

**ELIZEBETH: The Capstone**

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## Introduction

My capstone project focused on the historical research, composition, and performance of “ELIZEBETH,” a musical I wrote about the life and legacy of Elizebeth Smith-Friedman. On March 25, 2025 I presented a staged reading of ELIZEBETH featuring ten song selections from the show totaling approximately 30 minutes of music. I completed two independent studies with Dr. Bernarducci, who advised my project. I selected which songs I wanted to include in the Staged Reading, and focused my time with Dr. Bernarducci on writing, refining and editing the songs to a “publication ready” format. The first half of the Staged reading showcases Elizebeth’s early career, her introduction to the world of cryptography at Riverbank, and the budding romance with her future husband, William Friedman. As the story unfolds, the musical delves into the couple’s separate yet intertwined journeys through war-time code breaking, the stress of secrecy, and the challenges they faced in maintaining both their professional lives and personal relationships.

## Research & Composition

### City of Exposition

In 1973, Army Historian Dr. Forrest Pogue interviewed Elizebeth Friedman on her life. He begins the interview by asking Elizebeth about how she ended up in Chicago in 1916,

Question: You took your degree in English and taught for a year and then decided you didn't want to teach any more and went to Chicago...

Answer: Yes, to look for a job.

Question: Let's pick it up from there. This is June 1916.<sup>1</sup>

Instead of beginning Elizebeth's story in Chicago, "City of Exposition" begins in a classroom. The music starts with a simple melody, one that grows and swirls as she makes up her mind to leave the life she knows behind. The first lyrics are inspired by an excerpt from her diary, written in July of 1916,

I am never quite so gleeful as when I am doing something labeled an 'ought not.' Why is it? Am I abnormal?... I don't know what it is unless it is that characteristic which makes so many people remark that I should have been born a man.<sup>2</sup>

Much of the quote remains intact, however I omitted words, and moved pieces of it around. Instead of the lines "Why is it? Am I abnormal?" I added the line "Is something wrong with me? Why can't I be..." to capture the essence of what Elizebeth was lamenting in her journal in a way that rhymed. I also chose this quote because it dives right to the core of Elizebeth's personality as a young woman, and imbues the music with a sense of her voice from the very

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<sup>1</sup>Dr. Pogue, and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>2</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman college and WWI journal. <https://archive.org/details/ElizebethFriedmanCollegeWWIJJournal/mode/2up>.

start. She mentions that people often remark that she “should have been born a man,” which is a recurring theme throughout her life as Elizebeth navigated working as a woman in a man’s world. The next part of the song is intended to feel like a stream of consciousness; Elizebeth works through her thoughts in a way that isn’t grammatically correct, but closer to the way a real person would think. “Watching my life slip by/Wondering why can’t I?” is a sentence fragment. What can’t she do? I left this moment open ended on purpose. She doesn’t know what she wants, but she knows that what she’s doing isn’t it. The next line is another question “Is this really all there is for me?” This time, she answers herself, “That can’t be.” On the word “be” the music changes suddenly.

36

E

is for me - that can't be.

W.

M.

Pno.

*mf*

$\text{♩} = 120$

The key changes from C to Eb major, and I employed the use of cluster chords to mimic the sound of car horns and the bustle of a city that would've been overwhelming to someone who was used to rural Indiana. The music remains purely instrumental from measures 40 through 53 to allow time for a set change from a classroom to a bustling city before Elizebeth comes back in, in measure 54. When she sings for the first time in Chicago, it is with the declaration “I am here.” I employed the use of anaphora, which is the repetition of a word or phrase at the

beginning of successive clauses.<sup>3</sup> I use each restatement of the phrase “I am here” to show the range of emotions Elizebeth might have felt as she entered Chicago, implying new meaning with each repetition.

When the ensemble enters, they sing the title of the song, “in the City of Exposition,” which is a play on the word “exposition.” The song itself, on a basic level, *is* exposition: it’s background information on Elizebeth’s life, and how she ends up in Chicago. Additionally, it is a reference to the Chicago World Fair, also known as “The World’s Columbian Exposition of 1893.” The Exposition, although twenty years prior to Elizebeth’s arrival in 1916, drew scores of single young women into the city, a trend which continued throughout the 20th century.

Jane Addams, the urban reformer who founded Chicago’s Hull House, wrote, “Never before in civilization have such numbers of young girls been suddenly released from the protection of the home and permitted to walk unattended upon the city streets and to work under alien roofs.”<sup>4</sup>

I play on this historical context with the lyrics the ensemble members sing, “In the city where you can be/Anything you want/ Anything you dream.”<sup>5</sup> Chicago was a world in which women could find work. Elizebeth wrote in her memoir “I went to Chicago to seek a congenial way of earning my living.”<sup>6</sup> It is not until after the ensemble sings “anything you dream” that I introduce Elizebeth’s official “I am here” motif.

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<sup>3</sup>“Anaphora Definition & Meaning.” n.d. Merriam-Webster. Accessed April 10, 2025.  
<https://www.merriam-webster.com/dictionary/anaphora>.

<sup>4</sup>Larson, Erik. 2003. *The Devil in the White City: Murder, Magic, and Madness at the Fair That Changed America*. N.p.: Penguin Random House Audio Publishing Group.

<sup>5</sup>City of Exposition

<sup>6</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography.  
<https://archive.org/details/ElizebethFriedmanPartialAutobiography>.



A motif is a short, recurring musical idea, phrase, or rhythmic pattern that can be associated with a character, place or idea.<sup>7</sup> This particular motif represents change and uncertainty for Elizebeth throughout the musical, and the corresponding melody appears on several occasions throughout. Grammatically, this line is another sentence fragment– what is clear? The thought remains unfinished. She hasn't decided yet. On the second reiteration of the motif Elizebeth states “I am here/Where is here?” immediately followed by another brief instrumental break, with cluster chords and the bustle of the city, as Elizebeth navigates where she is both literally and figuratively.

When Elizebeth went to Chicago, she was there for weeks, visiting employment agencies, and finding little to no luck.<sup>8</sup> In her unfinished autobiography, Elizebeth wrote “As an English Literature major, with heavy minors in languages and applied sciences, I was sent by an agency to the famous Newberry Library. The librarian told me that she knew of a position in Shakespearean research because of the library’s possession of a first folio.”<sup>9</sup> For the sake of time, and succinct storytelling, I excluded the employment agencies, and jumped straight to Elizebeth’s introduction to the Newberry Library. In the song, instead of an employment agent, a librarian stands on the street, advertising to onlookers that they might come in and see a copy of Shakespeare’s first folio.

<sup>7</sup>“Motif Definition & Meaning.” 2025. Merriam-Webster. <https://www.merriam-webster.com/dictionary/motif>.

<sup>8</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>9</sup>Ibid

Once Elizebeth enters the library, the music shifts once again. I strip back the chaos of the city and introduce a soft and whimsical repeating melody in the piano part. Elizebeth initially sings overtop this melody as she catches her first glimpse of the folio. In her autobiography Elizebeth describes the moment,

My first sight of an original 1632 Shakespeare folio gave me something of the feeling, I suppose, that an archaeologist has, when he suddenly realizes that he has discovered a tomb of a great pharaoh.<sup>10</sup>

Her description inspired the lyrics “I feel as though I’ve stepped into another world/something so old/something beautiful.”<sup>11</sup> This brief moment is a soliloquy, which is a dramatic device where a character speaks their thoughts aloud, often alone on stage, or regardless of who might hear, to reveal their inner feelings and motivations to the audience.<sup>12</sup> The librarian interrupts with the line “It is beautiful, isn’t it?”<sup>13</sup>

For the conversation between Elizebeth and the librarian I had to imagine what might've been said between them in a manner which still pushed the story and momentum of the song forward. In an interview conducted in 2012 by NSA cryptolinguist Virginia Valaki, Elizebeth said,

And so, when I asked her (the librarian)... if she knew of any jobs available... I was particularly interested in literature, and I would like something unusual... She said, “by the way... this Mr. Fabyan asked me if I can find somebody to work... on this cipher system in this book... and I said “Well, what does she have to do?” And she said, “Well, I

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<sup>10</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>11</sup>City of Exposition

<sup>12</sup>“Soliloquy | The Poetry Foundation.” n.d. Poetry Foundation. Accessed April 11, 2025. <https://www.poetryfoundation.org/education/glossary/soliloquy>.

<sup>13</sup>City of Exposition

don't know what he has to do, but he wants somebody to carry on some research for him.”<sup>14</sup>

Because of this interview, I made sure to include a line about Elizebeth looking for something unusual, “Yes, I’m looking for something unusual. You wouldn’t have any suggestions would you?”<sup>15</sup> In the 1976 interview with Dr. Pogue, Elizebeth also mentioned that the librarian asked, “Shall I call him up?” and I said “Well yes, I wish you would please” and she did.”<sup>16</sup> I included those lines verbatim at the end of the dialogue between Elizebeth and the Librarian.

For the final section of “City of Exposition,” I attempted to simulate Elizebeth’s description of Colonel Fabyan entering the library. “And in came this whirlwind, this storm, this huge man, and ((imitates a deep, bellowing voice here:)) his bellowing voice, you know, could be heard all over the library floor.”<sup>17</sup> I introduce part of Fabyan’s motif, with his entrance into the library, a big booming octave rumble, mimicking Fabyan’s large demeanor, personality, and voice. Fabyan’s first line in the show, is the first thing he ever said to Elizebeth,

“Will you go out to Riverbank and spend the night with me?” His very words. And I timid, little Indiana Hoosier school girl was knocked kind of breathless, I suppose... I said “Well I don’t have anything with me to go anywhere and spend the night.” And he said, “That’s alright... We’ll furnish you anything you want; anything you need, we have it. Come on!” And he just practically lifted me by one arm, you know, under one elbow and he stiffened my body so that he just carried me like that, swept me out of there and swept me into this big limousine with a driver.”<sup>18</sup>

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<sup>14</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>15</sup>City of Exposition

<sup>16</sup>Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>17</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>18</sup>Ibid



I transcribed this dialogue nearly exactly. Measures 126 through 134 are designated as a vamp, so there is time for the actor who plays Fabyan to take his time, and make as much of an entrance as desired. The vamp segues directly into the second song of the show, “Welcome to Riverbank.”

The image shows a musical score for piano accompaniment. It consists of two systems of staves. The first system is labeled '126' and the second system is labeled '132'. Both systems are marked 'Pno.' on the left. The music is in G major (one sharp) and 4/4 time. The first system (measures 126-131) shows a vamp pattern with a repeating four-note ostinato in the right hand and a bass line in the left hand. The second system (measures 132-134) shows the beginning of the 'Welcome to Riverbank' song, with the right hand playing a melody and the left hand playing a bass line.

### Welcome to Riverbank

Elizebeth described Colonel Fabyan in her memoir as a “magnanimous millionaire” who indulged “his personal whims of scientific and literary pursuits on his estate.”<sup>19</sup> In *The Woman Who Smashed Codes* Jasone Fagone wrote that she “figured out within a week or two that she was dealing with a half-crazy individual of unlimited funds and a split personality.”<sup>20</sup> Fabyan’s motif, which plays as an undercurrent throughout most of “Welcome to Riverbank” balances his two sides: the four note repeating ostinato pattern represents the whimsical-wonder of the three hundred acre estate,<sup>21</sup> whilst the baseline introduced at the end of “City of Exposition” represents Fabyan’s capricious whims and penchant for “bellowing” at people.<sup>22</sup> Elizebeth wrote, “If

<sup>19</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>20</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>21</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>22</sup>Ibid

anything displeased him, he would stand the offending person, guest, or employee up before the hell chair and literally give them hell.”<sup>23</sup>

However, the four note pattern is intended to distract. It’s busy, uptempo, and helps to build Fabyan up as a larger-than-life Willy-Wonka-esque figure. His first line of the song “Welcome to Riverbank” is a slight play on words. Because he literally whisked her away from Chicago and onto his estate, I wrote this lyric to both sound like “Welcome to Riverbank” and “Well, come to Riverbank.” The first line is both a salutation, and a command.

His first real line after the initial fanfare of the beginning of the song is “I’m a scientist you see.” Colonel Fabyan was not actually a scientist, (nor was he a Colonel, it was an honorary title bestowed upon him by the Governor of Illinois<sup>24</sup>). Despite having no formal education, “Fabyan had a great desire to appear as a knowledgeable person in the fields of science and learning which he chose to establish on his own place.”<sup>25</sup> Elizebeth would later write in her memoir,

At first I was very impressed with Colonel Fabyan’s capacity to sound like an expert in any of the many fields where he had young people like myself hard at work. However, I never saw him read anything beyond a newspaper headline... Whatever anyone said to him, technical or not, he could repeat. So to the unwary, he could sound extremely convincing.<sup>26</sup>

I tried to capture Fabyan’s “extremely convincing” nature through making every lyric that he sings either a command or a statement. Fabyan doesn’t question himself: if he says it, it is so.

The next line, “Welcome to my laboratory” is a reference to Riverbank Laboratories, which was

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<sup>23</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>24</sup>Ibid

<sup>25</sup>Ibid

<sup>26</sup>Ibid

technically a subsection of the estate. Elizebeth explained in an interview that “Riverbank was the estate, but Riverbank Laboratories covered all those buildings on that one side of the Lincoln Highway that carried on discoveries in this or that.”<sup>27</sup> Fabyan’s third line “everything you see was made by me”<sup>28</sup> is simply a reference to his pompous and arrogant nature. As Elizebeth put it “he was, in manner and conversation, as startling as his manner of dress,”<sup>29</sup> which was apparently also odd. When he was at Riverbank, Fabyan exclusively wore “goatees and riding collars and a big... general cowboy hat.”<sup>30</sup> Additionally, when Fabyan sings the line “everything you see was made by me,” the two note pedal tone in the piano accompaniment drops out, and Elizebeth’s “I am here” motif plays in the baseline representing her uncertainty and desire for change. Will Riverbank be the right place for her?

In measure 84, the piano part moves in a sweeping motion from the Ab Eb pedal tone to an Eb Ab pedal in measure 77, where Elizebeth has an aside. It’s the same pedal tone that underscores her soliloquy upon entering the library in “City of Exposition.” She asks herself, “How did I end up here?/ What am I doing?/ How will I know if I belong?”<sup>31</sup> I attempted to show Elizebeth’s thought process similar to how she described it in her interview with Valaki in 2012. “And I suddenly got thoughts of; Where am I? Who am I? Where am I going? And God knows what!”<sup>32</sup> The melody is initially unadventurous oscillating between four notes, mimicking her rumination and uncertainty. As she continues, I harken back to her decision to leave and go to Chicago in the first place “so long/my plain old life and boring teaching.” She proceeds with her

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<sup>27</sup>Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>28</sup>Welcome to Riverbank

<sup>29</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>30</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>31</sup>Welcome to Riverbank

<sup>32</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

motif “now I’m here/and it’s clear,” the piano sweeps back to the initial pedal. What’s clear? She still doesn’t know. Instead of an answer, she notices the Fox River which “cut into the estate,”<sup>33</sup> and looks up to the sky.

The ensemble cuts her off, “well we’ve got work to do.” Elizebeth once said that “Fabyan had use for only one kind of worker, and that was one that knew his business and worked at it damned hard.”<sup>34</sup> The ensemble repeats the line “we’ve got work to do” six times. In a direct juxtaposition to the ensemble’s work, Fabyan sings over them in measure 128 explaining why he created the estate to begin with. It is an abbreviation of a quote attributed to Fabyan by the Fabyan Villa Museum,

Some rich men go in for art collections, gay times on the Riviera or extravagant living.

But they all get satiated. That’s why I stick to scientific experiments... You can never get sick of too much knowledge.<sup>35</sup>

I use his next line “what do we do?/why everything!”<sup>36</sup> to set up the interplay between the statement “this is what we do” with the question “what are *you* going to do?” that occurs between Fabyan and the people at Riverbank, and Elizebeth throughout the rest of the song. Because it is Elizebeth’s story, I have the ensemble ask her the same question she asks herself: “what will you do?”<sup>37</sup> Of course, Fabyan and the ensemble also explain to Elizebeth some of what *they* do at Riverbank, including “acoustical levitation” and tending to an on property zoo.

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<sup>33</sup>Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>34</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>35</sup>Wright, Wally. 2021. “Fabyan Villa Museum and Its Frank Lloyd Wright Connection.” The Not So Innocents Abroad.

<https://www.thenotsoinnocentsabroad.com/blog/fabyan-villa-museum-and-its-frank-lloyd-wright-connection>.

<sup>36</sup>Welcome to Riverbank

<sup>37</sup>Welcome to Riverbank

According to Elizebeth, Fabyan “built the second sound laboratory in the United States,”<sup>38</sup> and that his wife “had a small zoo on the grounds.”<sup>39</sup>

The music changes abruptly again in measure 190, and the key changes from Eb to F major. This sudden tonal shift is the moment that Elizebeth meets her future husband, William Friedman, and is the first introduction of their motif.



Elizebeth describes this moment, in detail, on several occasions. In her interview with Valaki she states, “It was... that evening that I met my future husband.”<sup>40</sup> In other accounts she calls him Fabyan’s “geneticist” saying,

“His geneticist was a dark-haired young man, who experimented with the fruit fly and with plants... there was a windmill in the center of the area where the geneticist worked.”<sup>41</sup>

No matter how she refers to him, Elizebeth always mentions that she met her husband on her first day at Riverbank, so it was imperative to me to find a way to include it in “Welcome to Riverbank.” Their dialogue in this moment is brief. I continue to play with the question of “what will you do?” by having Elizebeth ask William what *he* does. The musical motif which underscores the scene is a combination of two shorter musical ideas which repeatedly appear

<sup>38</sup>Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>39</sup>Ibid

<sup>40</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. “Oral History Interview.” National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>41</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

throughout the musical, always in association with Elizebeth and William's relationship and love for one another.

At the end of the song, Fabyan introduces Elizebeth to Wells-Gallup, who "had discovered a cipher which proved that Francis Bacon had written Shakespeare."<sup>42</sup> Finally, Elizebeth knows what she's been invited to Riverbank to do. In this moment I introduce yet another motif: Wells Gallup's "mystery" motif. It is a two measure repeating scale that I think sounds mysterious.



This motif is a musical representation of Wells Gallup's ideas about Francis Bacon and the first folio. Fabyan ends his introduction with "if she's right it changes history/and she's right... here!" Fabyan pauses between the words right, and here implying a double meaning to the phrase. He believes that she is correct, and he's also announcing that she's "right here!" The song ends with bravado, welcoming Elizebeth to Riverbank.

### What Can You Do

"Welcome to Riverbank" ends on a low C octave rumble, and segues directly into "What Can You Do," where Fabyan bellows at Elizebeth "SO, WHAT CAN *YOU* DO?" To which Elizebeth replies "well that remains sir, for you to find out." This short transition song is based on Elizebeth's account of her first conversation with Fabyan on their limousine-ride to Riverbank. She wrote,

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<sup>42</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

After a very few moments of silence he turned to me and shouted, "WHAT DO YOU KNOW?" By this time I was realizing that I must appear to be a demure little nobody. Although I had had a reputation for volubility in college, I had done no talking whatsoever for he had kept up a constant stream of conversation. So when he said "WHAT DO YOU KNOW" I... looked at him quizzically out of my half turned head and said, in a firm but low tone, "that remains, Sir, for you to find out."<sup>43</sup>

In other accounts, Elizebeth remarked that Fabyan's statement "struck something stubborn" in her, and that it was "the most immoral remark" she ever made in her life.<sup>44</sup> I kept Elizebeth's response intact, because it was simply too iconic to change, however I shifted Fabyan's line from "what do you know" to "what can you do," to continue with the question introduced in "Welcome to Riverbank:" What can Elizebeth do? I end the song with a call back to Elizebeth's motif, "now that I'm here."

## Hidden Text

"Hidden Text" is both Elizebeth and the audience's first true introduction to Wells Gallup, who, like Fabyan, was eclectic. She was obsessed with the long-deceased Sir. Francis Bacon whom she was convinced was the true author of Shakespeare's plays. "Hidden Text" imagines the conversation between Gallup and Elizebeth upon their first meeting. When the song begins, Gallup initially sounds reasonable, as she asks Elizebeth to "keep an open mind."<sup>45</sup> However, the song quickly devolves into the type of rambling sentences which appear throughout much of

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<sup>43</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>44</sup>Valaki, Virginia T., and Elizebeth Friedman. 2012. "Oral History Interview." National Security Agency.gov. <https://dn790005.ca.archive.org/0/items/Oral-History-Interviews-nsa/NSA-OH-1976-16-EFRIEDMAN.pdf>.

<sup>45</sup>Hidden Text

Gallup's book, "Concerning the Bi-Literal Cypher of Francis Bacon." One sesquipedalian passage reads,

Deciphering the Bi-literal Cipher, as it appears in Bacon's works, will be impossible to those who are not possessed of an eyesight of the keenest, and perfect accuracy of vision in distinguishing minute differences in form, lines, angles and curves in the printed letters. Other things absolutely essential are unlimited time and patience, persistency, and aptitude, love for overcoming puzzling difficulties and, I sometimes think, *inspiration*.

As not everyone can be a poet, an artist, an astronomer, or adept in other branches requiring special aptitude, so, and for the same reasons, not everyone will be able to master the intricacies of the Cipher, for in many ways it is most intricate and puzzling.<sup>46</sup>

Gallup is simply far too wordy to directly quote in a song, but I still wanted to capture her circumlocutory manner of expressing herself through the music. Her mystery motif underscores most of the song, as the harmony changes overtly. Like "City of Exposition" and "Welcome to Riverbank," I employ the use of pedal tones. Because Elizebeth's life would come to revolve around finding patterns it was important to me to not only put patterns into the music but to have them grow more complex as the story unfolds. "Hidden Text," is the first time the pedal tone is more complex than the simple Eb Ab which appears throughout most of the first two songs.

When Wells Gallup sings "something new, in the old" it's the same melody as Elizebeth's "I am here" motif, but in C major, once again signifying change and uncertainty. After Gallup sings "something not yet foretold," she switches gears and fervently asks "do you see it?" in reference to her belief that "inspiration" plays a crucial role in parsing out the "hidden messages" within the first folio. Before Elizebeth can respond, Gallup switches gears once again, with little

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<sup>46</sup>Gallup, Elizabeth W. 2015. Concerning the Bi-Literal Cypher of Francis Bacon, Discovered in His Works: Pros and Cons of the Controversy. N.p.: FB&C Limited.



transition (much like she does in her book) and begins to explain her theories about Francis Bacon to Elizebeth. She wrote in her memoir that during her first consultation, Wells Gallup explained that she “would be taught to master her cipher-proof of Bacon’s authorship of the plays.”<sup>47</sup> She also mentioned, “I could not help but deduce from this conversation... that Mrs. Gallup had dwelt only among those who agreed with her premise and that she had little personal contact with the viewpoint of those who did not believe in the non-Shakespeare authorship of Shakespeare.”

The tone switches rapidly again in measure 60, as Gallup goes from seriously explaining her theory, to gushing about Bacon. I wanted to imply that maybe, on some level, Gallup was more than infatuated with Francis Bacon. “She kept images of Bacon close at hand, for inspiration: an engraving of Bacon in his prime, a handsome youth with curls and a ruff; a picture of Gorhambury House, Bacon’s mansion outside London.”<sup>48</sup> The music takes a romantic, lilting  $\frac{3}{4}$  and Gallup goes into her own world. Finally in measure 96, she snaps out of it, and asks Elizebeth if she will see what she does. Finally, Elizebeth gets a word in edgewise and asks, “will you show me?”<sup>49</sup> The tone of the music switches once again.

The final part of “Hidden Text” is dedicated to explaining how the Baconian cipher works. This section is rhythmic, and includes more complicated patterns than the initial pedal tones of the first few songs. In the right hand of the piano accompaniment, a melody begins to emerge through the ruminating texture. Five notes pop out: E, C, B, F, and G. I specifically chose five notes to symbolize the Baconian Cipher, in which “all letters of the alphabet can be represented with only two letters, if the two letters are combined in different permutations of

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<sup>47</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>48</sup> Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>49</sup>Hidden Text

five-letter blocks.”<sup>50</sup> The melody emerges in groups of two: E, C followed by E, B and so on. Bacon’s cipher works exactly like binary code, “just two symbols, arranged in different combinations, can stand for many others.”<sup>51</sup> I utilized five notes, arranged in groupings of two, as my own “secret message” and nod to the principles of the cipher. I also added the lyric “you must look through/the letters” as a cheeky way of alluding to the fact that Gallup was not just looking through the letters for slight variances, she was looking *past them* to see what she wanted to see.

### **The Worksheet**

On Elizebeth’s first day, Wells Gallup gave her a worksheet to determine if she had the “inspiration” necessary to work on the project. “Along with the typed worksheet, Mrs Gallup had provided a photo enlargement of the actual page from the First Folio on which these words appeared.”<sup>52</sup> “The Worksheet” begins with the same rhythmic pattern that occurs at the end of “Hidden Text.” This time, the notes which pop out of the texture, are Elizebeth’s “I am here” motif. The song then shifts to a familiar brooding pedal with Gallup’s mystery motif underneath. “The Worksheet” starts with many of the same musical ideas I introduced with Wells Gallup’s song, because it is Elizebeth’s first interaction with the Baconian Cipher and Gallup’s theories. She hasn’t had a chance to make up her own mind yet, so she assumes Gallup’s ideas as her own at the beginning of the song. It took Elizebeth “eight hours to produce the twenty-four-word plaintext translation.”<sup>53</sup> In the song, Elizabeth repeats the phrase “I can do it” three times. Each iteration implies new meaning: I can do it (can I?) I can do it (I can) I can do it (I will). On the

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<sup>50</sup> Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>51</sup> Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>52</sup>Ibid

<sup>53</sup>Ibid

lyric “new” the key changes from C mixolydian to G Major, and a new pattern emerges in the piano accompaniment symbolizing the switch from Gallup’s opinions to Elizebeth’s.

When Elizebeth graduated from college in 1915, she wrote in her journal that she felt like “a quivering, keenly alive, restless, mental question mark.”<sup>54</sup> She also wrote about detesting her last name, Smith.

“The odious name of Smith... It seems that when I am introduced to a stranger by this most meaningless of phrases, plain ‘Miss Smith,’ that I shall be forever in that stranger’s estimation, eliminated from any category even approaching anything interesting or at all uncommon.”<sup>55</sup>

She wanted to be uncommon, and Riverbank was just that. The line “I am where I need to be”<sup>56</sup> is an affirmation: Elizebeth found the place that would launch her into history.

## Pictures

“Pictures” is the song I took the most liberties with when it came to the composition process. Secondary to the plot about secrets and codes and hidden messages, is a love story between Elizebeth and William. I particularly wanted to give William a traditional ballad where he sings about his feelings for Elizebeth, however William Friedman was a reserved person. Elizebeth described him as “gentle, considerate, polite, very handsome” and “always immaculately dressed.”<sup>57</sup> He also was a hobby photographer. “William carried his camera

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<sup>54</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman college and WWI journal. <https://archive.org/details/ElizebethFriedmanCollegeWWIJJournal/mode/2up>.

<sup>55</sup> Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>56</sup>The Worksheet

<sup>57</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

everywhere, a black box that hung from his neck.”<sup>58</sup> Although William worked at Riverbank as a geneticist, he also worked on the folio project with Elizebeth, taking pictures of the book. He was “pressed into service by Fabyan who believed that enlarging the type forms in Elizabethan books would show up the differences which Mrs. Gallup claimed were there.”<sup>59</sup> Elizebeth wrote, “this work threw us together a very great deal,”<sup>60</sup> and later stated in an interview, “we became friendly very shortly. We both got bicycles and would ride around the countryside.”<sup>61</sup>

When I was looking through the images that William took at Riverbank that are available through the George C Marshall Foundation Library, I began to notice a trend. Most of the photographs of Riverbank feature Elizebeth. In one particular photo, she smiles at the camera,



but her gaze appears to look past the lens, to the person standing behind it. This particular photograph inspired not only the lyric “in this picture/in this moment/she’s smiling at me,”<sup>62</sup> but the premise behind the song itself. What type of a ballad does a shy scientist-photographer sing? Perhaps one framed through the lens of his camera.

The song begins with William describing the many wonderful things he sees and photographs at Riverbank. The line “I see monkeys”<sup>63</sup> is a reference to the “two monkeys” which “roamed outdoors wearing red diapers, (one a kleptomaniac with a habit

<sup>58</sup> Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>59</sup> Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>60</sup> Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>61</sup> Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>62</sup> Pictures

<sup>63</sup> Pictures

of stealing keys).”<sup>64</sup> He also sings that he sees “great chairs hanging from the ceiling,”<sup>65</sup> which is in reference to Fabyan’s penchant for hanging his furniture. “The living room in the Villa was furnished mostly with divans and chairs which swung on huge chains from the high beamed ceiling.”<sup>66</sup> Yet, despite these marvels, William only wants to take pictures of Elizebeth.

The lyrics for the bridge are, “I know that I’m distracted/I can not seem to care/With ev’ry moment captured/I hope to see her there.” The piano accompaniment in this section is simple. Harmonically, the chords move in a rocking, plagal motion from IV to I. The music mirror’s William’s distraction, in that it doesn’t really go anywhere until the chorus, when the music picks back up harmonically. In contrast to the motion of the accompaniment in the chorus, William sings long held notes on the words take, last, freeze, and past, to emphasize his desire to hold onto a moment, while time marches on nevertheless. The idea of holding onto moments introduced in “Pictures” is a theme which permeates throughout the rest of the musical.

### **Days Like This (Rep.)**

“Days Like This” is a reprise. A reprise is the repetition or reiteration of a musical theme or song, often a song that was previously heard in the same musical work, but in a different context or with slight variations.<sup>67</sup> I chose to put the reprise rather than the song into my capstone because there’s an important moment at the end of the reprise that’s crucial to the plot. At this point in the musical, Elizebeth had been at Riverbank for a year and grown incredibly close to William. The two of them had shifted from working on the Shakespearean cipher together, to a new more consequential one. “It was not long until a new interest diverted some of Colonel

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<sup>64</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>65</sup>Pictures

<sup>66</sup>Friedman, Elizebeth. n.d. *Elizebeth Smith Friedman partial autobiography*. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>67</sup>Reprise Definition

Fabyan's attention. Being a man who loved power, he had acquired a certain amount of influence in Washington... He sensed early in the winter of 1916 and 1917, that this country was going to soon be at war."<sup>68</sup> Fabyan realized that his Shakespeare team at Riverbank happened to be the only people in America working on decoding ciphers. "Even before the United States had actually declared war, Colonel Fabyan had a tiny nucleus of operating staff prepared to go ahead with this plan which he had "sold" to Washington. Hence it was that my husband and I found ourselves no longer a Geneticist and an English Literature student, but the heads of this staff."<sup>69</sup> Elizebeth and William had only ever worked with the Baconian Cipher, which they had come to determine wasn't even present within the first Folio, so they had to learn a completely new skill, and quickly began to spend all of their time together. "She and William operated as a team. During the day they were never more than a few feet apart, handing papers back and forth, checking each other's work."<sup>70</sup>

Although their work had shifted from Shakespeare to preparing for war, Elizebeth and William still spent leisure time together on the estate outside of their work. Elizebeth wrote that she "saw him at meal times and on off hours when all of the young people on the place were swimming, bicycling and riding."<sup>71</sup> She also stated in her interview with Dr. Pogue, "we really lived the life of what you might call the minor idle rich."<sup>72</sup> "Days Like This Rep." occurs shortly after America officially entered WWI, and Elizebeth and William "began to actually do official

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<sup>68</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>69</sup>Ibid

<sup>70</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>71</sup>Friedman, Elizebeth. n.d. Elizebeth Smith Friedman partial autobiography. <https://archive.org/details/ElizebethFriedmanPartialAutobiography>.

<sup>72</sup>Pogue, Dr. and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

war work for the government.” They did “all the deciphering and decoding for about six departments of government.”<sup>73</sup>

Even though they’re singing about the happy days they’ve shared together, I wanted to make the music feel unsteady, to emphasize the undercurrent of anxiety they were feeling about the state of the world, and the work they were doing. I rapidly change meters throughout the song switching from  $\frac{3}{4}$  to  $\frac{4}{4}$  to give the music a lilting and uneasy feel. The lyrics of the first verse tumbles into the next, a sentence running away from its speaker. Finally the music settles into a comfortable  $\frac{4}{4}$ , and Elizebeth asks, “why can’t it be just us?”<sup>74</sup> William joins in, and they sing the hook of the song, “days like this won’t last forever.”<sup>75</sup> America had entered the war, there was no going back to the safe happy bubble they’d been living in.

In the following section, I used a technique called non imitative polyphony which is a musical texture that features two or more distinct, independent melodic lines sounding simultaneously, where each line is unique and not a variation or imitation of the others.<sup>76</sup> Elizebeth and William’s separate melodic lines are mostly in harmony with each other, but occasionally clash, in zings of dissonance. William bares his heart in a display of affection, singing “I don’t care what they may say/Elizebeth I love you.”<sup>77</sup> Elizebeth responds “You’ll never be accepted by my family/and I’m not accepted by yours.”<sup>78</sup>

“Nice Quaker girls didn’t marry Jewish boys in Indiana.”<sup>79</sup> Elizebeth had hesitations about marrying William, because she knew that their families wouldn’t approve. William

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<sup>73</sup>Ibid

<sup>74</sup>Days Like This Rep.

<sup>75</sup>Ibid

<sup>76</sup>Janae, Jean. 2020. “Four Types of Texture in Music.” Perennial Music and Arts. <https://www.perennialmusicandarts.com/post/four-types-of-texture-in-music>.

<sup>77</sup>Days Like This Rep.

<sup>78</sup>Ibid

<sup>79</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

however, threw caution to the wind, and asked Elizebeth to marry him anyway. Elizebeth said yes. “When William traveled back home briefly to tell his parents, his mother collapsed at the news that her son had married a shiksa.”<sup>80</sup> They were married on May 21 in Chicago, “a month after Germany declared war on the U.S.” William’s brother Max said, “it was one of the first mixed marriages in the Pittsburgh Jewish community. You would have thought William had committed murder: “If he had still been living in Pittsburgh, he would have been ostracized.”<sup>81</sup>

### Without You Here

In her interview with Dr. Pogue Elizebeth shared that William “went overseas within two months”<sup>82</sup> of their being married. “Without You Here” follows the young couple’s letters to one another during this time. I specifically wrote “Without You Here” in  $\frac{3}{4}$  because waltzes were a popular dance and music style before WWI. However the style declined rapidly in popularity during the war in part because men were fighting overseas, and social gatherings and dance floors became much less frequent.<sup>83</sup> The waltz harkens back to their time together, before the war, and is intended to evoke a sense of nostalgia, and yearning. Elizebeth and William also lament how much harder it is to decipher messages without each other to bounce ideas off of. William wrote in one of his letters,

A group of two operators, working harmoniously as a unit, can accomplish more than four operators working singly. Different minds, centered on the same problem, will

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<sup>80</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>81</sup>“Release of the William and Elizebeth Friedman Collection.” 2015. *Cryptologic Quarterly* 34 (January). <https://www.nsa.gov/portals/75/documents/about/cryptologic-heritage/historical-figures-publications/publications/cryptologic-quarterly/cryptologic-quarterly-2015-01.pdf>.

<sup>82</sup>Pogue, Dr., and Elizebeth Friedman. 1973. *Interview with Mrs. William F. Friedman*. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>83</sup>Baker, DT. 2024. “A History of the Waltz.” Winspear Centre. <https://www.winspearcentre.com/extra/blog/a-history-of-the-waltz/>.



supplement and check each other... in short, two minds, with but a single thought, bring to bear upon a given subject that concentration of effort and facility of treatment which is not possible for one mind alone.<sup>84</sup>

William reflects this sentiment with the lines “Wasting my time/without you,” and “Everybody's talking about what they can be/but I know you'd say/I miss you.” On the lyric “I miss you,” Elizebeth sings with him, affirming his statement.

Her verse begins with “my silly Billy Boy,” which is a reference to the pet name she used to refer to William. In one letter she wrote, “To be your North Star–Billy Boy–I'd like to be!”<sup>85</sup> In “The Woman Who Smashed Codes,” Fagone explains that

Elizebeth wrote long letters back to him. In one envelope she enclosed a lock of her hair. Her letters don't exist today. It's likely she destroyed them after the war. Still, they left traces in William's: sentences of hers that he quoted, questions she asked that he answered.<sup>86</sup>

Despite the frustrating lack of primary sources, it is evident through William's letters that Elizebeth was beginning to feel unsafe at Riverbank without him there,<sup>87</sup> which I reference with the line “Fabyan's workload is growing unkind” immediately followed by “when do you return my love/I miss you.”<sup>88</sup>

In the middle of the song as the key changes from major to minor Fabyan enters, and the audience learns that he is tampering with Elizebeth and William's mail. His motif plays but in the minor key and with slight variations in the four note pattern that happens overtop of the bass notes. Elizebeth stated in an interview that “Colonel Fabyan thought nothing of opening

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<sup>84</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>85</sup>Ibid

<sup>86</sup>Ibid

<sup>87</sup>Ibid

<sup>88</sup>Without You Here

everybody's mail. He did it regularly."<sup>89</sup> She also said that Fabyan "tried to control everybody and everything that he ever had the slightest fringe contact with," and that he was "ruthless about having his own way."<sup>90</sup> Fabyan not only tampered with their mail, he trashed "letters to the Friedmans which were not in his best interest."<sup>91</sup>

In the second half of "Without You Here" Elizebeth and William realize that their mail is being tampered with and censored, and choose their words carefully. In measure 137 Elizebeth's lyric is a simple hum, to mimic the blacked out sections of her letter that William received. The harmony in the piano accompaniment gets tight and crunchy in measure 181, when Elizebeth and William sing together, "I wish I knew/when I'd see you," and the song ends with a simple, yearning, "I miss you."

### **How Was Work Today**

"How Was Work Today" appears near the end of Act Two, and occurs later in Elizebeth and William's careers. Before America entered WWII Elizebeth was hired by the Coast Guard to decipher messages intercepted from German U-Boats along the East Coast.<sup>92</sup> At the same time, William was working on a separate project deciphering the Japanese code, Code Purple.<sup>93</sup> In "How Was Work Today," Elizebeth and William navigate living with the burden of top secret knowledge that they couldn't share with one another. The song was directly inspired by a portion of Elizebeth's interview with Dr. Pogue, where she discusses how little she and her husband were allowed to share with one another.

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<sup>89</sup>Pogue, Dr., and Elizebeth Friedman. 1973. *Interview with Mrs. William F. Friedman*. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>90</sup>Ibid

<sup>91</sup>Fagone, Jason. 2017. *The Woman Who Smashed Codes: A True Story of Love, Spies, and the Unlikely Heroine Who Outwitted America's Enemies*. N.p.: HarperCollins.

<sup>92</sup>Ibid

<sup>93</sup>Clark, Ronald W. 1977. *The man who broke Purple: the life of Colonel William F. Friedman, who deciphered the Japanese code in World War II*. N.p.: Little, Brown.

Dr. Pogue: Mr Friedman never, never mentioned or breathed a word of anything... I think that often when you aren't sure what people know or what has been cleared, it gets mixed up in your mind as to what you can talk about safely, and to whom, that you tend to feel that the easiest thing to do, or the safest thing to do, is just not talk.

Mrs. Friedman: Just never, never say anything.

Dr. Pogue: There may have been times when you didn't talk to each other on some things.

Mrs. Friedman: Exactly, exactly...And the thing that astounds me so, as I've looked back on it many times, was that the day that the first message, when they...got the machine to the point where he ran a message through and it actually produced... now wouldn't you have thought that any being that was human couldn't have resisted, that they would have said something on that day. Never said a word to me. I didn't know anything about it.<sup>94</sup>

"How Was Work Today" asks the question: how do you talk to the person you love, if you can't tell them about the most important things in your life, or warn them of dangers you know are there? The song opens with a tangle of different musical references to Elizebeth and William's songs together, weaving them closer together as they are forced to work apart. The intro ends on an E natural before Elizebeth begins to sing. E is the leading tone in the key of F. I chose to leave the introduction on an E to amplify the tension of what they're not allowed to say. I do not resolve the chord. Instead, William and Elizebeth dance around the question "how was work today," never truly answering one another. In measure 18, they both sing "what do you do?"<sup>95</sup> William's melody teeters out of the key, slipping down to an Eb and back to the natural. In measure 55, the song moves from strained small talk to the two of them wishing and longing to

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<sup>94</sup>Pogue, Dr., and Elizebeth Friedman. 1973. *Interview with Mrs. William F. Friedman*. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

<sup>95</sup>How Was Work Today

connect with each other. The texture of the accompaniment changes from plunky chords to a sweeping pattern. “Everything has changed/the country’s in danger/and you don’t know/what I know.”<sup>96</sup> William trails off and stops singing before the end of the song, and the final chord ends on the leading tone, leaving the song unresolved. William stopped speaking completely for fear of accidentally sharing top-secret information.

## **Pretend**

“Pretend” is a lullaby and a love song that Elizebeth sings to William when she visits him in the hospital after he had a nervous breakdown due to the stress of working on Code Purple.

Dr. Pogue: ...He had something like a nervous breakdown after the work on this machine...

Mrs. Friedman: Yes...It was after the thing was broken that brought the crash. He apparently had just been wound up and built up and built up and then when they got the thing and read the first messages that’s when he crashed... He was away from work for between three and four months, I think.

Dr. Pogue: ...the process relating to the breaking of the Japanese message just before Pearl Harbor...

Mrs. Friedman: He had almost the entire role in it<sup>97</sup>

The baseline in “Pretend” is the same baseline that underscores “Pictures,” the ballad that William sings in Act I. “Pretend” begins with just the baseline by itself before the familiar melody that first appears with William and Elizebeth’s motif in “Welcome to Riverbank” shows up once more. One of the first lines of the song is Elizebeth telling William that he “must get

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<sup>96</sup>How Was Work Today

<sup>97</sup>Pogue, Dr., and Elizebeth Friedman. 1973. *Interview with Mrs. William F. Friedman*. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

some sleep.”<sup>98</sup> Just before William ended up in the hospital, he not only stopped talking but sleeping as well.

Dr. Pogue: ...was he working night and day?

Mrs. Friedman: Yes.

Dr. Pogue: So you saw very little of him?

Mrs. Friedman: ...Well he was home at night, presumably to sleep, but he couldn't sleep.

He'd be up until two and three in the morning.<sup>99</sup>

The song is slow and gentle, and Elizebeth acknowledges that even though she can't know what he does, she *can* sit beside him. However, on some level she *does* know, because of her own burden of knowledge. She repeats the line “I know” in a soothing manner, each iteration bringing new meaning to the words. I know (I understand) (I'm here) (I'm aware). She ends the song with a plea, “maybe for a moment... can't we pretend/that everything is fine?” The word “moment,” like the baseline, references back to “Pictures;” an appeal to William's desire to hold onto happy times though taking a picture. All she asks from him is a moment.

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<sup>98</sup>Pretend

<sup>99</sup>Pogue, Dr., and Elizebeth Friedman. 1973. Interview with Mrs. William F. Friedman. N.p.: George C. Marshall Research Library. <https://library.marshallfoundation.org/Portal/Default/en-US/RecordView/Index/727>.

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