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Wishes: Modeling Characters and Environments for a Visual Narrative

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Wishes: Modeling Characters and Environments for a Visual Narrative

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Fine Arts
Digital Production Arts

by
Erik John Reed
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Accepted by:
David Donar, Committee Chair
Dr. Sophie Joerg
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Abstract

Wishes showcases character and environmental models designed for an original short animation. The story begins when a wishing coin comes to life and tries to interfere with the wish of its owner. The narrative, a quintessential romance, derives a timeless appeal from its locale, Paris. The design is inspired by digital artists like Cecille Carre, directors like Pete Docter, and painters like Eugene J. Paprospki. Overall concepts and production of the models spanned five months.
Artist Statement

The biggest obstacle many people face in achieving their dreams is overcoming their fear. They long for the ability to surpass doubt, but lack the self-confidence to believe in their own capacity. Particularly when it comes to relationships, this struggle is magnified, as people learn they cannot control love, commitment, or reciprocation from another person. Navigating relationships can be a harrowing experience for those who struggle with distrust and anxiety. These individuals can get trapped regarding relationships with pessimism, always foreseeing an inevitable, broken outcome.

Young people, particularly those in their mid-20s to 30s, perhaps feel this conflict more distressingly than other ages. Romantic relationships always carry a possibility of becoming a marriage, or a breakup. Friendships are in a state of transition. Young people can bounce from relationship to relationship, unable to voice their deepest desires and unwilling to overcome their fear of rejection. Conversely, the lack of self-belief leads to a failure to launch scenario, where relationships crumble because young people fear commitment and its risks.

Stories offer a powerful medium for helping audiences to wrestle with their internal dilemmas and resolve conflicts. Wishes combats this cynicism with an optimistic message that despite all our blundering, hiding, and self-destructing behavior, our wishes for love will make themselves known. I hope audiences leave the narrative more willing to listen to their deepest wishes, without letting fear cloud their internal dialogue. Artists who mastered appeal and heart-stirring landscapes provided the inspiration for Wishes’ design. From the sun-drenched paintings of Johan Messel, to the charming, stylized character designs of Cecille Carre, to the classic and Greco-Roman inspired engravings of Jules Clement Chaplain, I sought artists with an eye for cheeriness.
Wishes’ denouement, the ‘aha’ moment that I hope ultimately captures the audience, arrives when the man encounters the coin mosaic. The revelation reminds us how a wish can achieve Herculean tasks when it fights to come true. It validates how the purity of a wish, or hope, can break through our selfish doubt and recreate our story.
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Chapter 1

Narrative

1.1 Background

My first experience with filmmaking started in middle school, when my family’s digital camera gave rise to a visual effects extravaganza that required using PowerPoint as a compositing tool. Since then, I have slowly acquired skills for my toolbelt, trying out each new program that came my way. PowerPoint gave way to Photoshop, then After Effects, and eventually Nuke. Over the years, I found the visual language of cinema the most mystifying, gratifying, and challenging of the arts I attempted. I loved creating “images,” complex moments within narratives that deliver an emotional catharsis.

Each project I undertook represented an effort to learn something new—about digital realms, cameras, or writing—so that maybe someday I could achieve the dream of creating stories for an audience. In many ways, Wishes represents a culmination of those years of effort, as well as my feelings about the future. Combining screenwriting, concept art, character, costume, environment design/ modeling, and rendering, this project builds on the lessons of past pieces. I hope it shows a mature design skillset and newfound clarity in storytelling instinct.
1.2 Origins

I started thinking about this story when I was still an undergraduate student. At the time I was studying media production, and my program allotted a connection to general 3-D programs like Lightwave and Maya. I had almost finished a degree in English and had begun expanding my portfolio into 3-D design. The possibilities of storytelling in a visual medium excited me, and I brainstormed many ideas for potential projects. One, named ‘Clotheslines’, focused on a plaza with many jumbled buildings connected by a web of clothes, like Figure 1.1. Seeking a focal center, I placed a wishing fountain in the middle of the environment. Though I never created the scene, something about the image of a fountain framed by a colorful, rustic plaza stuck with me for years.
1.3 Writing

The first iteration of the story followed a character who casted a coin into the fountain. The coin then sprung to life as an ungranted wish. Many drafts followed. One preferred draft featured the story of a couple casting wishes throughout their marriage. At the end, after the death of his wife, the elderly husband returned to the fountain, grieving. Upon arriving, he noticed the fountain had created a coin mosaic in remembrance of his late spouse. Though the draft needed to evolve because of its similarity to Up, a melodramatic tone, and an overall lack of conflict, I loved the idea of the coin mosaic. It became the centerpiece of all my future drafts.

I tested other ideas, searching for a storyline that bolstered my plot and themes. Finally, the idea of a proposal—one concrete, relatable, vulnerable concept—gave the narrative its through line and the characters their motivation. With this newfound arc, I decided to design my thesis around this story. I had never gone about writing in such a systematic way: brainstorming ideas, paring away weaker ideas, then refashioning stronger ones until they fit. The process felt technical, but in the end produced a more organic script that did not include my first ideas.

1.4 Connections

I find ties to my own life when I look over the script, even though I have not proposed to anyone. Life in my mid-twenties has required a certain level of reflection on the big, circuitous desires that drive my actions. I have had to reconcile long held wishes that will come true with ones that will not, and redirect accordingly. I have found this stage of life requires living on hope, hope for a future and for the result of efforts. My mid-twenties have been a time of transition for my relationships, a time to search for and choose my self and my family. Living through this period made the story of casting a wish, and having that wish fight for survival, ring true for me.

“The man stands on the edge of the fountain. He looks down into the water as if it is a mirror. Inside, a shining mosaic of coins reflects his greatest wish. But he hesitates, wrestling against the doubt and fear that led him to this place. Will his wish come true? Or will it remain just this: a glittering unreality?”
More than any other moment, this scene in the script resonated with me. Beyond showing the heartbreak of rejection, or the joy of fulfillment, I wanted to pause the story between experiences. I wanted to stand there not knowing the outcome.
Chapter 2

Design

2.1 Painters

I sought out design inspirations that, when combined, would lead to a heightened sense of appeal. The story, a quintessential romance, has a ubiquity born from its almost fairy-tale locale, Paris. The familiarity of the scenery communicates the theme and tone immediately, and audience expectation follows.

Vibrancy, light, and color would form essential elements for constructing this tone of story. I sought out painters next, color masters whose sun-drenched, picturesque compositions could accent the sort of hopeful tone I wanted to imbue throughout the story. The foliage-adorned scenes of Johan Messel, born in Belgium, 1927,[27] struck me with their captivating color palettes and cozy, impressionistic qualities. I wanted to emulate this style seen in Figure 2.1 and 2.2: one an audience would want to inhabit, travel to, or curl up inside.

Messel used colored, saturated shadows, never gloomy or foreboding, with splashes of sunlight through the foliage, which gave his buildings life. Plenty of leafy green, floral highlights, colored walls, and golden-yellow light created touching off points for later designs. My environment modeling, surfacing, color scripting, and lighting design all referenced Messel. Messel’s artwork evokes the pleasantness of memories, offering spaces of meeting that invite our own interactions inside—
Figure 2.1: *Impressionistic sunlit terrace*, oil pastel, by Johan Messel [1]

Figure 2.2: *Impressionistic sunlit doorway*, oil pastel, by Johan Messel [1]
Figure 2.3: *Sunlit city streets and environments*, oil, by Eugene J. Paproski [1]

no people are present. His enchanting atmosphere is warm and alive. His works are anchored by Impressionism, but also offer a counterpoint to the Belgian countryside ravaged by World War II. German occupation during his adolescent years influenced Messel’s work later in his life. His garden scenes provide a countryside untarnished by the war’s destruction [27].

Another important artist influenced my cinematic vision of the story, specifically regarding framing, cinematography, and scale. Eugene J. Paproski, an urban painter born in Chicago, Illinois, 1971, allowed me to conceptualize an urban plaza at different times of day [31]. His emphasis on the evocative beauty of our surroundings, something capable of acquiring all our attention, gives his paintings a unique outlook on environment design. He did not rely on specific architectural elements, or overcrowded scenery, but on the presence of light and color within the scene to accent areas. Similarly, people are deemphasized or missing from his scenes. His art inspires reflection, like the vaulted trees creating a canopy seen in Figure 2.3. He wants viewers to look up and out of daily living. I wanted my environment to have a similar “get lost in” quality, a simple elegance that invites contemplation.
2.2 Sculptors

After finding painters, I searched out artists who have mastered anatomy, sculpting, and proportion. The historical medalist Jules Clement Chaplain, born in Mortagne-au-Perche, Orne, 1839, crafted a specific kind of facial profile for his coin engravings [33]. He sculpted soft, often rounded features inspired by Greco-Roman sculptors like Praxiteles [12]. The classicism gave his coins a timeless quality, like in Figure 2.4. He became the official medalist of the French government in 1877, and created the official sculpts of every president of the French Republic until 1899. His style continued to define the French coin well into the 20th century [13].

Together with Louis Oscar Roty, born 1846, Chaplain helped found the Art Nouveau movement in the 1870s. A reaction to generic, uniform, or academic forms of art and architecture, Art Nouveau emerged as organic shapes: waves, flowers, lilies, birds, and eels, among others [23]. The style is characterized by swirls and a liquid like line structure. Though out of style by 1910, the movement found its way into railings, building entrances, staircases, and furniture. Art Nouveau rose out of abandoning the inferior quality of newfangled industrial production and sought to raise the status of craftsmanship. The academic system which oversaw the art world from the 17th to 19th century emphasized classic skills like painting and sculpture at the neglect of craft-based decorative pursuits like woodworking, ironwork, and furniture design. Art Nouveau marks the transition of art
from classicism into modernity [38]. In my scene, Art Nouveau and its influences can be seen in the balconies, window railings, and table designs for the cafe.

Art Nouveau also offered a trove of sculptors seeking to revolt against industrialization. These artists showcased the body as pure expression, with poses that mimicked the sinuous curves and lyrical complexity of nature [28]. Growing vines, blooming flowers, rushing water, and eye-catching swirls combined a two-dimensional graphic style with traditional bronze sculpture [15]. The beauty of form and silhouette, as seen in Figure 2.5, provided inspirations for the pose of my characters in mid-dance. The ‘le style Mucha’ of Auguste Moreau, adorning his subject with flowers, leaves, and bouquets, further merges the pursuit of classicism and decorative arts [5]. Contrasting
Figure 2.6: *The Preacher*, bronze, by Stanislaw Szukalski [35]

Figure 2.7: *Buzz, Old Habits*, Italian statuary marble, by Bela Bacsi [6]
the ornamental impulses of Art Nouveau, I found two sculptors who mastered facial stylization in two completely different mediums: bronze and marble.

Stanislaw Szukalski, born in Warta, Poland, 1893, [4] created works out of an immense passion for his craft and intellect. Self-claiming that he inherited no motifs, his work remains singularly unique, unable to classify within a “movement or era.” He struggled with poverty and obscurity, possibly for his vehemently self-assured outlook, or for his oft reviling of critics and their baseless opinions. Regardless, his stylization and vision, both in sculpture and drafted drawings, show the quality of a genius prodigy. In Szukalski’s surreal sculptures, like in Figure 2.6, forms bend in on themselves, changing hands between the natural, mechanical, ancient, and primitive. These layers are not political, his sculptures obtain their essence through their artistic construction. Interaction with light, shadow, shape, and dramatic staging all interact to create unmistakable originality [35]. His style invites the artist to consider stylization that breaks the anatomical, “straight” mold of over-generalized modeling. Sharp angles, abstracted faces, and primitive-modern fusions offered me new inspirations for stylizing my environment. Szukalski’s shift from photo-real into abstract stylization provides inspiration for new tree shapes, building facades, and breaking the norm of modeling.

My characters’ facial inspiration came from Bela Bacsi, a fifth-generation stone carving artist born in Gyor, Hungary in 1956, during the Hungarian Revolution. Today, he is considered one of three prodigious art marble artists in the world [3]. Rounded, smooth shapes define many of his marble busts and face sculpts, as seen in Figure 2.7. His sculptures show remarkable detail of anatomical form through the marble, as the viewer’s eye can detect bone, muscle, fat, and wrinkles through the stone. The realism with which Bacsi approaches details runs adjacent to an overall arc towards stylization and abstraction [6]. Some of his sculpts disappear completely into dream-like stylizations. Others, however, show personal characterization. Old Habits and Buzz, seen in Figure 2.7, show how facial detail and bust shaping alone is enough to fully present a character to an audience. His work challenged me to think about crafting and planning my models’ details not just for an “anatomically-correct” end result. I should seek to create personalities and spirits deeply thought out, and thus presented. Bacsi taught me there is more to a face than its underlying structure.
2.3 Architecture

Many examples of Parisian architecture inspired the look of Wishes’ environment. Historically, Paris has housed a plethora of occupants that each brought different architectural shapes and structures to the city. From Romanesque churches, to the Gothic style, the French Renaissance, the Classical revival, the reign of Napoleon III, the Belle Epoque, and finally *Art Nouveau*, Paris’ buildings reflect the influence of so many designs [30]. Yet, together, they create an unmistakable look. I focused on buildings introduced by the renovation of Paris by Georges-Eugène Haussmann, formally between 1853 and 1870, and informally from 1872 to 1927 [34].

Emperor Napoleon III commissioned Haussmann to decrease the poverty and squalor of Paris by installing boulevards, reinventing the city’s crowded layouts, and reconfiguring parks and public green spaces. Overcrowding and poor city planning throughout the Industrial Revolution had created epidemics, spurred infant mortality, and supported crime [16]. Several riots and revolts started because citizens could barricade the narrow streets with household items and furniture, cutting off law enforcement. Haussmann widened roads to decrease unrest, inspired by Napoleon’s trips to London. His homogeneous designs unified Paris, though they remained controversial. His buildings are distinctive to Paris and often appear in works of cinema [11].

Haussmann apartments were strictly regulated to ensure their facades retained the same height, color, and structure [30]. The main building in Wishes’ set, the one with the cafe, follows a Haussmann pattern, seen in Figure 2.8. The ground floor has thick, columned walls with a front that
showcases shops or restaurants. The second, piano nobile floor contains a moderated balcony. This floor, popularized before buildings had elevators, contained the largest and best rooms. The upper floors contain the same styles but with less elaborate siding, and no balconies [34]. An overlapping shingled roof, curved and angled, caps the building, like Figure 2.9.

Other apartments showcase garret rooms and dormer windows. These rooms were built to be used by the servants and concierges of the people in the buildings below. Aside from the shingled roof style, I had to include the emblematic grey zinc rooftops, mansard, angled at roughly 45 degrees, seen in Figure 2.10. These rooftops are so popular they are listed as a world heritage site [9].
2.4 Fountains

Public spaces took on a new significance under Haussmann, with an emphasis on decreasing unrest and encouraging community correspondence. Fountains became a central feature of these new spaces. Designers moved old fountains, and architects constructed new ones. Three French fountains in particular inspired Wishes’ example. The first is a French Louis XIV style fountain, seen in Figure 2.11, hand-carved out of limestone, from Provence, South of France, on the Riviera coast. Four metal spouts provide four pouring waterfalls [2]. I loved the look and texture of the limestone as a rustic facade. The fountain stone has aged but remains attractive. I liked the octagon base rather than a generic circle, and I noted the paneled sides which added visual geometry.

The oldest fountains in France provided drinking water to monasteries, villages, and towns. By the time the nineteenth century arrived, they had been reformed as a symbol of elegance and provincial power. The fountain located at Place des Trois Ormeaux in Aix-en-Provence in France is one of the oldest still in public use today, constructed in either 1625 or 1632 [36]. As the city expanded, this fountain found itself cemented into a small plaza surrounded by newer buildings. Its proximity to an outdoor cafe, coupled with its modern, largely aesthetic purpose, underlies contrasting historical uses for fountains. The intimacy of its old design stuck within new architecture gives its situation charm, seen in Figure 2.12.

Paris’s oldest public square contains a Northeastern fountain in the square Louis-XIII, at the center of the Place des Vosges [26]. This fountain offers a striking visual presence, with high
Figure 2.11: *French Louis XIV style fountain* [2]

Figure 2.12: *Fountain at Place des Trois Ormeaux* [2]
jets and cascading waterfalls, seen in Figure 2.13. The size of the base pool creates an immediate association with the fountain in Wishes, with enough area to allow for a high density of wishing coins. Originally inaugurated in 1612, the square commemorated the engagement of Louis XIII and Anne of Austria [36]. The pitched slate roofs of the surrounding buildings predicated future nobility’s apartments and the Haussmann style. As a meeting place for Paris’ highest nobility, the square contains the visual flair of aristocracy and wealth. The well-trimmed and perfectly clipped lawn contrasts the overgrown vines of other plazas.

The fountain I modeled for Wishes references each of these three inspirations, in its rustic simplicity, evolution and decomposition over time, and as a symbol of wealth.

2.5 Films

I wrote the script without referencing any past animations, but once I completed it I took note of films that contained similarities in tone, story, and stylization. The viral hit In a Heartbeat,
2017, directed by Esteban Bravo and Beth David, focused on two characters who are brought together by a personified object, a heart, vying to make them notice each other [29]. The film *Ratatouille*, 2007, directed by Brad Bird, is set in the heart of Paris, making use of Haussmann architecture and warm, twilight lit plazas [21]. The nature of my characters, people and coins, would require a creatively scaled cinematography, like that found in the superhero movie *Ant-Man*, 2015, directed by Peyton Reed [18]. Two modeling environments, one macro and one micro, would show areas of extreme detail in the plaza, fountain, and cafe when looking from the coin’s perspective.

*In a Heartbeat* made use of simplified sets that frame the characters without calling attention to their forms. Complementary colors provide contrast and separate figure from ground, seen in Figure 2.14. The value structure changes with the story, as the conflict deepens, the average level of light darkens. The fanciful and sweet storyline underpins a topic of anxiety for LGBT teens, publicly coming out. Within a few minutes, the animation creates enormous empathy for the main boy and his plight to find romance without exposing his sexuality. It shows how the heightened and simplified reality of animation can comment on contemporary social issues.

*Ratatouille* is the closest computer-animated film, by location and production design, in
Figure 2.15: *Ratatouille*, Brad Bird [17]

Figure 2.16: *Ant-Man*, Peyton Reed [18]
Figure 2.15. Inspecting models and building facades allowed me to plan how much detail should be included in my geometry. I also referenced lighting situations for the look of Parisian buildings at various times of day.

*Ant-Man*, though not similar in storyline, showcases a hyper-real world from a miniature perspective, shown in Figure 2.16. The scenes from the coin’s point of view would have to include very narrow depth of field as well as many models with a high-resolution geometry. Glass bottles would become like buildings. The stitching on the tablecloth, the crumbs from the bread, and details on the silverware would be largely visible. Many environments would require this kind of hyper-detailed “mini-set”, including the cafe table, fountain bed, tin can, and brick, plaza floor.

### 2.6 Story

Showing the “wish” as a character, an animated coin, gives the audience a new connection, a literal face, to put on their own desires. As I wrote the script, I realized its semblance to the Pixar film, *Inside Out*, 2015, directed by Pete Docter. Like *Inside Out*, *Wishes* personifies a distinct human quality as an animated character. This quality provides the character with both virtues and flaws. As the “wish” fumbles, fails, and learns about herself, we learn about ourselves. In some tiny way, we learn to resolve our own desires.

At the start, after the man flips the coin in the air, the “wish” comes to life as a foil for the man’s timidity. The two represent different approaches to a wish: insecurity versus over-compensation. The man struggles with the human condition that runs counter current to hope: self-destruction, paralyzing doubt, and an inability to go after what he wants most. The coin also distrusts, but reacts in its own way, by seeking control and fulfillment of the wish, no matter the cost. Presented as two separate characters, they comment on a singular conflict: *how do our wishes react when we stymie and reject them?* The conflict deepens as the coin’s overzealousness and the man’s fear diverge, compete, and collide. The coin tries to set up a public proposal and the man retreats into doubt and hesitation.
2.7 Metaphors

I created three rules of escalation to develop all three characters. Every action the coin takes must be larger and more significant than the last. Every action must create more fear in the man and draw more expectation from the woman. Every action must also include some nascent property of a coin, must feature its native agency as a tiny metal cylinder. The creativity and surprise of the animation comes from exploring this limited capacity of a coin—the audience wonders—what can it really accomplish?

I devised physical laws for the coin that seemed believable and could explain the level of fantasy built into the storytelling. The coin can hop up about six inches, can roll, and is just slightly bigger than a quarter. Otherwise, it has no hands or feet, it cannot fly, and it cannot get over barriers without human assistance. Despite these challenges, the coin manages to call a great amount of attention to the man and sets up his failed proposal.

However, it is the man, not the coin, who makes the final choice. The woman, finding the ring box, asks point blank out of confusion: “Are you proposing, or not?” The question hones in on the man’s conflict: to overcome his fear or succumb. Faced with failure on every side—and losing the ring—the man chooses to answer: “I’m not.” The admission cements his self-fulfilling prophecy of rejection and inadequacy and could end the relationship permanently.

After this denial, the man casts the coin back into the darkened fountain, abandoning his wish. He loses hope. The moment marks a turning point. The coin realizes her actions have achieved the opposite of her goal, and she has been left in a bleak situation. Her core motivation and purpose as a character is stripped away. This story element is reminiscent of the abyss, death, or descent into the underworld trope in the hero’s journey found at the end of act two in a three-act structure. In Inside Out, Joy finds herself at the bottom of a memory dump surrounded by crumbling memories. Her actions broke Riley, the girl she serves, as Joy forced her to always feel happiness. Joy ignored Sadness, stopping Riley from experiencing a necessary emotion, see Figure 2.17.

Similarly, the coin is abandoned in a sea of coins, among wishes granted and ungranted. She sits next to the sunken ring: a symbol of the proposal. The mood evokes the scene in Inside Out. The wish must let go of its selfish impulse for control over the outcome and simply, honestly,
Figure 2.17: Inside Out, Pete Docter [22]

make itself known. This change in the character only comes when it has grown through a total failure, into rebirth. The mosaic represents not only the wish abstracted, but the coin’s growth from a selfish desire to a mature one.

For the man, the mosaic represents the goodness of his wish and the importance of trusting its instinct. He too, cannot control the outcome. He must learn to hope through his clinging doubt.

2.8 Characters

I have really focused on developing the coin in this draft, laying the signposts for her character’s metamorphosis. But I feel this process neglected the man. He remains a bit of a mystery, and though his actions are clear, his deep, internal motivations remain unspoken. As a metaphor for self-rejection, he fits. But as a character the individual reasons for his choices are undefined. This could alienate the audience from identifying with him, even though I want to present him as an everyman, or a viewer substitute. But sometimes audiences need backstory to understand and empathize. Is he afraid of rejection? Commitment? Is there parental pressure, or financial pressure on the relationship? How long have they been together? How many times has he tried and failed to propose? It is an interracial relationship; does that influence his actions? Is one of them about to move? What is the future of this couple if they do get married, or if they break up? What is at stake?
I did develop a backstory for the couple. How much exposition would need to be in the film would depend on the scope of the animation. The short answer, of course, is the minimum amount needed to maximize audience identification.

The man, Lucas, 27, is of French descent and works as a post-grad researcher in Paris. He has lived in Paris all his life and has only just begun to create plans to leave after meeting his girlfriend, Isabelle. He works for the Universite Pierre et Marie Curie (UPMC) studying Biochemistry and Molecular Biology. His main area of research is the Visualization of Dictyostelium Exosome Content Using Fluorescence Energy Transfer. Basically, he is very academic.

I planned to make him an intellectual type—always stuck in his head—but I also wanted to put some unkempt fashion and messiness into his design, like Figure 2.18. In the sculpted scene, he plans to meet Isabelle after his proposal fails spectacularly. I wanted to emphasize his anxiety and haste in his costume. Multiple draped layers, hanging strings, untied shoelaces, and messy hair give the impression of a harried internal state, like Figure 2.19.

The woman, Isabelle, 25, is of French/ Nigerian descent and is finishing her graduate degree.
She moved to Paris for university but plans to move back after her graduation. As the date looms, she also balances her relationship with Lucas and must determine how their future will proceed. She studied French Language, Linguistics, and Comparative Literature at the Universite Paris-Sorbonne (Paris IV) and wrote a thesis on the Influence of Emile Gaboriau on Modern Detective Fiction. Since Isabelle grew up in Nigeria, and not Paris, she yearns to return home but enjoys the excitement of living in a foreign country. As a person, she is much more of a free-spirit than Lucas, a “wanderer,” literary, spontaneous, and adventurous. She also acts as a foil to Lucas’ character and invites him out of his shell.

Since Isabelle has already accepted a position in Nigeria, the marriage proposal represents not just a new commitment but a complete change of life and location for Lucas. Proposing to Isabelle would cause a seismic shift in his world, and he hesitates because he fears the unknown. He finds security in his similar, familiar world. He must learn to accept the new adventure that love brings.

Isabelle’s most striking characteristic is her curly hair, seen in Figure 2.21. I wanted to differentiate her from Lucas and show personality through her hairstyle. Her clothes include print patterns, a prominent feature of Nigerian fashion. Her white, denim jacket gives her outfit light, and makes a nod at a wedding dress. I hoped her clothing choices would be stylish, and fun, like Figure 2.22, but with an eye for individuality from mixed patterns and unique pairing.

The coin, Marianne, comes from the inspiration of Jules Clement Chaplain. She is the
Figure 2.20: Character concept for Lucas
Figure 2.21: Photograph inspiration for Isabelle [32]

Figure 2.22: Costume and hair inspiration for Isabelle [24]
Figure 2.23: Character concept for Isabelle
French symbol for liberty and reason, and comes with a history of fighting for the rights of common people. Marianne gained prominence after 1775 and remained relevant until World War II. She consistently unified French citizens against regimes of oppression [25]. As “wish fulfillment”, my Marianne brings out a more whimsical, fantastical side. I dialed her features into stylization and simplification. Her facial structures are rounded, childlike, suggesting innocence and kindness. She has sculpted hair unlike the other characters’ fiber mesh, with sweeping cascades of flowing locks. Though I created her bust in full perspective 3-D, I sculpted her to be “smushed” onto a coin model as a raised displacement map. Thus, her profile was accentuated to be later flattened. Her customary Phrygian cap and acorn headdress came from the Chaplain engravings. Historically, the Phrygian cap appears on artistic works signifying freedom and the pursuit of liberty [25]. Thus, her costume fits her character: somebody who fights for love through the despotism of fear.
Chapter 3

Methodology

3.1 Storyboarding

I began the process of working on Wishes by writing the script. Though I knew the basic storyline from beginning to end, several details changed as I constructed the arc and dialogue on paper. Notably, the plot point of losing the ring came about during a rewrite phase. Final Draft supplied the template for formatting the script.

After I approved the story on paper I turned to drawing basic tonal storyboards, like Figure 3.1 and 3.2. These provided the visual element of my story pitch. I focused on defining cinematography, value arcs, poses, and key expressions for the narrative. Screenshots from the environment helped me to draw quick, realistic perspectives while keeping continuity. I worked on the drawings in Photoshop using only one brush from the digital artist Loish. A veteran of 3D Total, Loish paints stylized digital portraits, female figure drawings, character designs, and award-winning commissions. She frequently shares tutorials and tools with the online digital paint community.
Figure 3.1: Initial storyboard from sequence

Figure 3.2: Middle storyboard from sequence
3.2 Z-Brush

Z-Brush offered the quickest and easiest solution for sculpting my characters from start to finish. I approached the characters as several different pieces. Assembly came last, only after I approved the final look of each piece. The first element, body volumes, consisted of stylized silhouettes with proper musculature and anatomical proportions. I finished these volumes first, so they could be exported to Marvelous Designer for clothing simulation. Next, the hand sculpts started as a rigged hand with an interior muscle system in Maya. This rig offered easy posing using joints, which resulted in a model for OBJ export. I sculpted over the OBJ in Z-Brush. Character traits like finger length, volume, and nail details were easy to define on top of an anatomically realistic hand gesture.

I started the facial sculpts from scratch, using clay-buildup over a sphere to form bone structures. I referenced sculpts from concept artist Alina Balgimbaeva for a base style guide. She creates simple, young characters with unassuming silhouettes. I wanted to emulate the smooth, round, appealing facial shapes of her designs. While I sculpted, I found I needed to define anatomy
like cheekbones and jaw lines. I dialed back the design to a suitable level of stylization as a second step.

Facial refinement took the longest, seen completed in Figure 3.3, 3.4, 3.5, and 3.6. I had to fight to find a decent ratio of eye size to face size for the adult characters. Fibermesh and the short hair groom brush created the man’s hair. For the woman I used Ornatrix, a dynamics and hair simulation tool in Maya. Clay build-up, dam standard, move, pinch, and smooth brushes made up the bulk of my palette for sculpting the coin’s long hair. I created variations out of the same initial sculpt.
3.3 Maya

Conversely, I used Maya for modeling the environment and box modeled each of the props and sets seen in the plaza. I still have not mastered hard-surface modeling in Z-Brush, and I find the perspective tools in Maya more intuitive for large-scale set construction. The set began as a series of large boxes, abstracted. I worked to create horizons and directional lines within the scene. Each building received construction details like roof pitches and architectural shapes. Once I achieved a proper scale then detail work commenced.

I tried to “group” the scene so that I could keep the meshes as simple as possible. This meant, where possible, constructing objects out of separate meshes, rather than combining and extruding. Tables and chairs were cylinders, boxes, and deformed boxes. Doors were beveled boxes with no backs. I tried to be economical with details and cognizant of my limited time. Several key, chosen images made up my modeling “palette.” I referenced these images exclusively to keep the design consistent.

3.4 Marvelous Designer

Simulating clothes within Marvelous Designer involves breaking down the process into many steps. I have learned to give the program one, or two things to do at once, rather than several. The
simulator works most efficiently when handling tasks in succession. I define my workflow by first blocking shapes, sewing basic parts, and then simulating. I keep a high particle distance, so the computer does not lag. I also only simulate one garment per project, and either freeze the other garment or import it as an OBJ avatar, to aid computer performance. Once the initial simulation takes place, I tailor the clothes, seen in Figure 3.7. The tailoring process takes the longest, often days, to set the proper length of each pattern and match it with a fitting sewing length. Tuning the simulation requires pulling, pinning, and sometimes sewing extra pieces onto the fabric for later deletion. Marvelous Designer creates UVs for each piece of clothing, which I can import into Z-Brush. Clothing details like the jean jacket puckering were added using a Z-Brush “mask by intensity” method, UV maps, and displacement created from real-world photos using Photoshop.

3.5 Nuke

I facilitated the model, rig, and animation of the coin by planning the coin’s formation in two steps. The first relied on sculpting the bust and face in full 3-D. The face could be rigged, blend shaped, and animated with expressions like any other face. That facial animation would be rendered through Arnold with an AOV for Z-Depth. Nuke Shuffle nodes extracted that Z-Depth pass into RGB data, seen in Figure 3.8. I completed minor grade and gain corrections, clamped the values to
a 0-256 scale, and used the result to create a high-resolution displacement “alpha” for a coin model. In Maya, the high-density coin received the displacement map, which I synchronized through UV mapping. Catmull-Clark divisions allowed the geometry to increase from high to infinitesimally high. The resulting displacement “parented” the baked animation to the coin animation in a very dynamic way. The computer would handle the simulation of perspective as the face turned, the coin turned, and the facial expression animated.
Conclusion:

I had two objectives for writing this story: one, to validate the experience of people who have abandoned or stymied their wishes for whatever reason, and two, to design a story that felt emotionally true and honest to me. Audiences watch films to see themselves, and their untold stories, on screen. They connect with characters whose conflicts and catharses authenticate their own struggles. Everybody has reckoned with the internal drama of a denied wish. The ubiquity of this experience aligns the audience with the man. As he wrestles with one of the biggest, most vulnerable wishes a person can make, for lifelong love, the audience reflects on their own yearnings. The ending then provides a triumphant resolution for the audience and a new beginning.

For me, Wishes has brought excitement for new opportunities as a storyteller. The project changed the scope of what I am able consider when visualizing my future work. I feel I have gained confidence completing character designs from concept to delivery, ensuring their visual impact with strong appeal and anatomy. I am sure these characters, my first characters, will stay with me. The challenges they helped me overcome will inform my future career.

The significance of this work is its culmination and combination of storytelling elements. Before my master’s study, I would not have been able to create detailed characters, fully invent a digital set, or draw detailed storyboards to visualize a narrative. It is my first work that synthesizes my English skillsets from my undergraduate years and digital artistic techniques from my graduate studies.
Appendices
FADE IN:

EXT. PLAZA - EVENING

A rustic, French plaza with a wishing fountain and quaint café. Evening twilight. A young couple lingers by the fountain. They are waiting for a table at the café. The MAN, nervous, clutches a ring box behind his back. He holds a coin in his other hand. He flicks the coin into the air and makes a silent wish.

MAN
(silently)
For her to say yes...

SLOW-MOTION: In midair, the face on the coin, female, comes to life: the "wish."

The man tries to summon his courage to ask his girlfriend. But he becomes too afraid and pockets the box in his coat.

The COIN, utterly disappointed, watches from the fountain amidst a sea of expressionless coins. She must make the perfect proposal happen.

EXT. FOUNTAIN - EVENING
The coin "swims" through the fountain and hits an interior switch. All the fountain jets and lights turn on, a pretty scene. The coin looks to see if the couple has reacted.

The WOMAN points, delighted.

The man fiddles anxiously with his coat pocket.

Encouraged, the coin jumps from the surface of the water to the fountain edge. She inspects the plaza for a new idea.

EXT. STREET CORNER - EVENING

A homely STREET PERFORMER plays a doleful tune on the violin a few yards away.

The coin jumps down and rolls over to him, through the shoes and legs of passersby. She hops in his tin can of spare change. The coin jumps up and down, causing the coins inside to jingle, multiplying their perceived number.

Perking up, the street performer begins to play a beautiful song.

Every time the coin reaches over the top edge of the tin can, it glimpses a sight of the couple.

The woman walks toward the performer, enchanted, intrigued. She waves at the scene and twirls.

    WOMAN
    It’s perfect!

The man, rallying his strength, pulls the ring box out of his pocket. He clutches it in a tight grip. He reaches out his hand, shaking.

The coin sees this and jumps more frantically.

The woman, out of the corner of her eye, also notices the ring box. She turns away, hiding any reaction from the man.

The violin intensifies.
But the man, overcome by nerves, sticks the box back in his pocket.

The coin crashes down, deflated, "c'mon!" She hops out of the can seeking another idea.

**EXT. CAFÉ WALL - EVENING**

An exterior plug and surge protector connects wires to the café wall. The coin rolls over to it. She loosens certain plugs by wedging herself between the plug and outlet.

The couple and café PATRONS look up as strung lights flicker. Some strands go out.

The coin finds the plug she sought, but it is unplugged. Thinking fast, she sits between the outlet and the plug. Being metal, the resulting electric current doesn't cause pain, merely excitement and a "coffee-like" rush.

All the café's exterior lighting goes out, vignetting the couple. All the fountain's interior and overhead strung lights remain, spotlighting the couple. The jets, music, and lighting create a wonderful scene.

The woman, bewildered, turns to the man.

**WOMAN**

(expectantly) Did you have something to do with this?

All eyes are on the couple. After seeing their public audience, the man shuts down, all nerves, bumbling an answer.

The woman smiles but seems disappointed.

The café's HOST inspects the exterior plugs. He picks up the coin and resets the outlets. He walks over to the couple.

**HOST**

Your table is ready.

He throws the coin back in the fountain, turns off the jets, and leads the couple to their exterior table.
FADE: MINUTES PASS

EXT. CAFE TABLES - EVENING

The man talks too fast, avoiding silences. The woman is suspicious of his panicky behavior.

EXT. FOUNTAIN - EVENING

The coin, frustrated yet determined, sets another plan in motion. She checks the trajectory of one of the far jet pipes. She hits the switch then wedges herself inside the pipe, fast.

Bubbles burst to life inside the pipe. Pressure builds, and the coin launches out.

EXT. CAFE TABLES - EVENING

SLOW-MOTION: She flies through the air. Water sprays the café patrons...

but she is short of reaching her target: the man's pocket. She lands in his wine glass.

The couple, watching the wayward jet, do not notice.

The host rushes to turn off the jets.

Stuck within the tall glass of white wine, the coin desperately looks for a way out. Nothing is found. Moments pass.

The man lifts his glass to drink. The coin slides helplessly into his mouth. He promptly spits the wine out. The woman dodges. The coin lands on the table, but the spray hits a waiter, carrying a tray of plates.

The waiter throws the tray up, and the plates fly into the air. They come crashing down on the table, spilling food and drinks on the couple, and covering the coin.

The date is ruined. All eyes are on the couple, again.
The host returns to apologize, profusely.

The man is now a nervous wreck, apologizing to his girlfriend.

She waves the host away, embarrassed, wiping food from her blouse.

    WOMAN  
    (to Man)  
    I think we should leave.

The coin rolls tipsily on the table to clear itself of food and wine. She realizes the couple is about to stand up. She rolls off the table and jumps into the man's pocket.

Stares and whispers accompany the couple as they exit.

The coin, desperate to make the proposal happen, starts to nudge the ring box out of his pocket.

The man grabs his coat and covers the pocket. His elbow hits a neighboring table.

    PATRON  
    Hey! Watch it!

    MAN  
    So sorry!

    WOMAN  
    (to Man)  
    What's going ON with you tonight?

    MAN  
    Nothing, I...

The coin yanks the pocket out of his grasp.

He begins a frantic dance, trying to keep the pocket closed. He bumps into other patrons and tables.

    WOMAN  
    (annoyed)  
    What are you DOING?!

    MAN  
    I don't know. I'm sorry!
EXT. FOUNTAIN - EVENING

They end up by the fountain. The struggle escalates as the coin continues to dislodge the box.

WOMAN
Is something wrong with your pocket? Let me see!

The man tries to keep his pocket away from her.

The box opens.

SLOW-MOTION: A jolt, and the ring flies out of the box. In the mayhem, neither the man or woman notices. The coin lurches to catch the ring, but the box follows. The box automatically snaps shut, trapping the coin.

The ring lands in the fountain. Currents caused by the jets sweep the ring into a drain and wedge it within the grate. The box sails through the air and lands on the ground, rolling to a stop.

The woman picks it up, grinning.

WOMAN (CONT’D)
I KNEW it!

MAN
Wait!

WOMAN
I KNEW you were acting. All night! I knew it!

She opens the ring box. She is ecstatic until her face falls.

WOMAN
It’s a coin.

MAN
(shocked)
It’s a... what?!

WOMAN
Are you proposing with a coin?
She looks beneath the felt holder. Nothing.

    WOMAN (CONT’D)
    What’s going on?

Her tone shifts from confused to upset.

    MAN
    (disbelief)
    Of course. Of course, it's a coin...

He buries his hand in his pocket and doesn't feel the ring. He tries to swallow a nervous laugh. The result is somewhere between a cry and guffaw.

Every café patron is staring at the couple.

    WOMAN
    What’s going ON?!

    MAN
    I don’t know!

His nervous laugh breaks again. She is almost dissolving into tears.

    WOMAN
    Are you proposing, or not?

He is paralyzed with hesitation.

    MAN
    I...

The man notices many patrons glaring at him. He looks at the woman, crying, covered in food and wine, a mess.

    MAN (CONT’D)
    I...

His expression darkens as he registers his failure. Anxiety to anger. Self-rejection.

    MAN (CONT’D)
    I'm sorry... I'm... not.
She steps back, heartbroken, then humiliated, covering her face with her hands.

    WOMAN
    I have to leave.

She snaps the ring box shut, closing the coin in darkness. She tries to hand it back but drops it on the pavement. The coin is jarred.

    MAN
    Wait!

    WOMAN
    I’m LEAVING.

The man watches, stricken, as she jogs away.

FADE: HOURS PASS

EXT. FOUNTAIN – LATER EVENING

The man ends his frantic search for the lost ring. He's searched the café, the plaza, under tables, inside cracks, and through trash bags now scattered about. Not many people remain, the lights are dimming. He hunches down on the fountain edge, miserable. He removes the ring box from his pocket.

Inside, the coin hides within the felt holder, dismayed. The man lifts the box to his face. He takes out the coin. For a second, the two almost make eye contact.

The man blinks back welling tears. His wish has betrayed him. He betrayed himself. His expression turns to fury.

He hurls the coin, hard, into the fountain.

The coin skids into a pile of coins, spinning madly.

The man stalks away, kicking the ground.

The coin swims after him, but realizes she's stuck, she's failed. She swims over to the sunken ring. The coin slowly despairs, unable to think of a solution. She breaks into tears. She recalls his wish, echoing: "for her to say yes..."
TIMELAPSE: HOURS PASS

EXT. PLAZA – MORNING

The man returns to the plaza to look for the ring in daylight. He appears unkempt, still anxious and upset. He searches around the café.

Something catches the corner of his eye, glinting. He walks over to the fountain, searching for the source. He gasps, then stands on a bench to get a better look.

A mosaic of the woman's face, smiling, has been assembled by all the coins in the fountain. The coin created an image of what the man wishes for most. He's dumbfounded, trying to take it in: what he had wished for, what he believes he has lost.

The glinting continues from the mosaic.

The man hops down to inspect it, reaches in, and lifts out the diamond ring.

Beneath the ring, the coin had been rocking back and forth, catching the sunlight, awaiting his return. The man turns the ring over in his hands, astonished. He looks down at the place where he picked up the ring.

The coin stares back, silently imploring him to act.

The two make eye contact, although the man does not realize it. He starts to form a decision. A little hope builds.

The coin tries to contain her excitement. The mosaic has granted the man a spark of courage—he reaches for his phone.

MAN
    (typing text on phone)
    I'd really like to apologize – can we meet again at the plaza?

He hits send. He cannot believe his actions, and fights against fear, but he must rally his resolve. He glances again at the mosaic.
FADE: TIME PASSES

The woman arrives, unsure, defensive.

    WOMAN
    What’s going on?

The man launches into an apology, trying to come up with an explanation. He stumbles over his words, hurriedly mixing ad lib with a practiced speech. He stops when he can't decipher her expression.

She is stuck staring incredulously at the fountain. The sheer volume of coins is unbelievable—she can’t figure out how it happened.

She shakes her head, thinking. Then she shrugs, looking at the man quizzically. She almost starts to laugh, then smiles.

The man realizes the mosaic may have sparked a reconciliation between them. He takes a deep breath. He gets down on one knee and proposes, without hesitating.

A moment of waiting.

    WOMAN (CONT’D)
    (whispering, smiling)
    Yes.

The man, amazed, cannot believe his change of fate.

The coin jumps for joy up out of the water, causing a small splash.

The man looks at the little splash, and it dawns on him, putting two and two together.

    WOMAN (CONT’D)
    What is it?

He smiles, confounded, unable to find words. He kisses her. The coin settles back into the sea of coins, content. She granted the wish.
References


