

# Design of a Narrative Implemented as an Interactive Audiobook

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## ABSTRACT

This paper designs a narrative in a vector based interactive structure, with optional side branches and two endings. The narrative will be implemented as an interactive internal ontological audiobook, using the Unity3D engine's extension Fungus as a tool for building the story branches and the UI (User Interface). The narrative is also capable of being implemented in a 3D virtual environment.

## Keywords

Narrative Design, Narrative Immersion, Narrative Intelligibility, Interactive Audiobook

## 1. INTRODUCTION

The *empathic puzzler* genre [1] is taking the way we play games to a new dimension. The genre removes conventional gameplay elements and focuses on the user being rewarded with story pieces, that through the progress creates a holistic comprehension of the story, and let the user build up an empathic relationship to the characters within the storyworld.



Figure 1. In-game screenshot from *Dear Esther*

The explorative first person perspective game *Dear Esther* (The Chinese Room, 2012), is a game that stands out from normal conventional games, and utilizes the *empathic puzzler* genre in a high degree. The story is of a castaway on a remote island, delivered through florid monologue pieces in past and present tense, which as you progress, draws a picture of the islands history and Esther, whose identity will become clearer as time goes on. As player, you actually don't do anything, as you are merely guiding the protagonist around on the island and puzzling the pieces of monologue together to a whole. Most gameplay elements, such as interaction with objects and jumping, are eliminated, and the game relies solely on the astonishing and highly detailed visual

environment, and the sumptuous and disconnected prose of spoken lines by the protagonist. Similar games such as *Firewatch* (Campo Santo, 2016) and *That Dragon, Cancer* (Numinous Games, 2016), both relies on a strong and personal story, with themes such as loss and solitude and are seen and told from a first person perspective.

The *empathic puzzler* genre and the game *Dear Esther*, provide the main basis for our inspiration and the remediation in creating and designing the narrative. Furthermore the narrative is designed for the author's semester project report, with the intention of measuring the impact of a interactive voice-over monologue in a virtual environment.

In the process of designing and implementing the narrative, we look into the design considerations of themes and premise, story and discourse, interactivity type and structure, narrative immersion and narrative intelligibility. Lastly, we will go through the implementation of the recorded and mixed audio and the build of the interactive audiobook in Unity3D.

## 2. MAIN DESIGN CONSIDERATIONS

### 2.1 Themes and Premise

As we wanted the narrative to appear emotionally strong, we were inspired by the genre and the game mentioned in the introduction. With their heavy themes such as, loss of loved ones and solitude, we also looked at Martin Scorsese's premise of the movie *Shutter Island* (Paramount Pictures, 2010). The movie is about a U.S Marshal that investigates the disappearance of a murderess who escaped from a hospital for the criminally insane located on a remote island with a lighthouse. There are many theories on how the movie should be interpreted, one of them is, that the character of the U.S Marshal has admitted to be a patient and that he has killed his wife. Though he cannot carry the sorrow and the knowledge, so he chose to act as another person who can get the lobotomy, and thereby forget his past and sins. As he says: "Which would be worse: to live as a monster or to die as a good man?". This is the premise of the movie - he would rather die as a good man, then to live as the monster, he feels his action have made him.

This inspired us to base our narrative on the premise of the movie, which will be elaborated through the following sections. It also inspired us to use the themes amnesia and life versus death. With the same environment from the game *Dear Esther* and *Shutter Island*, we used the lighthouse, island and surrounding ocean, which all are linked to a strong symbolism and emotional

resonance, such as spiritual strength and emotional guidance, when we are lost in a sea of inner turmoil<sup>1</sup>.

## 2.2 The Story

*Pitch: A male lighthouse keeper living in solitude and his routines in a lighthouse on an desolate island, is one night called upon his dead wife's spirit. He has suppressed what has happened to her, and he starts to recall her. As he explores around the premises, he discovers two versions of the truth of what happened to her - his own and his wife's. In the end he redeems himself as a settlement of peace within himself, or with his wife.*

The story existence evolves around the male character, who lives as a hermit in a lighthouse on a island. The spirit of the wife is merely just a part of the environment and has no apparent character role other than in the male character's mind. The main story events happening is the calling of the woman spirit, the recall of two versions of truth, and his the settlement of peace in the end.

## 2.3 Interactivity and Structure

We have chosen Ryan's [2] interactive category of the *internal-ontological*, which is the most common used in first person perspective and adventure game narratives, where the system creates a storyworld in which the user impersonates an individuated member of this world. *Internal* interactivity meaning, when the user of an interactive text plays the role of an individuated member, while *ontological* interactivity allowing the user to cause explorative action that brings lasting changes to the story.

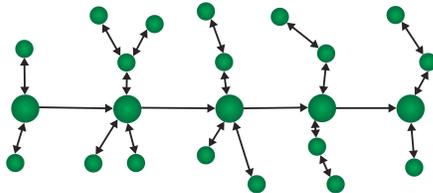


Figure 2. The vector structure with optional side branches.

The interactive structure is based on the *vector structure with optional side branches* [2]. It preserves the linearity of its temporal structure, meaning that the user can casually progress, and meanwhile having the option to explore additional elements related to the linear story - all happening in the users own pace. In addition, we have added two optional endings to the structure.

## 2.4 The Story Discourse

The plot is a causal and logical structure, which creates a connectivity between events and is part of the story's discourse [3] - how the story is presented. We have build up the chapter's in three days. The first day is his daily routine, the second day is the calling of his wife's spirit, and the third day is the recall of his memories, followed by the two endings leading to his redemption.

<sup>1</sup><http://www.aseekersthoughts.com/2010/01/lighthouse-as-symbol.html>

The story is told through the narration of the male lighthouse keeper. In other words, it is a interior monologue, told as an “I” teller which verbally “paints the picture” of the spatial environment. In the monologue, the one who speaks (the narrative voice), as Lethbridge and Mildorf describes as an overt homodiegetic-autodiegetic narrator [4]. Overt, as he makes his opinions heard, homodiegetic as he is the character of the story, and autodiegetic as he is also the protagonist of the story. The monologue is in both past tense and present tense, also called *tense switch*. The past tense is when we hear the man character's thoughts, trying to recall the memories of the wife. The present tense, is when he speaks out loud to himself. The diction (the choice and use of words) in the monologue, are over-romantic, deep and broody, sometimes even towards the abstract. The syntax (structure of sentences) are concrete short sentences, e.g. when main character is commenting on an empty picture frame: “*Just a frame. No motive. Why? Who was in that picture?*”. With concise sentences, followed by a period, the pause makes them stand out, letting the user dwell for a moment on the empty frame, reflecting over why it is empty and who might have been in it.

The story contains some long monologue pieces (see example below), making the time sort of slow down, experimenting with the solitude the man character feel. But to maintain suspense, and to progress the story, we have made the time jump between the chapters, which helps to tighten the plot (Figure 3).

Example of long piece of monologue:

*Madeleine. How could I forget you? To see you there, elegantly dancing and flirting with the camera. So graceful. I remember you. I shot these footage. You and me. Us. Joyful and innocent. We who once were. I remember something happened. Did you get distant? Yes. You got lost in your dreams. Lost in a web of dreary thoughts. Your eyes turning dull, bleak and lifeless. That fateful night. You just gave up. I woke up with your bedside cold. I followed your shadow up to the lighthouse and I saw you leap to your death. The sea took you away from me. How could I forget? Madeleine. I remember you now.*

Figure 3. Example from manuscript of time jump:

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LIGHTHOUSE ROOF, DAY
It is foggy.

VO TRIGGER:

    HP: Ahh the cool fresh breeze of the salty seawater.

LIGHT SWITCH: TRIGGER LIGHT, VO & AUDIO


    HP: I am the caretaker of this lighthouse. I've been here forever, for as long as I remember.
    This is my responsibility. I am the guiding light for everyone lost at sea. I am the caretaker!

FADE TO WHITE

CHAPTER 2
"THE DREAM"

FADE IN:

BEDROOM, NIGHT

HP wakes on bed
    
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This is an interactive narrative, and we wanted the user to have the possibility to choose the character's fate in the end. Thus, in the story two versions of the truth are presented, in which the user is able to choose what version to believe in: did she commit suicide, or did he murder his own wife? This leads to the optional ending of settlement of peace, as either life or death. If the user believes the first truth, that she committed suicide, the most obvious choice would fall on the life choice, the character of the man will keep on living and move on. On the other hand if the user believes in the second truth, that he murdered his own wife, the obvious choice would be death. Him committing his own suicide and joining his wife in death as a settlement of peace.

Here we can elaborate on the premise of our narrative taken from *Shutter Island*: “Would you rather live being guilty and lonely, or die in peace and forgiveness?”. We let it be the choice of the user.

The title we have given the narrative: “Remember Madeleine”, comes from Marcel Proust’s *Madeleine effect*, that depends on the coincidental subjective resonance of a text or a single word, that can trigger a subjective stroll down memory lane. The combined “Remember Madeleine” part should instantly tell the user, what this story is about, as in “I must remember not to forget Madeleine” or “Who is Madeleine? I want to remember.”

With the story discourse in place, we can elaborate on the main story in the three chapters and the two optional endings, as outlined below:

*Chapter 1 – The Routine*

*On a small desolate island a lonely lighthouse keeper wakes up one morning and starts doing his daily routines. During his*

*routine, he discovers a empty picture frame and a locked cellar door. The chapter ends when he has turned on the light in the lighthouse.*

*Chapter 2 – The Calling*

*At night he is awoken by a calling voice of a woman spirits coming from the sea The picture frame does now have a vague silhouette of a woman. He follows the calling up to the top of the lighthouse. The spirits voice reveals itself as Madeleine.*

*Chapter 3 – The Recall*

*The next day, he finds a key to the cellar, where a film projector helps him remember, that she committed suicide. But behind the picture frame, he finds a letter from Madeleine, that blames him for her death. He gets confused – and want to redeem himself somehow.*

*Redemption Ending A*

*He believes he is the one who murdered Madeleine. So in order to redeem himself and a settlement of peace with Madeleine – he commits suicide by jumping out from the top of the lighthouse.*

*Redemption Ending B*

*He believes she took her own life. There was nothing he could do. So as a settlement of peace with himself, he will return to his routine, keep on living in bliss and solitude.*

Below (Figure 4) are the narrative plotted into the vector structure with side branches and two optional endings.

See the entire manuscript of the narrative in the appendix.

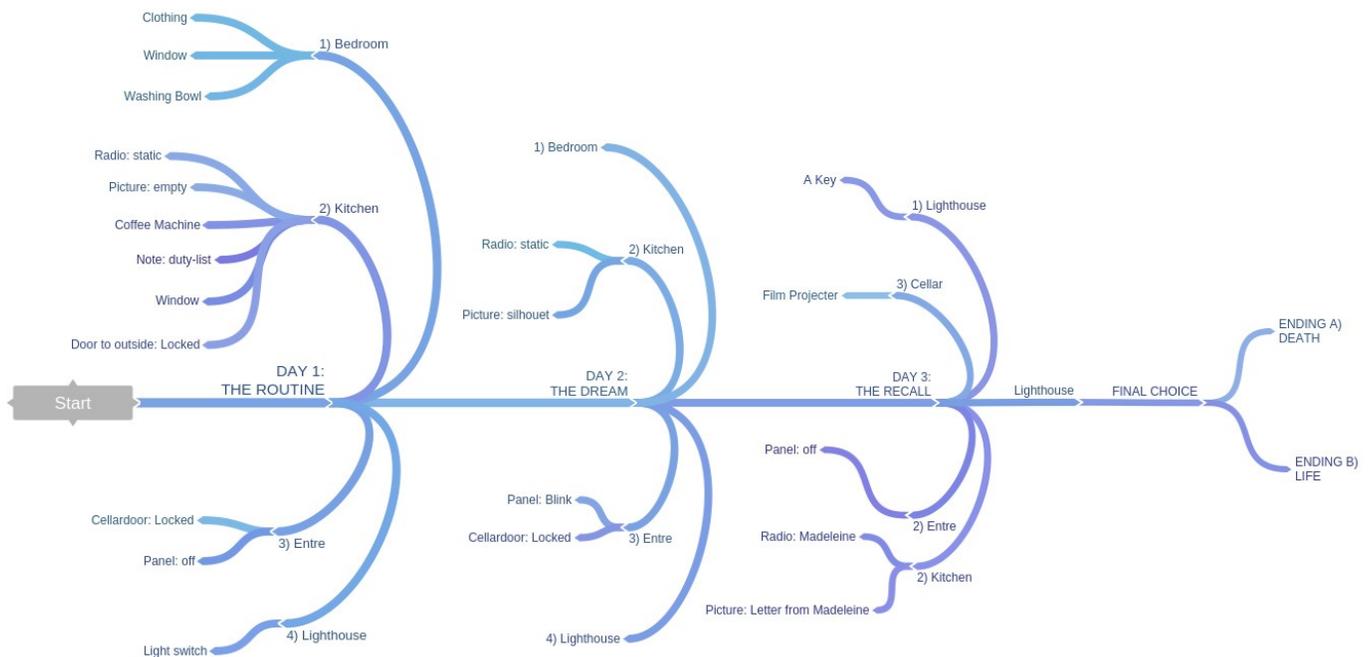


Figure 4. Narrative plotted into vector structure.

Originally, choosing ending two, would take the user to chapter one again, though the empty frame and cellar door was removed, leaving no trace of Madeleine. This chapter was set in an endless loop, a limbo, as a sort of punishment to the user and the male character's fate for not choosing the other ending. We choose not to use it, as to length of the narrative and the message might not be clear. Instead, we wrote a piece of monologue as an ending:

*Here I go. Work to forget. Putting all of my memory of her in crates with giant locks and carefully tucking them away. Far away, deep into the eternal dark abyss. I might be guilty, but I can live with it. Ignorance is bliss. Back to my duty, my routine, my solitude..*

## 2.5 Narrative Immersion

To summarize the narrative and to consider the immersive aspects of the narrative, we have used Ryan's three components of spatial, temporal and emotional immersion [2], which corresponds to the setting, plot and characters, we have created:

The response to the environment, *the spacial immersion*. The sense of place, a small desolate island, with a lighthouse, and a house with objects inside, should with the narrator's descriptions, create the (mental) model of space, here, the user is intended to imagine the surrounding oceanic environment of the small desolate island far away from any civilization.

*Temporal immersion* is the response to plot. The surprise, suspension and curiosity. The user's desire for the knowledge that awaits at the end of the narrative time. The questions we rise to temporal immersion are, what happened on this island? How did this man end up here all alone, and why is he haunted by this woman? Lastly, the mystery of who did it and what happened? Is it the woman who took her own life, or is it the man who murdered her?

*The emotional immersion* is the response to characters. Our story should provoke subjective reactions, such as some form of pity to the character, like exasperation or schadenfreude, depending on what the player believes has happened, and what final destined choice they will make for the male character at the end. As to the empathic emotion; the degree the user understands the male character's feeling of sorrow and loneliness, and the revealing of his destiny at the end.

## 2.6 Narrative Intelligibility and Closure

Based on Bruni & Baceviciute's [5] framework, we will look at the narrative intelligibility and closure, defining the relation between the goal of the system and the goal of the narrative, the level of abstractness and didascalicity, and the author-audience distance.

The intelligibility of the narrative, the understanding of the very substance of the narrative, is believed fulfilled by repeatedly using the themes of the story in the monologue and the symbolic meaning of emotional resonant environment (the ocean, island and lighthouse). By doing so, we make sure that the solitude and the emotional turbulence within the main character, are received by the

audience. As to closure of the narrative, issues can occur of incoherence, e.g. why must the man choose his destiny of life or death in the end? Maybe it would seem as an irrational choice to the audience, if the two truth-versions are not understood completely as intended. Though a successful narrative communication entails both intelligibility and closure, our narrative's outcome may lack of closure.

The goal of the system, in this case, is the mediation of the narrative, and to achieve narrative intelligibility, and as much closure as possible. Thus, goal of system and goal of narrative, merge into each other. The interactive system is intended to let the audience experience meaningful interactions, exploring the narrative elements, e.g. discovering the two truths, leading to the optional endings of the audiences own choice. Interactive narratives provide the possibility of audiences intents to be realized, the freedom of roaming freely around in the storyworld. But we as authors and designers of this narrative, have limited the audiences agency, by setting boundaries in the environment, limited choices and the forward progression of story.

As to the abstract and didascallic scale, the long passages of monologue (see 2.4), may appear too long and contain too colorful descriptions, which overall create an artistic expression. This can leave the audience towards the abstract level of the scale, as a sign of not receiving or fully comprehending the information transmitted. Our story is *not always* as it is, in contrast to Bruner [6] "the story as it is", where sharing of coding and decoding between author and audience seems perfect, here the interpretation gap of author-audience distance, may at times seem far apart.

## 3. IMPLEMENTATION

The implementation steps in creating the interactive audiobook, involved the programs Adobe Audition and the Fungus extension for Unity 3D.

### 3.1 Recording and Mixing Audio

To begin, we recorded the monologue of the male and female to wav-files, the voice-acting was done by Troels Ljung and Anne Villumsen, and recorded in a soundproof booth, with a condenser microphone. The recorded audio files was imported to Adobe Audition and mixed into monologue pieces, making it suitable for further implementation. A lower pitch effect was added to the voice of the male, making it deeper, and depending on which room he was in; the house, cellar, interior/exterior lighthouse, a reverb was added, giving it the wanted spatial effect. Audition was also used for creating the soundscape and sound effects, e.g. the ocean environment and sound effects of switches, paper, clothe etc.

### 3.2 Building the Interactive Audiobook

When all audio was prepared, the Fungus extension for Unity 3D was used for the implementation of the audio and creation of the UI (User Interface). Three *flowcharts* representing the three days of the story was created, together with a flowchart representing the StartMenu, which is executed upon application launch.

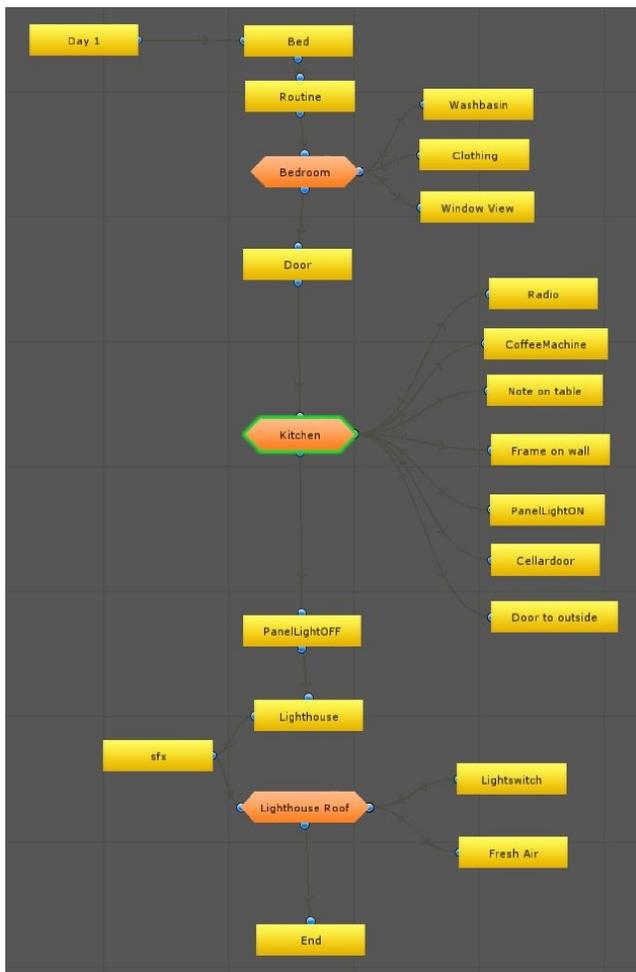


Figure 5. Example of Flowchart Day 1.

Each of the *blocks* represents a room, object, menu and/or an audio clip. E.g. the Kitchen block in Day One is shown in figure 6, which consist of menus leading to various blocks with objects: Note on Table, Radio etc. As the user clicks on a menu item an integer, in the example called MyInt2, will by the action, add 1 to the integer. When the MyInt2 reaches the value of 6, the block 'PanelLightOFF' will be called progressing the story onwards.



Figure 6. Kitchen Block.

Other functions of Fungus used is the 'Control Audio' for audio-loops, audio volume control and stop audio-loops. The more simple

function 'Play Sound' for executing monologues and sound effects. The 'Write' command is for the title "Remember Madeleine" in the StartMenu and using the 'FadeUI' function for fading out the title, when user clicks on Start. Also the 'Call' command for executing events, without apparent user interaction.



Figure 7. StartMenu Flowchart.

Once completed, a build of the audiobook was made, making it executable from desktop on a Windows PC. To get the best experience headphones is required.

#### 4. SUMMARY

By utilizing the *empathic puzzler* genre and the inspirational games, we have designed an interactive audiobook, that brings the users in proximity to the main character, by using symbolism, strong themes and overt homodiegetic-autodiegetic as narrative voice. The two truths and optional endings provide "food for thoughts", though leaning towards the abstract level of the scale, it should still awake curiosity and interest to the audience, as they can self-interpret the missing gap, at the cost of closure and didascality.

The narrative's capability of being implemented into other mediums, will be executed in the author's semester project, as we have made three conditions to measure the impact of a voice-over monologue: one implemented in a 3D Virtual Environment (VE) *with the monologue*, another only in 3D VE *with no monologue*, and thirdly as the interactive audiobook implemented in this paper.

#### REFERENCES

- [1] Heron, M. J., & Belford, P. H. (2015). All of Your Co-workers are Gone: Story, Substance, and the Empathic Puzzler. *Journal of Games Criticism*, 2(1), 1-29.
- [2] Ryan, M. L. (2015). *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media*. JHU Press.
- [3] Forster, E. M. (1927: 93f). *Aspects of the Novel*. Edward Arnold.
- [4] Lethbridge, S. & Mildorf, J.: "Basics for English Studies.". University of Tübingen & University of Stuttgart. Website updated: 2004. Reviewed 04-05-2016. <http://www2.anglistik.uni-freiburg.de/intranet/englishbasics/Discourse01.htm>.
- [5] Bruni, L. E., & Baceviciute, S. (2013). Narrative intelligibility and closure in interactive systems. In *Interactive Storytelling* (pp. 13-24). Springer International Publishing.
- [6] Bruner, J. (1991). The narrative construction of reality. *Critical inquiry*, 18(1), 1-21.