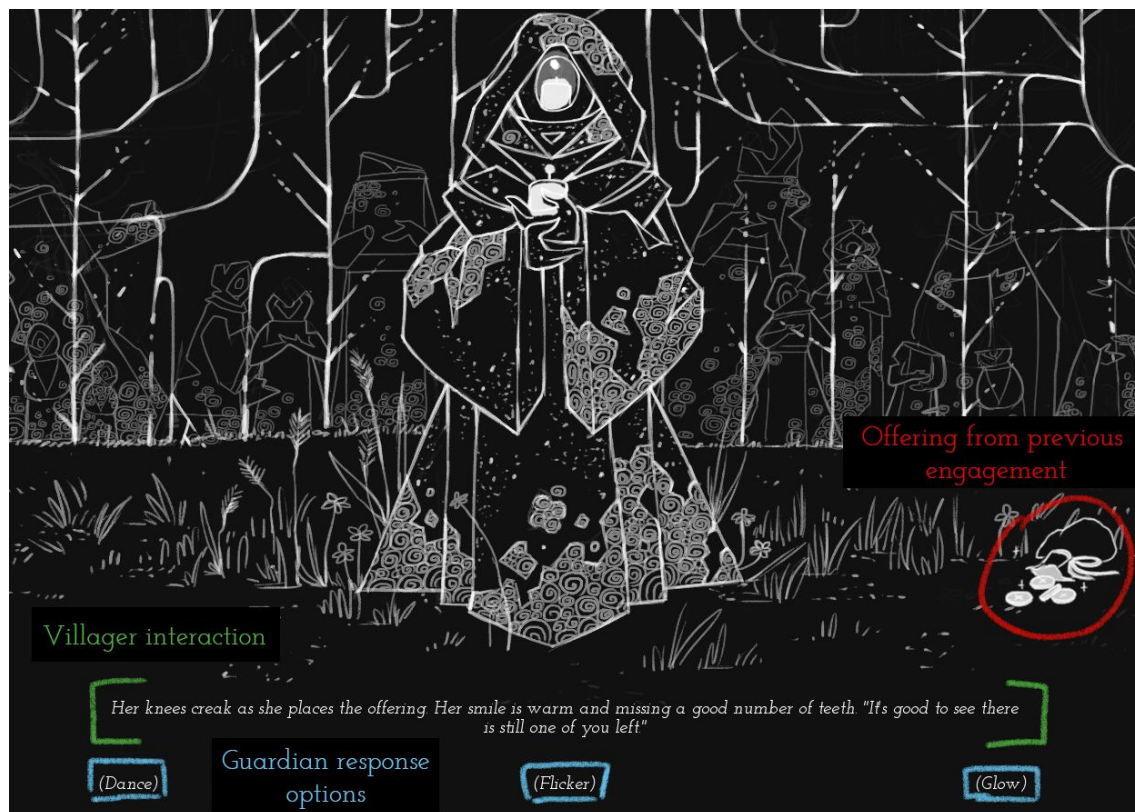
Screenshots from the piece illustrating visual contrast between involvement and separation.

A given choice’s positive or negative impact on the community isn’t always clear. In fact, a choice may add and subtract to a mixed array of states in the program and have nuanced future effects on the narrative. The story doesn’t have a set structure, but is instead composed of individual events in a pool that are drawn based on a set of state prerequisites. As a result of this

feature, the progression of the narrative is unique to a user's combination and ordering of choices, and can feel dynamic and reactive to their decisions as they progress.

There are three state variables that the story operates on. These variables are essentially tallied values in the background of the program that are added to and subtracted from with each selected choice. A higher number in a given state denotes a more positive or involved relationship. The variables respectively represent in abstract three different relationships that the community holds: their relationship with the environment, with other members of their community, and with people or forces operating outside their community. As such the states are titled Environment, Community, and Outsiders respectively.

Each interaction with a villager begins when they present a request and their dialogue and the guardian's subsequent available responses are displayed onscreen. It ends when the user selects a response, at which point the program adds the response's results to the state variables and displays their effects. If the three variables are increased overall (when summed), an animated offering shows up on-screen, left behind by the villager, and the screen brightens by a set amount. If they are decreased, an offering is removed from the screen and it darkens by a set amount. The dimness and decrease in offerings represents a villager's mistrust in the guardian, and a manifestation of their growing negative relationship.



Screenshot depicting the game display.

The dialogue fades into view with each presented story event. The speed of the fade is determined by the state variables; as they increase, events are displayed more quickly. This is representative of the frequency and ease with which villagers approach their guardian when trust has been built in their community. In contrast, as a social divide grows between the guardian and villagers, they visit less frequently, and time between the appearance of dialogue onscreen grows.

Each offering left behind is a source of light in the scene presented to the user. As more offerings are left at the shrine, the forest becomes brighter. Each offering is also a source of sound, and when on-screen this sound is looped indefinitely. The sounds are percussive - rattles, bells, and chimes. Each is small individually, but as offerings collect at the guardian's base they resonate as a group in a lively, cacophonous symphony. This is an added dimension to the growth and stillness dichotomy presented by the imagery and narrative design.



Various offerings a villager might leave at the shrine.

There are two end states that can be reached in the narrative. One is reached when the guardian grows with the community - when the state variables have reached an upper threshold. The scene is filled with noise and the screen becomes so light that it is difficult to read the text. This, in abstract, represents the guardian merging with the community. The other end state represents the guardian becoming separated from the community and no longer being visited by villagers. The scene is still, empty, and silent, and the user is presented with a final interaction that will restart the program. This is reached when the state variables reach a lower threshold.

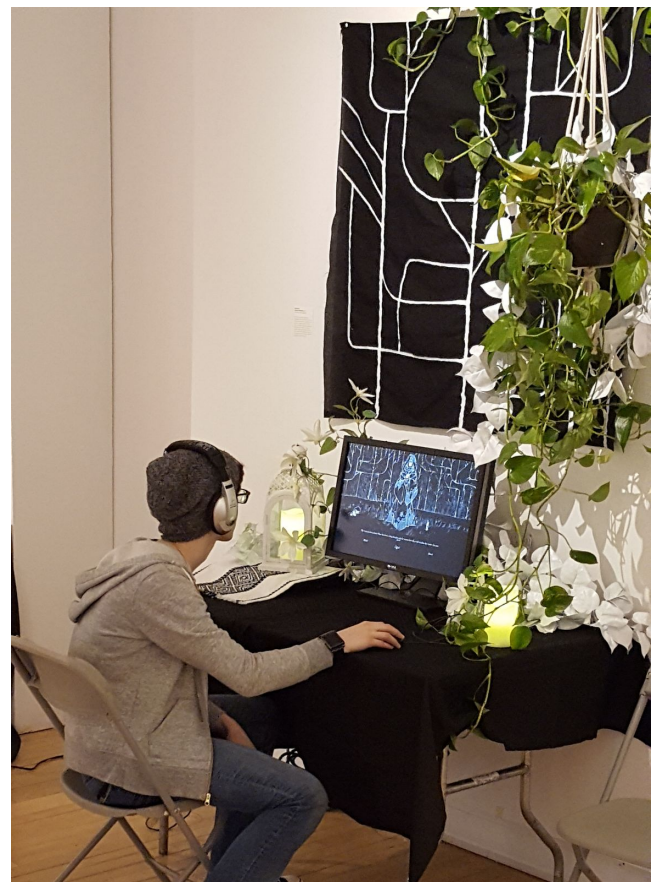
The scene in "Shrine in the Woods" both establishes the setting and provides visual context to the user as they compose the narrative. It is visually geometric and uses a minimalistic shape vocabulary and flattened perspective to mimic the style used in old books and illuminated manuscripts. This is to draw a visual connection to folklore and traditional storytelling that suits the narrative and establishes the setting. Trees in the background of the woodland shrine are composed of networked lines inspired by leaf venation and an invented language using these shapes to tell stories that I created for another class. Though they don't transcribe explicit meaning in this image, they build upon that consistent shape vocabulary and represent an encoding of meaning and a small cultural detail about the village. This consistency is also mimicked in the offerings and statue, which have recurrent themes of ellipses and light. Beyond the trees the user

can see the forest filled with other statues like the one they inhabit as the guardian. These statues look similar but are unlit and fractured. They mean to represent other supernatural entities that were unable to connect with the village and been made empty through neglect and lack of faith. This serves as another established world detail for the narrative setting as well as a subtle foreshadowed warning to the user.



A closeup screenshot of statue details in the background image.

This piece's space in the gallery exhibition also made use of this self-consistent imagery to draw a sense of place out of the monitor and into the gallery space. I painted a tapestry to mimic the linear tree/language structures and pinned it behind the monitor. I also hung a plant and draped it around the table, and filled that table with fake candles and flowers that mimicked village offerings present in the program. To better facilitate a visual connection between the live, green plant and its minimalistic black and white counterparts in the game, I also interspersed white, spray painted fake plants with the real one. Together these visual elements created their own, real-life "shrine" that



the user immersed themselves in in order to interact with the story.

The villager dialogue and presented responses are abstract, declarative, and poetic. This allows meaningful imagery and context to be communicated in short phrases and mimics the layered and folkloric style conveyed by the visual elements of the piece. This encourages the user to read into and think deeply about their own interpretations of the presented text and compounds their ability to interpret and piece together elements of the story themselves. In effect, it is another design choice that functions to create a unique and involved story experience for readers.

In order to piece all these elements together in an interactive way I wrote a Python program to display text and images, manage the story and state variables, and take user input to the system. The program uses an open source UI and game development framework called Kivy. Kivy supported a lot of the basic functions I needed to build this project in a streamlined way - text scalability, object placement, and an event-driven system for interactivity are just a few of these. Though the in-depth technical details don't necessarily lend themselves directly to the artistic meaning of the project, they are an important part of its manifestation and of the learning experience I am taking away from it. They are also essential to the medium and methods I chose - without the solution-building capabilities of code, I would have created a narrative piece that looked and behaved very differently.

Writing this in the Kivy framework and in Python specifically also allowed for a lot of rapid iterations and development of different design elements. I was able to put together effective mockups for class with different visual assets-in-progress and make quick edits based on feedback. With Python I was able to use the XLRD library to read story elements from an excel spreadsheet turned makeshift data parsing table, for example. This allowed me to make changes to the spreadsheet when I wanted to work on the narrative or adjust prerequisites or other small elements without having to look through or edit working code. Kivy's multi-platform functionality also allowed me to easily arrange scalable, consistent visual attributes like font, text placement, and interactive visuals (the background lightness, for example) without having to worry about the system running or displaying it. This was particularly valuable when adapting Shrine in the Woods for our gallery space.

III. Resources and Inspiration

- Branching vs state narrative (EW discussion)
- Visual design/influences
 - visual poetics
 - Sacred geometry/procedural goetia
- Minimalism and choice as elements of empathetic/individual narrative construction (Coley+IN resources)
- Audio

IV. Reflections

Conceptualization for this project involved a lot of input and shared knowledge from others in the RPI arts community. In addition to feedback from my peers and professors in class, I was able to discuss my project with my project mentor, professor Pat Search. She gave me incredible feedback, took time away from her busy schedule to meet and discuss ideas with me, and invited me to join her Visual Poetics and Narrative class. In that class (and with that class' feedback as well) I was able to work on my conceptualization of the project as a whole as well as different discrete elements such as the leaf-inspired language element of my drawings.

Professor Search and Professor Gordon got me in contact with a number of graduate students in the humanities department as well. From their individual areas of study I was also able to get information to weigh in on my project ideas. This communication was one of the most valuable learning experiences of the project and was a privilege of being a part of this institution and unique artistic community. I spoke with Jason Coley about interaction design, Eric Walsh about his own work with state-driven interactive narrative and research, and with Lorelei Wagner about her knowledge of folklore and religion as well as her narrative expertise. All three of these students also gave me valuable input on my ideas and invaluable knowledge that I could use to further my own research and development for this project, and for future endeavors in interactive storytelling.

The development of my initial ideas for "Shrine in the Woods" was an iterative process. I was initially inspired by procedural systems of storytelling and worldbuilding, and thought about creating a program of a much larger and much less personal scale. I also considered the merit of procedural visualization. Classmates suggested different methods of interactivity as well - something that approached a village building simulation, for example. All of this input was valuable and was combined with insight, research, and meaningful conversation to become the project it is today. The most valuable and concrete concept development took place towards the end of the semester, when I first attempted to combine all of these ideas and figuring out how they might work together in material realization. I devised what I thought would be the most effective model in

terms of using this project as a learning tool to delve into reaching others via interactive storytelling given the scope of my time and abilities.

Through working on “Shrine in the Woods” I learned a lot firsthand about the design and creation work that goes into this kind of project, as well as its value and unique attributes as a storytelling tool. Software design, for example, is not inseparable from the driving artistic theory behind a project. I tried to stray from binaries in the state variables for example. I did not want the effect of a user’s choices to be a binary good or bad, but rather a more nuanced reading of personal investment.

I received valuable feedback from gallery attendees about their experiences with the piece as well. Many found the visuals to be compelling and were interested in the detail and geometry and the story told in that composition. I also had a few different interpretations of the story based on how different attendees read into the story. One user, for example, felt like as the guardian they were witnessing the birth of a civilization and providing foundational myths for the culture and community. This was not the specific scenario I had in my own mind when writing for “Shrine in the Woods”, but it is exactly the kind of personal, invested combination of its visual and narrative elements that I had hoped to foster through my design.

In developing this piece I also gained a lot of confidence in my ability to independently solve technical problems, and to adapt to new tools. The programming framework I used was not one I had prior experience with, nor was I familiar with the workflow embedded in its design (that associated with UI programming.) I was able to teach myself these to effectively make a finished product. I was also able to troubleshoot and apply the theoretical knowledge granted to me by my technical coursework to understand the subtler design elements of both Kivy and the Python language to troubleshoot problems and invent their solutions. This gave me a lot of faith in being able to create new things like this in the future, and to apply these skills in the professional workplace.

It was also a self-actualizing experience to combine my technical and artistic skills in a single project in a way that made both more effective than they were independently. Rather than it being a detriment to my skillset to have split my attention between these two fields, I realized that my knowledge affords me a unique opportunity to create artistic space. I realized also that this opportunity warrants further exploration, using what I’ve learned here as a stepping stone on which to continue moving forward.

With time, now that this project and my undergraduate degree have both been completed, I would like to keep using these tools to create narrative, and to explore more how interactivity intersects with empathy and immersion as storytelling tools. It would be useful to make other small-scope, iterative pieces like Shrine in the Woods to test different methodologies. There may be value in creating interaction “vignettes” and animated illustrations to convey place, character, and

narrative in a way that is facilitated by technical tools (like those afforded to me by my computer science background.)

If I were to return to “Shrine in the Woods” in the future, there is certainly a lot of space to grow with it. There are a handful of technical fixes I would like to make - fixing transitions to either state ending and making the background and offerings imagery more scalable and consistent on different devices are just two. I would also like to add more story elements, and experiment more with their prerequisites and “light ordering” to see if there’s potentially a more constructed way to guide the narrative for different emotional effect. I would also like to fix the endings, as neither feels like it has a real sense of closure or complete explanation of everything involved (though perhaps, as I saw in feedback during the exhibition, this is a strength.)

I also received valuable suggestions from faculty about visual and audio tweaks that could be interesting to touch upon in this project or others that iterate from it. There are ways in which I could animate background elements in the image and add small interactivity to the visuals in ways that might make them feel more immersive or highlight different elements (the text, background details, etc.) I could also, rather than having a “symphony” composed by random sounds, create small, looping musical phrases that synergize and influence the aural experience in a more deliberate way.

V. Bibliography

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Possible Narrative Stylistic Influences:

Kerren McAdden - specific details and mood of her poetry (*Landscape with Plywood Silhouettes*)

Margaret Atwood - specific details and flow of her writing. *Year of the Flood* also has parables from an authored religion that mimic a more folkloric style of storytelling, for reference. (*Year of the Flood*, *Handmaid's Tale*, etc.)

Visual Influences and Resources:

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Audio Resources:

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