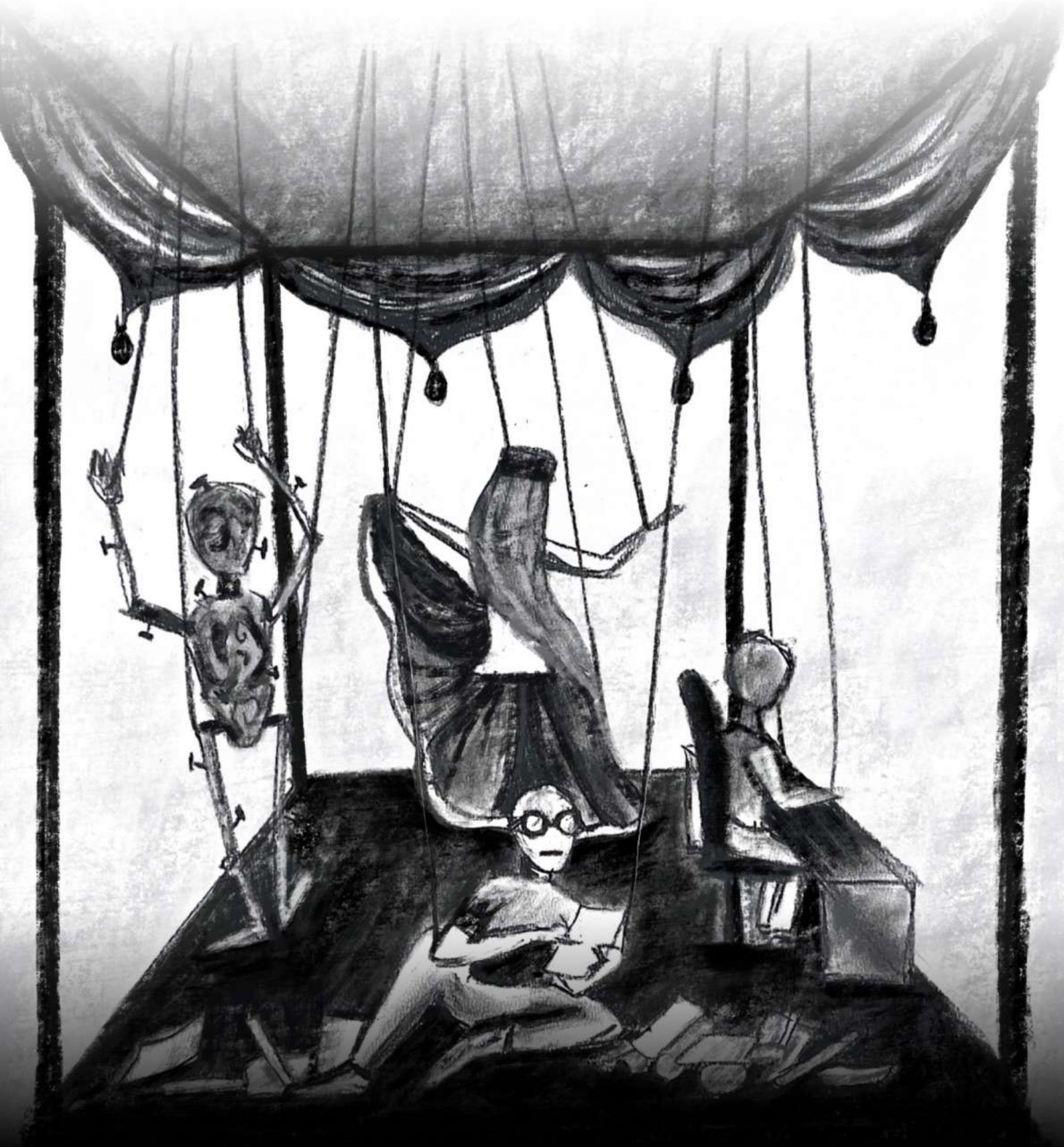
A Crisis in Threads

An Interactive Interpretation of Traditional Indian Puppetry



Mahima Jain
MFA Design & Technology 2021-2023

Jesse Harding, John Sharp
Frances Hoepfner, Ethan Silverman

Thesis document

Submitted in partial fulfillment of the requirements for the degree of

Master of Fine Arts in Design and Technology

Parsons School of Design

May 2023

Table of Contents

List of Images

33. *Anarkali paper puppet with fan*
34. *Hand gestures drawn on paper*
35. *Paper hands attached to the circuit*
36. *Preliminary ideas - Weak*
37. *Self Talk - Incessant inner monologue*
38. *Creative block - Empty, light head*
39. *The ideal version - Flamboyant*
40. *Sketch for the final form*
41. *3D model for the scenario when 4 users interact with the installation*
42. *3D scan*
43. *3D model*
44. *The “self talk” puppet head*
45. *3D Sculpting the puppet’s torso*
46. *Screenshot from SRP Player*
47. *Wood cut attached onto the Roland*
48. *The first Roland test cut*
49. *Final cuts from Roland CNC milling*
50. *Pieces that will form the legs and arms of the puppet*
51. *Separating parts from supports*
52. *Jewelers saw for the finer cute*
53. *Smoothing surfaces with sandpaper*
54. *Adding a layer of wood hardener*
55. *Sanding wood to curve the ends*
56. *Workspace set up made with wood*
57. *Stitching hands and legs out of felt*
58. *Stitching them onto a wooden torso*
59. *Reusing Bandhej fabric from ‘Kathputli’*
60. *Testing the pose with strings*
61. *Finalized ‘Creative Block’ puppet*
62. *Finalized ‘Self Talk’ puppet*
63. *Attaching wooden head to servo*
64. *Working with circuits and puppets*
65. *Pulley system to pull puppet strings*
66. *Attaching ultrasonic sensors*

67. *Signifiers for the interactions*
68. *First testing round with initial paper prototypes*
69. *Instructions with trickster puppet*
70. *Instructions with hand prototype*
71. *User testing*
72. *3D printed version of puppet along with frame*
73. *3D printed version of puppet along with frame*
74. *Diagram for the stage's structure incorporating fire safety regulations*
75. *Making the stage*
76. *Fully built stage*
77. *Final look with the drapes*
78. *Final installation with placards*
79. *'Nascent Ideas' puppet*
80. *'Self Talk' puppet*
81. *'Creative Blocks' puppet*
82. *'Idealised Vision' puppet*
83. *'Nascent Ideas' & Idealised Vision' puppet*
84. *All four puppets*
85. *A4 Poster*
86. *Instagram Post*
87. *Instagram Story*

Abstract

“A Crisis in Threads” uses modern technology to expand the traditional form of 'Kathputli' puppetry from Rajasthan, India, while maintaining its cultural roots and exploring the inner struggles and complexities of the creative process.

Exploring the intersection of traditional puppetry and contemporary technology, the project aims to expand the scope of artistic expression while preserving the cultural roots of 'Kathputli', an ancient form of puppetry from Rajasthan, India. With childhood memories as inspiration, the project blends traditional techniques with modern methods to invite the audience into the magical world of puppetry. The installation aims to expand the art form while maintaining its essence and traditionalism, incorporating 3D scanning, 3D modeling, Roland CNC milling, and physical computation for interactivity and movement. The installation explores emotions of inadequacy, self-loathing, and frustration, rather than typical ‘Kathputli’ stories of triumph. Multiple users can interact with the installation, creating a kaleidoscope of a creative mind, where time collapses, and chaos reigns supreme. By embracing a new way of presenting traditional puppetry, this project can contribute to the community of practice by expanding the scope of artistic expression while preserving its cultural roots.

Design Questions

1. How can a story be simplified and told through physical objects and simple interactions?
2. How can contemporary and traditional forms of storytelling be merged?
3. Can the audience participate and affect the story?
4. How can I expand the traditional form in ways that are supporting and honoring?

Research

Rajasthan's Age Old Craft of Puppetry

According to popular belief, around 1500 years ago, a tribe in Rajasthan initiated the practice of Kathputli, a type of marionette art that has endured over time due to the community's love for tradition. The stories that are depicted in this artform are derived from folk tales and convey the daily life of ancient Rajasthani tribal people. The narratives usually have clearly defined characters with positive and negative roles. For the past 500 years, Kathputli has been supported by wealthy families and kings. A distinctive feature of this artform is the high-pitched voices produced by the main puppeteer through a bamboo reed.[1]

Kathputli (img. 1)

The Kathputli puppets are carved and painted by the puppeteers themselves, and are characterized by their doll-like appearance with a head attached to a short, thin wooden torso. The arms are made of wood or cotton-stuffed cloth and are free to move on both sides of the

[1] *Kathputli (puppetry)*. Wikiwand. (n.d.). https://www.wikiwand.com/en/Kathputli_(puppetry)

body. As most Kathputli do not have legs, their long cotton voile skirts twirl around when they move. The puppeteer manipulates the loop directly between their fingers or elevates it to move two strings, one fastened around the puppet's waist and the other to the top of its head. The Anarkali dancer puppet is more complex, with about six strings. Traditional Kathputli string puppets do not have controls, but the quick movements from above and the large number of puppets arranged on the brightly colored cloth puppet stage, designed to look like a palace, enhance the effect of the manipulation technique.

A usual Kathputli stage made up of vividly colored cotton cloth (img. 2)

The story of Amar Singh Rathore, a Rajput prince of the Nagaur kingdom who lived during the reign of the 17th-century Mughal emperor Shah Jahan, is a prominent feature of Kathputli performances. In these performances, Rajput puppet characters are easily identifiable by their mustaches and occasionally by their cropped or divided beards, while Muslim puppet actors wear pointed beards. The Kathputli Ka Khel performance features a variety of performers, including female dancers, musicians, magicians, jugglers, horseback and camelback riders, clowns, and courtiers, all of which reflect the splendor of Northern Indian courts.

Trickster characters are commonly featured in Kathputli performances, such as the *behrupiya*, a puppet that can transform from male to female or have two heads; the *jadugar*, a puppet magician who can juggle his own head; and the *sapera*, a snake charmer who is a prominent

performer. In one popular story, the snake charmer is bitten by the snake he has lured with his shehnai, but is revived when the snake sucks out the venom. *Anarkali*, a beautiful dancer, is also a well-known character in Kathputli performances.[2]

Narrator sitting outside the stage with a 'dholak' (img. 3)

To communicate with the narrator outside the stage, the lead puppeteer uses a bamboo voice modifier to produce whistle-talk, a language that cannot be understood by the audience. The lead puppeteer narrates the story of Amar Singh Rathore and his life at the Mughal court, which ultimately resulted in his tragic death at the hands of an envious courtier. He is accompanied by a dholak, a drum with two skins, and ghungroos, small bells that create a rhythmic sound.[3]

Starting from 1980, various Kathputli groups have been invited to perform at various events and organizations worldwide. Presently, both troupes and traditional families, including some master puppeteers acknowledged locally and sometimes nationally for their contribution to the art of puppetry, continue to perform Kathputli Ka Khel.

---

[2] *Kathputli Ka Khel*. World Encyclopedia of Puppetry Arts. (2016, April 12). https://wepa.unima.org/en/kathputli-ka-khel/
[3] *The Story of Kathputli*. (2010, January 18). Story of Indian crafts and craftsmen. https://gaatha.com/the-story-of-kathputli/

Puppet Artist Pappu Bhat Urges Revival of Traditional Puppetry

During my travels to Rajasthan, I had the rare opportunity to learn about the ancient craft of puppetry from a local family of Bhats. They are a wandering community from Rajasthan who perform their shows or ‘Kathputli Ka Khel’ during the dry season and return to their villages to cultivate the fields after the rains.

At Pappu Bhat’s workspace with his family (img. 4)

The puppeteers believe in the divine origin of their art and claim to have been the chief performers during the reign of the legendary king Vikramaditya. They were the ones who performed the first puppetry show based on his life and achievements. Later on, king Prithviraj Chauhan became a patron of puppetry and other arts, followed by Amar Singh Rathore, who supported it in return for documenting his heroic exploits.

The Nagaur's Bhat clan is etched in history as the poets' and puppeteers' community of Rajasthan. Pappu Bhat, and his family, belong to this clan, and they taught me their ancestral craft. I was fascinated by the intricate process of creating a Kathputli puppet by hand, using only wood and cotton.

Carving puppet face out of mango wood (img. 5)

Carved out faces (img. 6)

The art of Kathputli puppet-making is truly a mesmerizing process, filled with intricate details and skilled craftsmanship. Starting with a block of soft and malleable mango wood, the carver's hands dance over the surface, chiseling and shaping until the wood takes on a new life as a regal king or a graceful queen.

The stages of varnishing and painting the puppet faces (img. 7)

With a delicate touch and years of experience, each face is carved with stunning precision, capturing the unique features and character of each puppet. The artistry and creativity of the puppet-makers shine through as they paint each piece by hand, adding fine details such as expressive eyes, luscious locks, and traditional Indian adornments like the ‘bindi’ or red dot on queen’s forehead along with a nose ring.

Stitching and attaching costumes on the puppet faces (img. 8 & 9)

As the costumes are draped and hammered over the wooden frames, the puppets begin to come to life, each one embodying its own distinct personality and flair. With a touch of cotton filling for structure and flowy fabrics for skirts and dresses, the puppets take on a sense of movement and grace, ready to enchant audiences with their captivating performances.

In the end, the strings are attached with care, each one carefully placed to allow for the characteristic movements of each puppet. The result is a true work of art, a masterpiece of skill and imagination that captures the essence of this rich and vibrant Indian tradition.

Pappu Bhat giving final touches to the puppet (img. 10)

Fluid string movements (img. 11)

Pappuji also spoke passionately about his determination to preserve the art of his ancestors and his dedication to keeping this traditional art form alive. It was truly inspiring to see how the tradition of Kathputli has thrived for over a thousand years, despite the challenges of modern times. They continue to perform their shows, entertaining audiences with stories from Hindu mythology, dance performances and folk tales. Their art is a testament to the resilience and creativity of the human spirit.

Pappu Bhat with the award (img. 12)

Proudly holding his well-deserved recognition, Pappu Bhat stands tall with the award bestowed upon him by the Indian Government, a symbol of his unwavering dedication and exceptional contributions to his craft. His tireless efforts and commitment to excellence have been recognized at the highest level, a true testament to his skill and mastery.

The Vocabulary of The Puppetry

In the captivating world of puppetry, each character holds its own unique essence, bringing to life a story that transcends time. With every movement and gesture, these enchanting puppets embody the very essence of their character, weaving a mesmerizing tale that leaves audiences spellbound.

The cunning Trickster puppet, with its two faces and double-bodied form, embodies the essence of duality and reveals itself as something unexpected in the midst of the story. Meanwhile, the Snake Charmer puppet playfully engages the audience with a snake puppet, drawing them deeper into the drama of the story.

Trickster (img. 13)

Snake Charmer (img. 14)

The Beautiful Anarkali puppet, adorned in a magnificent and colorful costume, flaunts a flowing skirt that moves with grace and fluidity, held in check by strings that control its every sway. And the Magician puppet, a true master of illusion, juggles its own head with effortless ease, its hands deftly attached to the head while strings on the waist, head, and hands add an ethereal

quality to its movements. Indeed, in the hands of a skilled puppeteer, these enchanting puppets become works of art, each movement and gesture a brushstroke in a larger, more complex canvas of storytelling.

Anarkali (img. 15)

Magician (img. 16)

Influences

The idea to mechanize the traditional artform came from the following projects that caught my attention and demonstrate aspects of what I'd like to create.

1. Hybrid Basketry by Amit Zoran

(img. 17)

In hybrid basketry, 3D-printed frameworks are fashioned in a way that permits the expansion and evolution of hand-woven designs. The hand-woven reed, jute, and canvas fibers give the baskets a distinctive organic appeal, while the 3D-printed plastic components contribute to the beauty of the digital curvatures and manifolds.

2. Mechanical Masterpieces by Neil Mendoza

(img. 18)

Mechanical Masterpieces is a collection of paintings reimagined for the 21st century. With short attention spans in mind, it enables viewers to freely poke, switch, disco,

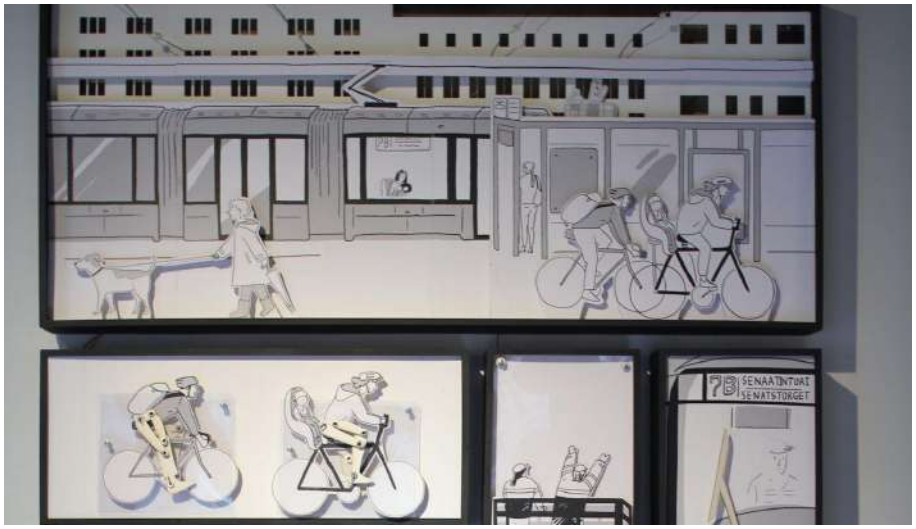
inflate, and water paintings. The installation was created for The Children's Museum of Pittsburgh.

3. 'Oongsung Oongsung' by Eunyoung Park

(img. 19)

The installation consists of 11 Puppets that follow viewers with the subtle movement of their eyes and heads. It was exhibited in 'Nightmare before Christmas' group exhibition at Open Innovation House, Espoo, Finland in 2013

4. Mechanical Cartoons by Eunyoung Park



(img. 20)

Mechanical Cartoons explores the possibility of comics not on a flat page but in the 3D space. Adding an additional dimension to a comic page with layers, depth and movement, it acts like a physical .gif comic. It was exhibited in ‘Happy Ever After’ at Kaapeli, Helsinki, Finland in 2014.

5. Sleep No More NYC - The McKittrick Hotel

(img. 21)

In this immersive theater experience, the audience explores a variety of theatrically constructed chambers at their own speed. The tale and the performers are unaffected by the audience's movement through the sets, engagement with the props, or observation of the actors at their own pace.

Furthermore, Guillermo del Toro's: Crafting Pinocchio and Calder's Circus have inspired me in terms of different scene compositions and character placements.

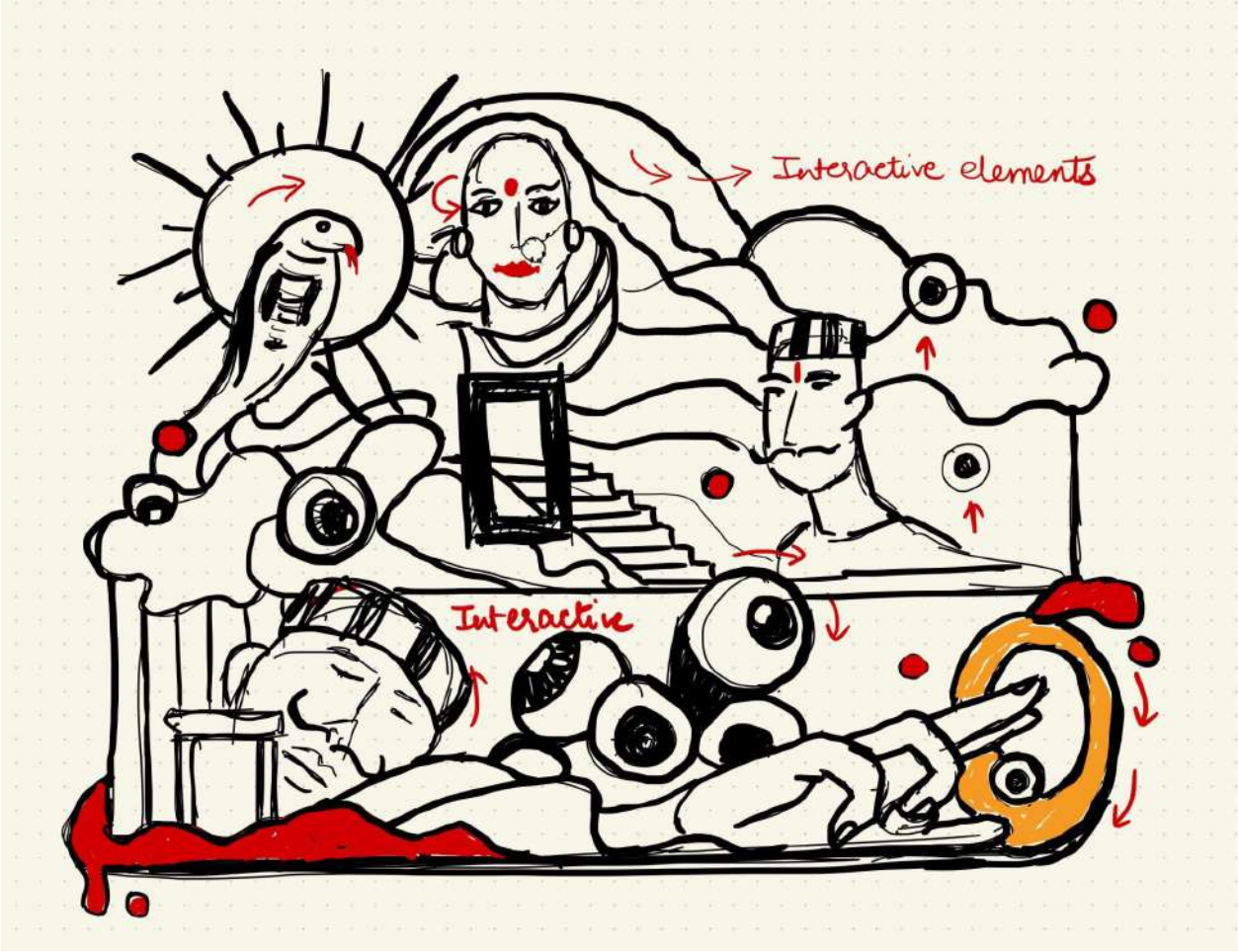
The Pinocchio exhibit at MOMA (img. 22)

Calder's Circus at Whitney Museum of American Art (img. 23)

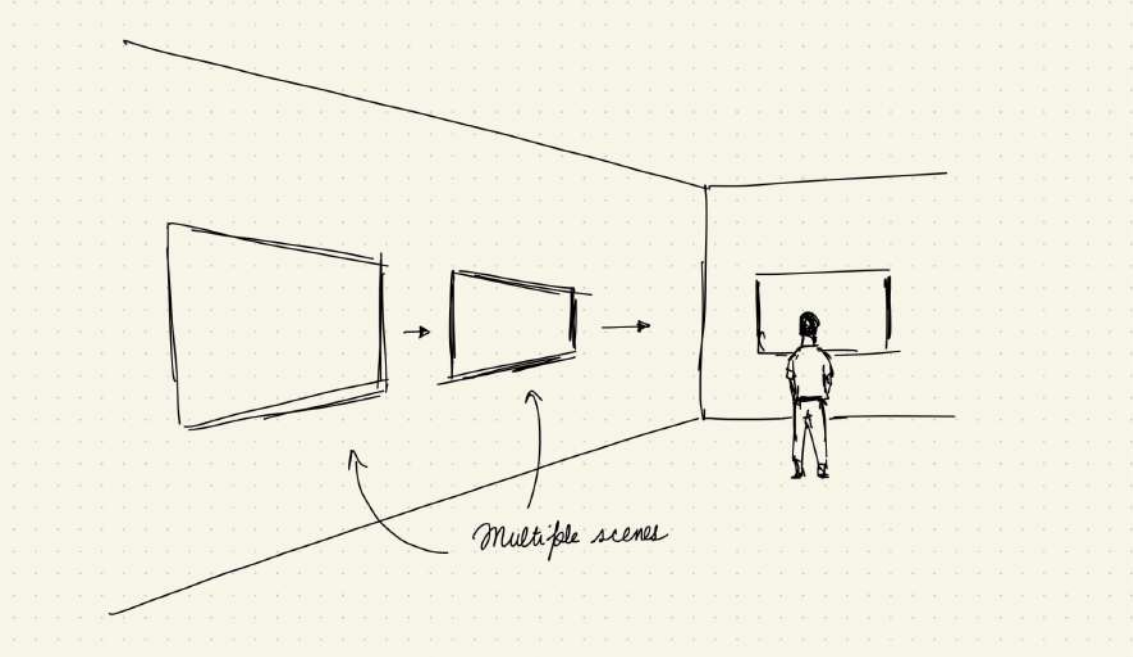
Conceptualization

Exploring Through Making

As I looked at the same characters appearing over and over again in the Kathputli shows with their characteristic movements, I got an idea to add some interactive elements to them. So, I drew some rough sketches and came up with a few ideas to make them more engaging. I played around with the prototypes until I was happy with the results and tried to address or answer a specific question about the thesis with each one. It was a fun and satisfying process and in the end, I created something that others could enjoy and be a part of.



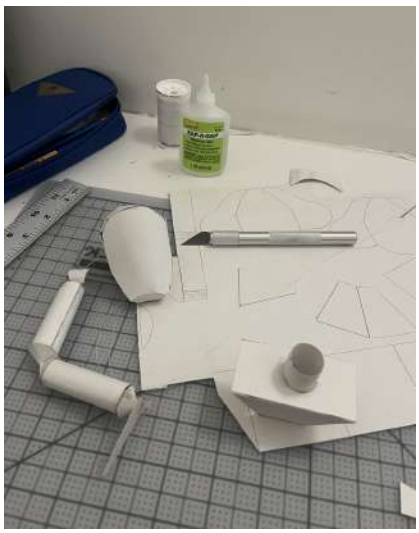
Initial sketches (img. 24)



Initial form ideation (img. 25)

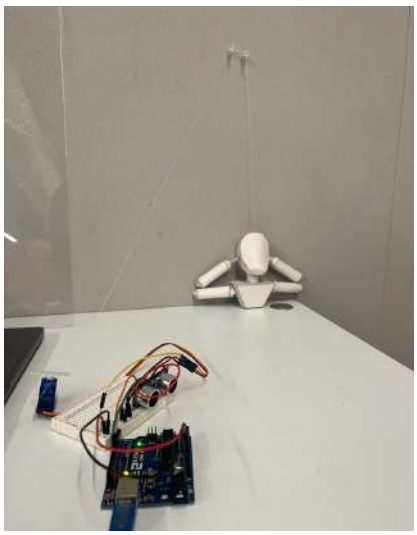
Prototype 1

The '*jadugar'* (magician) that juggles his own head.
View working prototype



Paper prototyping (img. 26)

Paper puppet (img. 27)

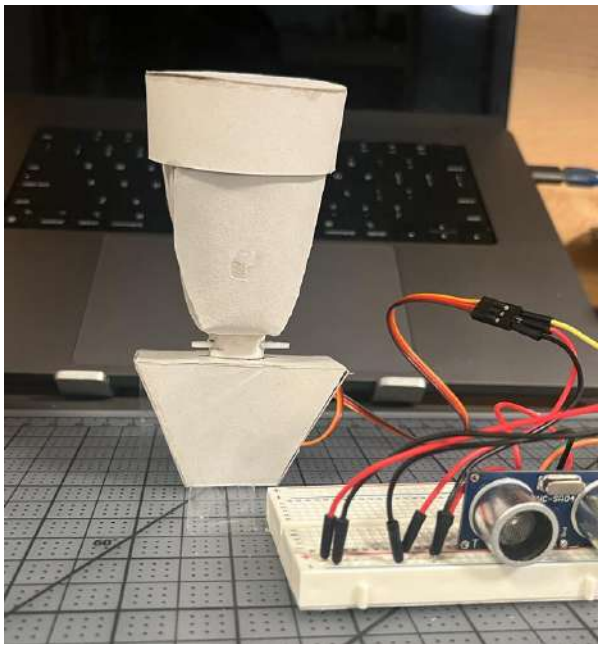


Circuit & the puppet (img. 28)

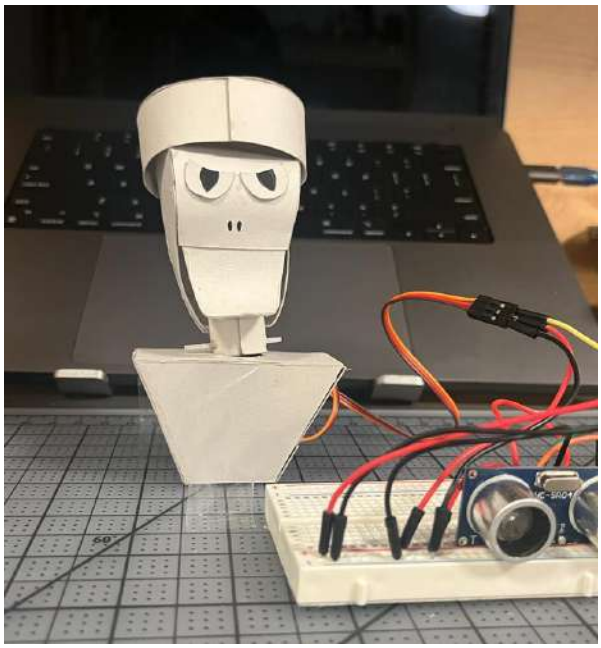
Prototype 2

Trickster puppet such as the '*behrupiya'*, the double-bodied or head-with-two-faces 'kathputli' that transforms from male to female.

View working prototype



Trickster puppet head 1 (img. 29)



Trickster puppet head 2 (img. 30)

Prototype 3

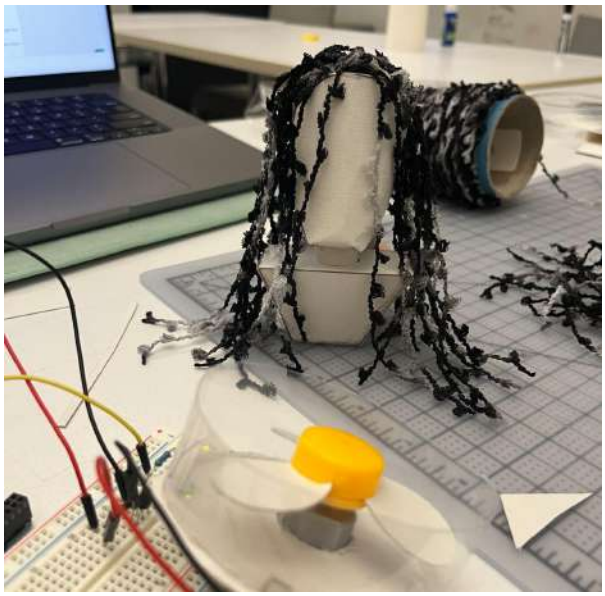
Exploring digital interactivity.

View working prototype

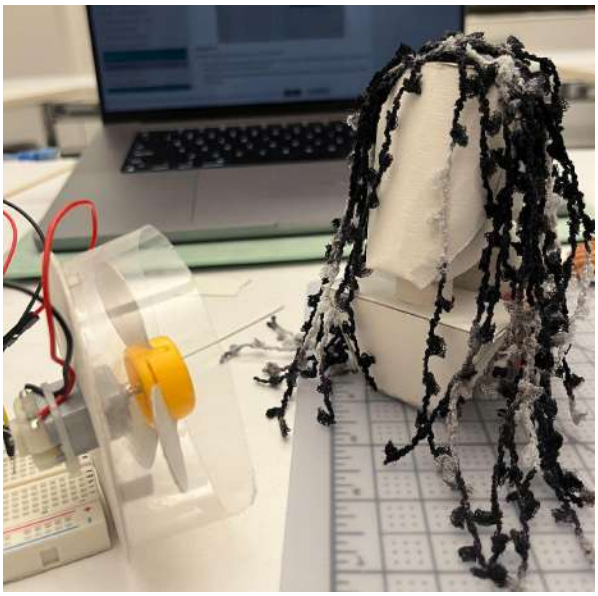
p5.js prototype (img. 31)

Prototype 4

Exploring the interactivity between the ‘Anarkali’ puppet and a working fan.
View working prototype



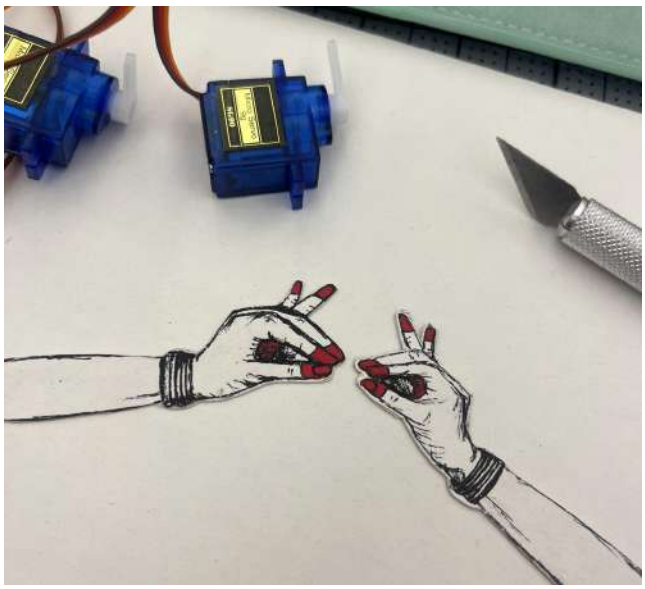
Anarkali paper puppet (img. 32)



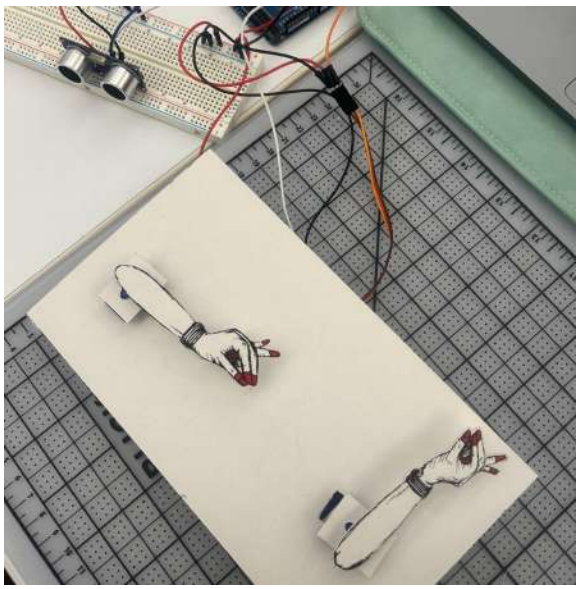
Anarkali paper puppet with fan (img. 33)

Prototype 5

How can I convey hand gestures?
View working prototype



Hand gestures drawn on paper (img. 34)



Paper hands attached to the circuit (img. 35)

Building A Narrative

As I delved deeper into my thesis journey, I was struck by the need to bring my ideas to life through the creation of four distinctive puppets. To imbue each puppet with a unique essence, I began by assigning descriptive words to each - preliminary ideas were deemed weak, fragile, and easily shattered; the second puppet represented an incessant inner monologue, with competing positive and negative self-talk; the third was a depiction of creative blocks, with an empty, light-headed, and blank expression; and the final puppet embodied the ideal version of oneself, flamboyant, perfect, graceful, and happy.

With these descriptors in place, I was able to visualize each puppet's design, movement, and interaction with its environment. Drawing upon the traditional art form of Kathputli, I assigned a specific movement or characteristic to each puppet, further bringing them to life in my imagination.

The first one was to embody the materiality of a puppet, its fragile form struggling to take shape and keep itself together. While interacting with it, users would attempt to support it and keep it upright, but it would inevitably fall apart and shatter into pieces when left alone. This puppet served to illustrate the importance of nurturing underdeveloped preliminary ideas with empathy, before succumbing to overthinking, questioning, or disregard.

Preliminary ideas - Weak (img. 36)

As I began sketching each puppet, I felt a sense of excitement as I brought my ideas to life. These puppets were meant to represent my thesis journey, and I put a lot of thought and effort into their design, movement, and symbolism. I was deeply invested in creating something that was not only visually appealing but also carried a strong message.

As I delved into the fabrication process, I knew that one puppet had to be the embodiment of grappling with initial ideas and the accompanying inner monologue. To reflect this, I envisioned a puppet with rough edges, nails sticking out, and an unfinished look.

As I worked on crafting the puppets to represent my thesis journey, I realized that one of the key aspects I wanted to capture was the internal struggle of grappling with initial ideas and the accompanying inner monologue. The voice in our heads can be both positive and motivating, but it can also be overwhelmingly negative at times.

To bring this concept to life, I created a puppet with a two-faced head that could rotate 180 degrees - a nod to the characteristic head twists of the trickster puppet. The user could interact with this puppet and hear the two contrasting voices within. On one side, the puppet would speak to the user's innermost insecurities, while on the other side it would offer positive affirmations and motivational thoughts.

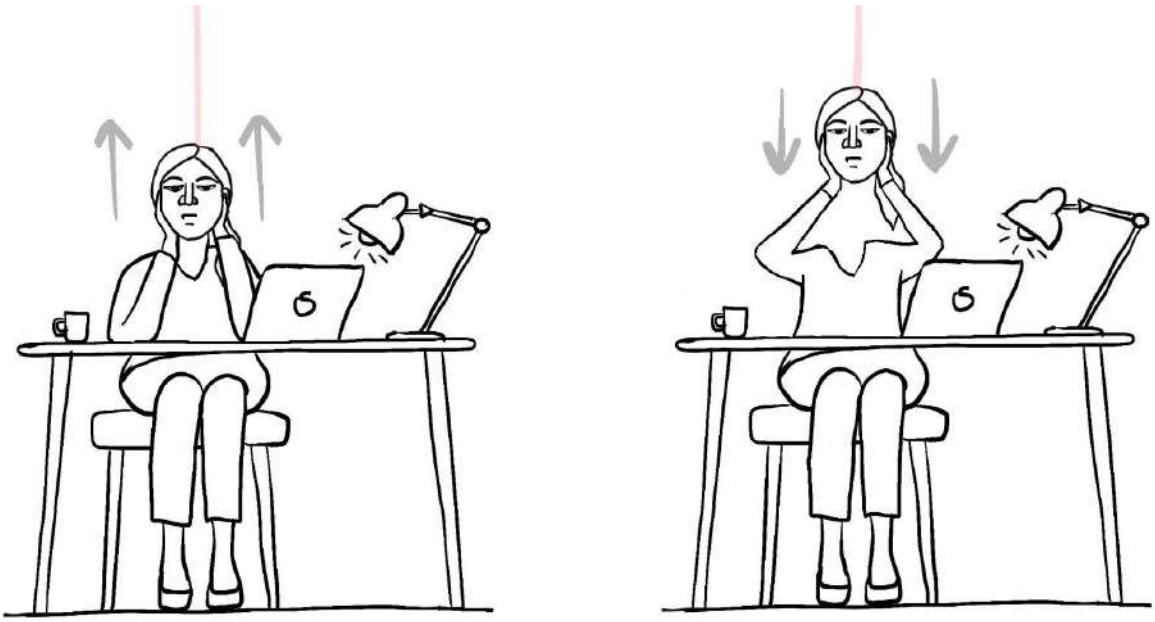
Self Talk - Incessant inner monologue (img. 37)

By engaging with this puppet, users could explore and reconcile their own internal struggles, and perhaps find ways to turn negative self-talk into positive self-motivation. It was my hope that this puppet would inspire viewers to engage with their inner voice and learn to navigate the complexities of the human psyche.

As I continued to explore the theme of creative blocks, I knew that I wanted to create a puppet that would capture the struggle of feeling empty and stuck, and the frustration of trying to come up with new ideas.

To bring this puppet to life, I drew inspiration from the movements of the magician puppet, but with a twist. When the user interacts with this puppet, its head will detach from the body, symbolizing the feeling of being disconnected from one's own creativity. Through a series of voiceovers and movements, the puppet will convey the sense of emptiness and the struggle to break free from the creative block.

I hoped that this puppet would resonate with viewers who have experienced their own creative blocks and inspire them to persevere through the struggle, to keep searching for inspiration and new ideas even when it feels like they are hard to come by. By embodying the frustration and hopelessness of creative blocks, this puppet could serve as a powerful reminder to keep pushing forward in the pursuit of creativity.



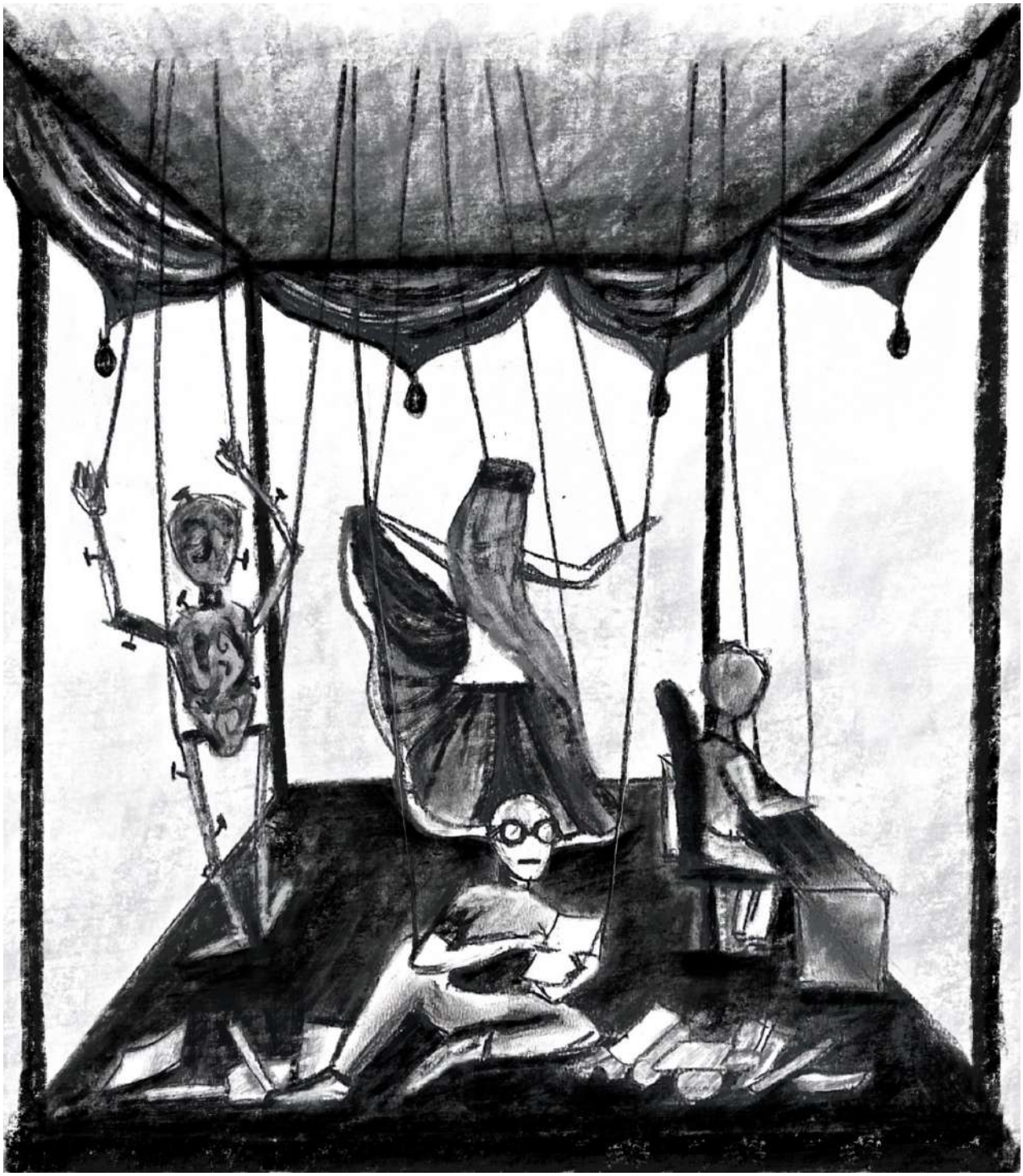
Creative block - Empty, light head (img. 38)

To represent the idealized version of our thesis project, I designed a puppet that would exude beauty, perfection, and grace. This puppet was inspired by the elegant and mesmerizing movements of the dancer Anarkali, and was crafted with great attention to detail to make it look as polished and refined as possible. With its intricate outfit and fluid twirling movements, this puppet was meant to represent the ideal version of our project.

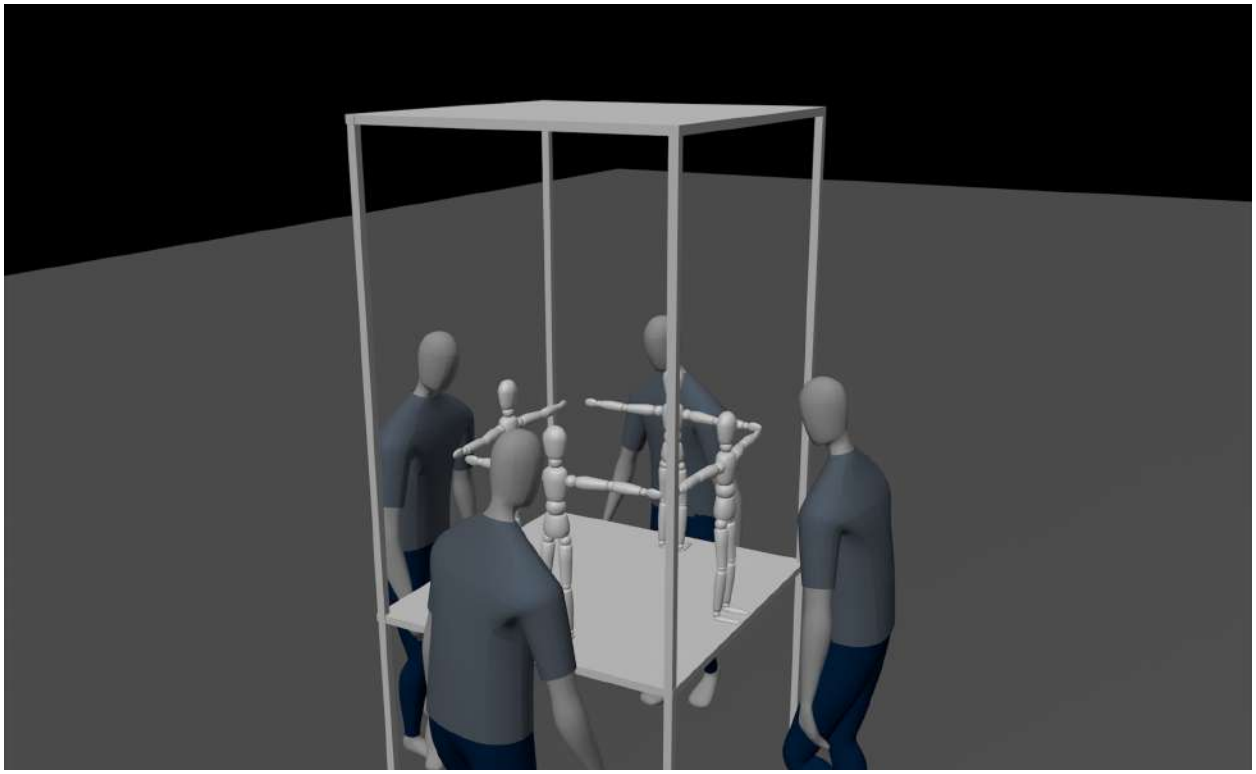
To highlight its beauty and perfection, I envisioned this puppet being placed under a spotlight, illuminating its every move and capturing the attention of all who laid eyes on it. In creating this puppet, I hoped to inspire others to strive for excellence and to always pursue their visions with passion and dedication.

The ideal version - Flamboyant (img. 39)

The process of creating something often involves a back-and-forth between generating ideas, questioning and doubting them, feeling both positive and negative about them, and striving for an ideal execution. As such, I envision these puppets operating independently of one another and simultaneously if multiple people interact with them at the same time. This way, the user can experience the journey of creation in a dynamic and fluid way, with each puppet representing a different aspect of the process.



Sketch for the final form (img. 40)



3D model for the scenario when 4 users interact with the installation (img. 41)

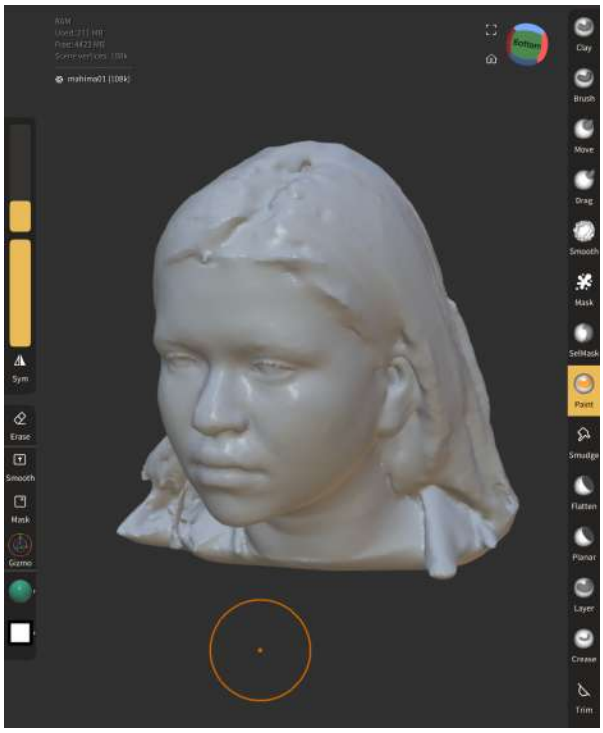
Methodology

3D Scanning & Modeling

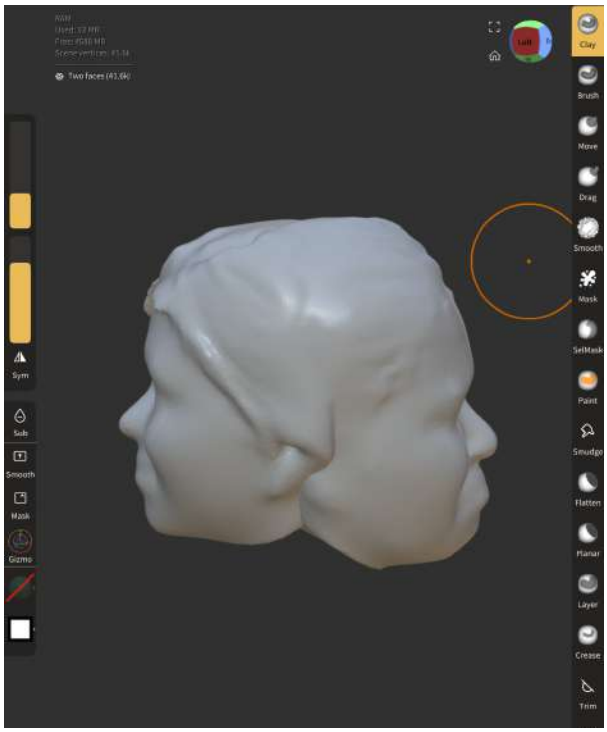
With a deep reverence for the traditional art form, I sought to maintain the authenticity of the fabrication process by utilizing the same materials employed by master puppeteers of the past. However, in order to imbue the process with a modern touch, I decided to innovate the fabrication techniques.

In keeping with the narrative of my journey, I chose to scan my own face in 3D, and then use the resulting model as a foundation for each puppet's unique features. Drawing inspiration from the distinct characteristics of each character, I made subtle yet intentional modifications to the 3D model, imbuing each puppet with its own distinct persona and essence. The result is a seamless blend of traditional craftsmanship and modern technology, a reflection of my own personal journey and evolution as an artist.

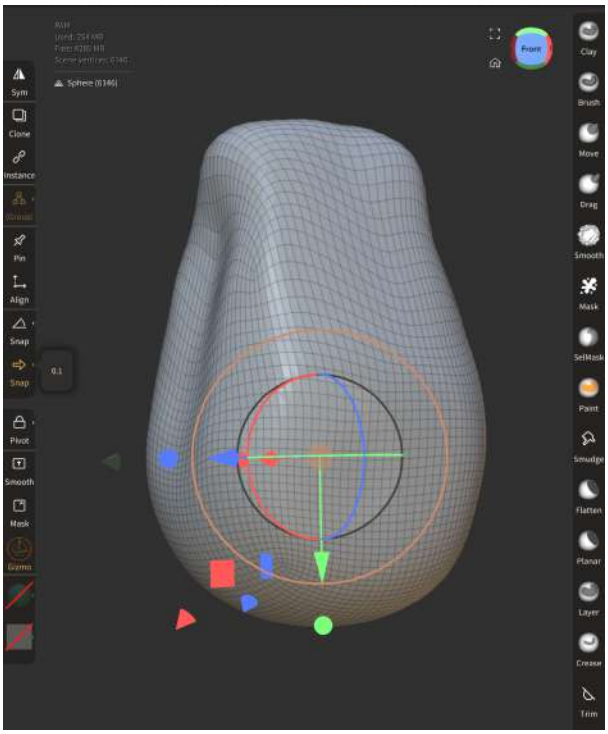
3D scan (img. 42)



3D model (img. 43)



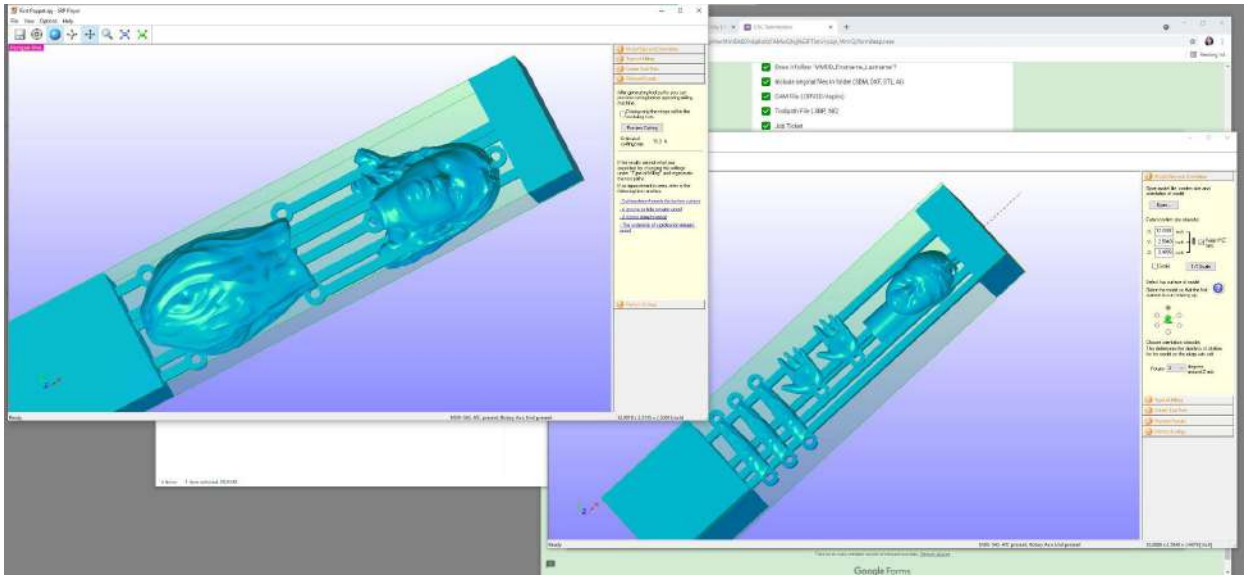
The “self talk” puppet head (img. 44)



3D Sculpting the puppet’s torso (img. 45)

Roland CNC Milling

Instead of the puppeteer's skillful hands sculpting the mango wood, here I use a Roland machine that sculpts my 3D scans and cuts them on softwood.



Screenshot from SRP Player (img. 46)

Wood cut attached onto the Roland (img. 47)

The first Roland test cut (img. 48)

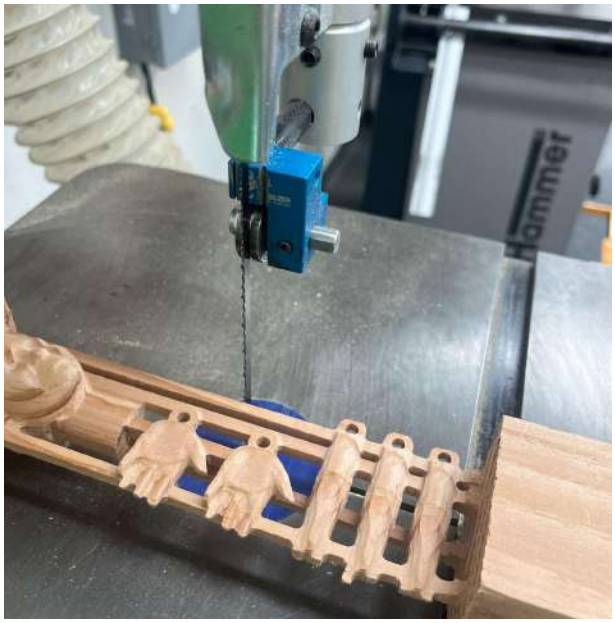
Final cuts from Roland CNC milling (img. 49)

It took a couple of test cuts on the Roland and editing of the 3D files to get the perfect cut with all the pieces intact with proper Roughing and Finishing. Image 49 below shows the pieces I detached from the original cut before the sanding and polishing process

Pieces that will form the legs and arms of the puppet (img. 50)

Woodwork

The following images depict the entire post processing steps from detaching individual wooden pieces from the supports and then the finishing of each piece.



Separating parts from supports (img. 51)

Jewelers saw for the finer cute (img. 52)

Smoothing surfaces with sandpaper (img. 53)

Adding a layer of wood hardener (img. 54)

The “Creative Block” puppet is staged in a workspace and the chair, table and laptop were cut using a band saw and table saw.

Sanding wood to curve the ends (img. 55)

Workspace set up made with wood (img. 56)

Costumes & Strings

I meticulously hand stitched the puppet costumes using felt fabric as well as the authentic Bandhini fabric from Rajasthan showcasing a harmonious fusion of craft and cultural heritage.

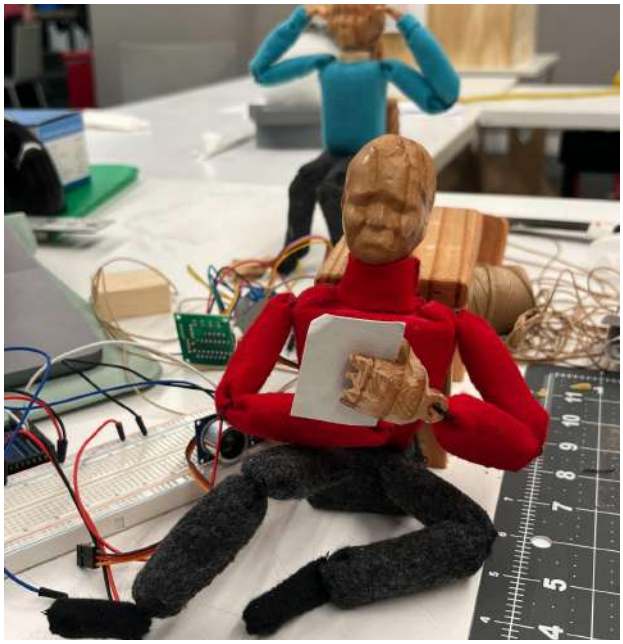
Stitching hands and legs out of felt (img. 57)

Stitching them onto a wooden torso (img. 58)

Reusing Bandhej fabric from 'Kathputli' (img. 59)

Testing the pose with strings (img. 60)

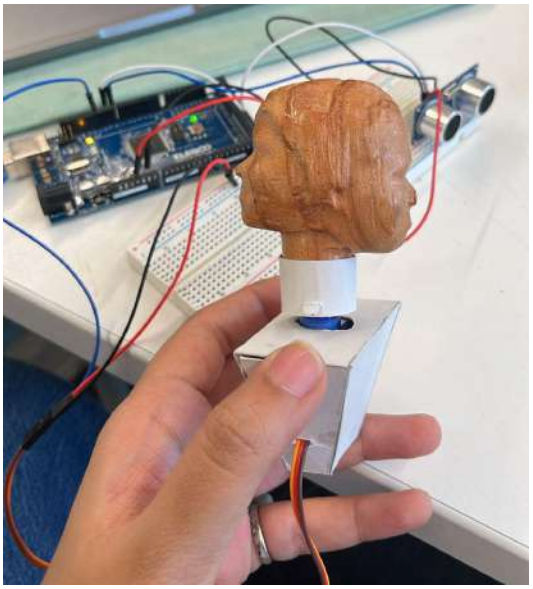
Finalized ‘Creative Block’ puppet (img. 61)



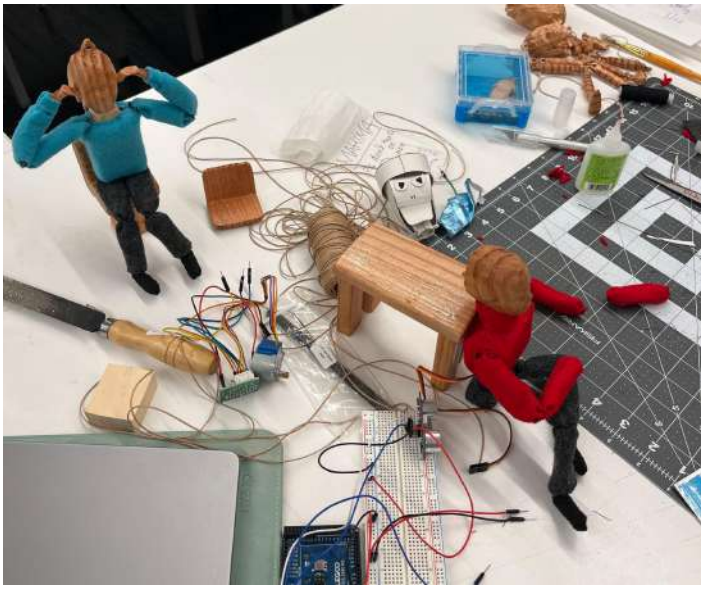
Finalized ‘Self Talk’ puppet (img. 62)

Circuits

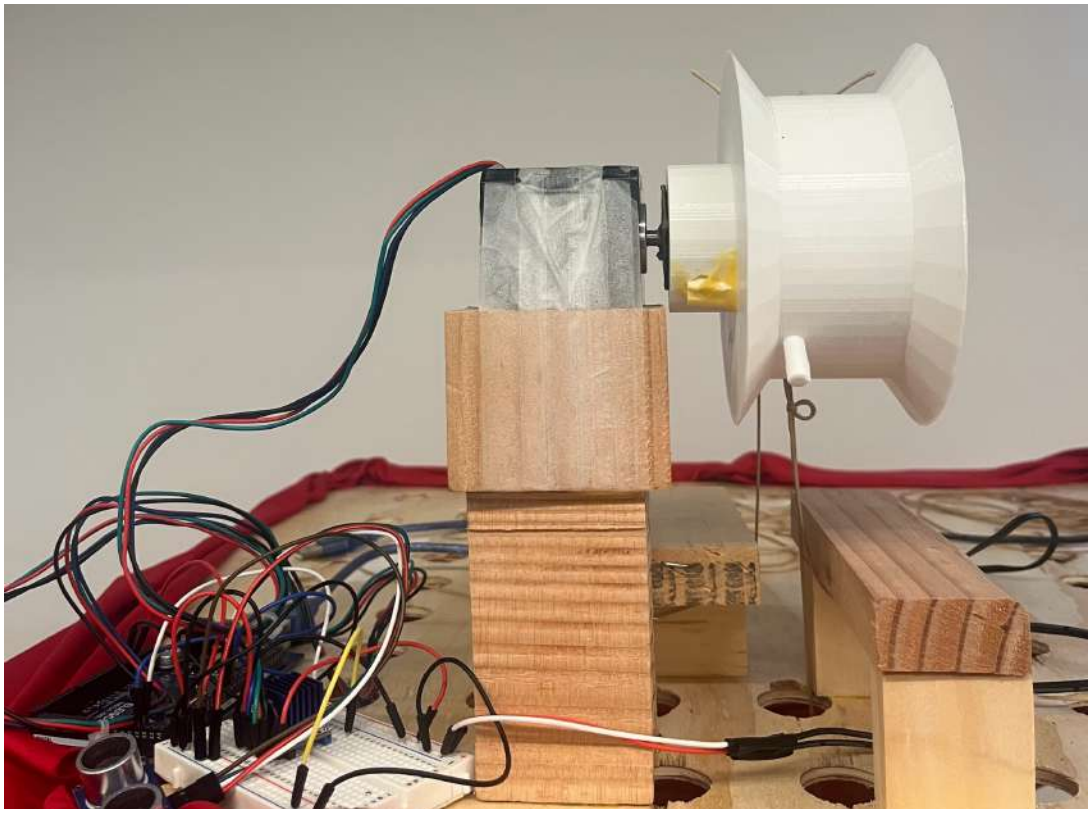
Next comes the seamless integration of circuits, motors, and sensors as technology and art converge. The 'Self Talk' puppet conceals a servo motor within its torso, connecting it to the wooden head. 3D-printed pulleys support the stepper motors, pulling the puppet strings. Ultrasonic sensors adhere to the stage's base, detecting the user's hand, while strategic signifiers—hand icon and arrows—offer intuitive cues.



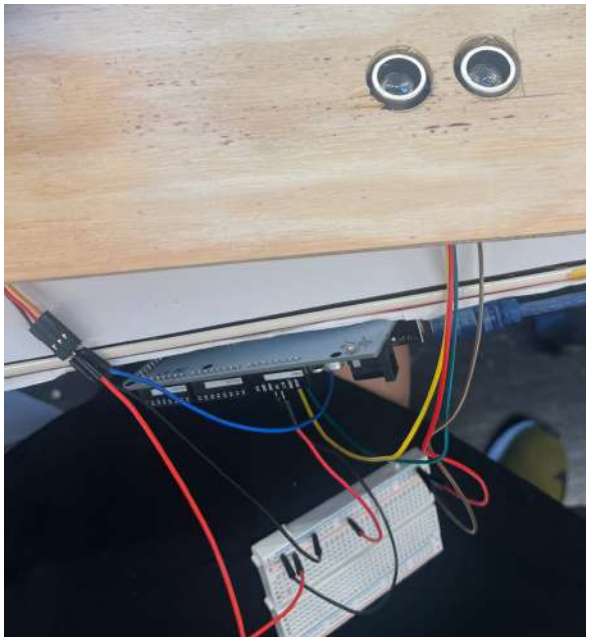
Attaching wooden head to servo (img. 63)



Working with circuits and puppets (img. 64)



Pulley system to pull puppet strings (img. 65)

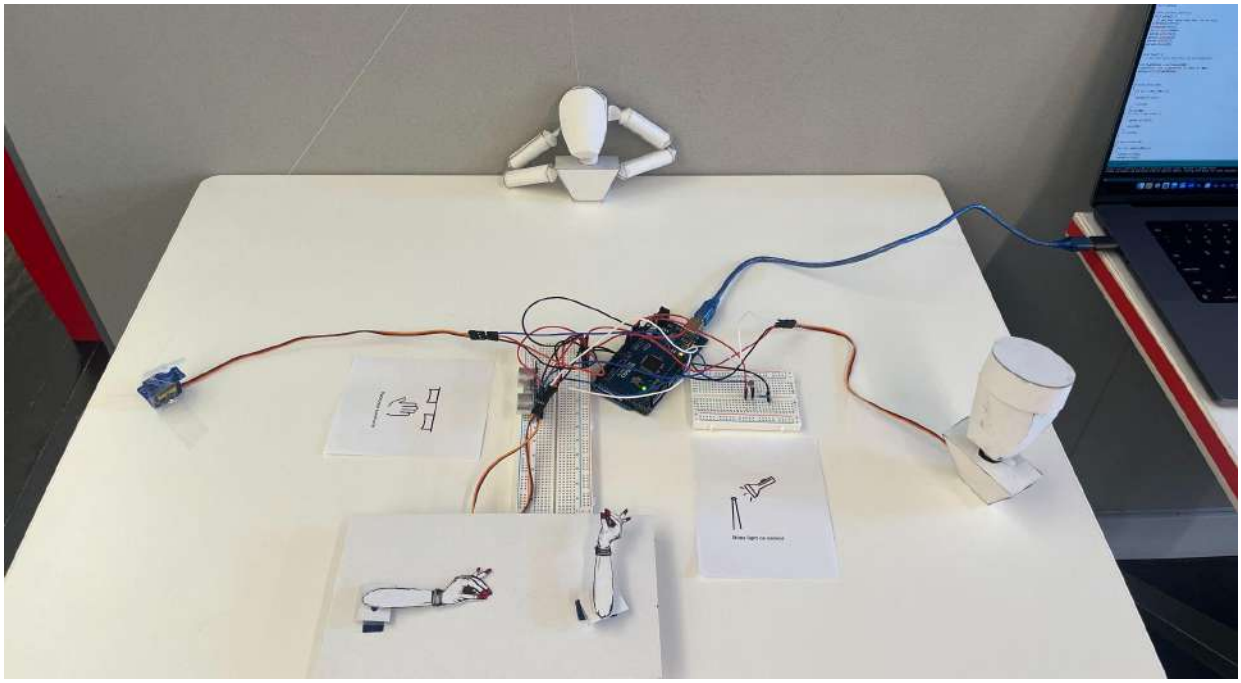


Attaching ultrasonic sensors (img. 66)

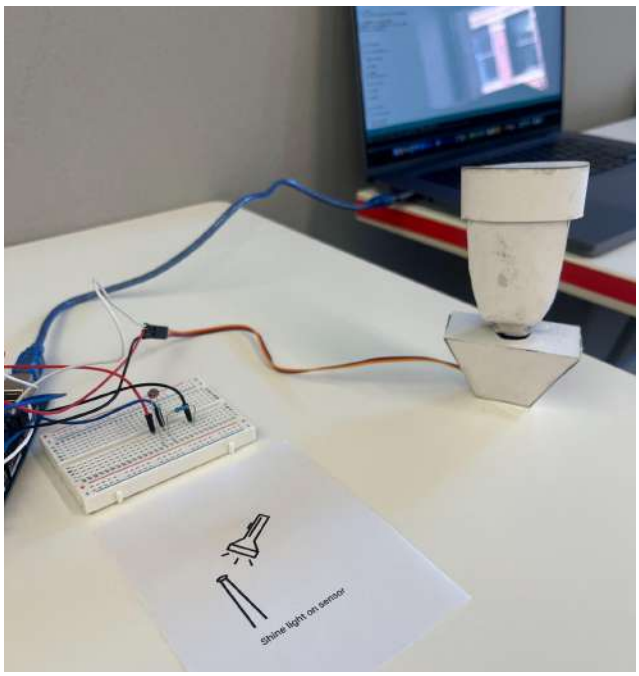
Signifiers for the interactions (img. 67)

User Testing Rounds

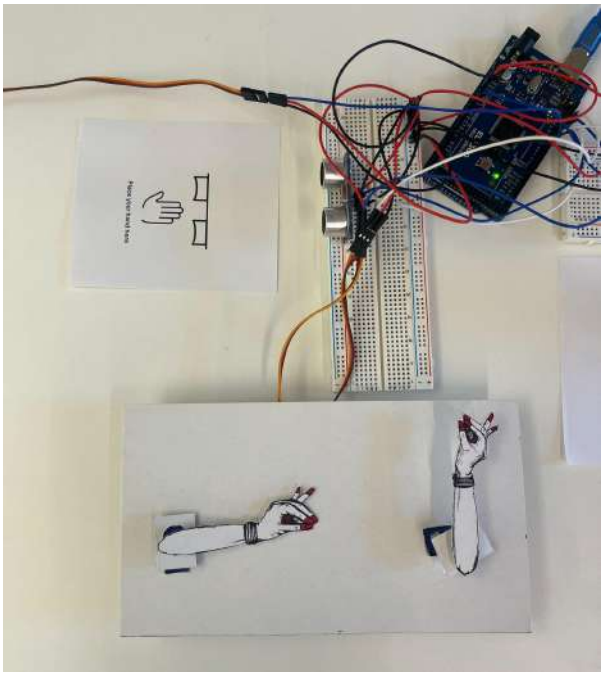
Initial paper prototype testings guiding the positioning of puppets in harmony with the stage and the users. Progressing further, a 3D printed puppet was brought to life, attaching it to a frame and testing how it responded to the pull of its strings.



First testing round with initial paper prototypes (img. 68)



Instructions with trickster puppet (img. 69)



Instructions with hand prototype (img. 70)

User testing (img. 71)

Observations:

1. Some users interacted with both sensors at one time because of the placement.

2.The second interaction wasn't intuitive because it involved an extra step.

3.The sensors and the mechanical movements need to be simplified and integrated seamlessly with the narrative.

3D printed version of puppet along with frame (img. 72 & 73)

The Stage

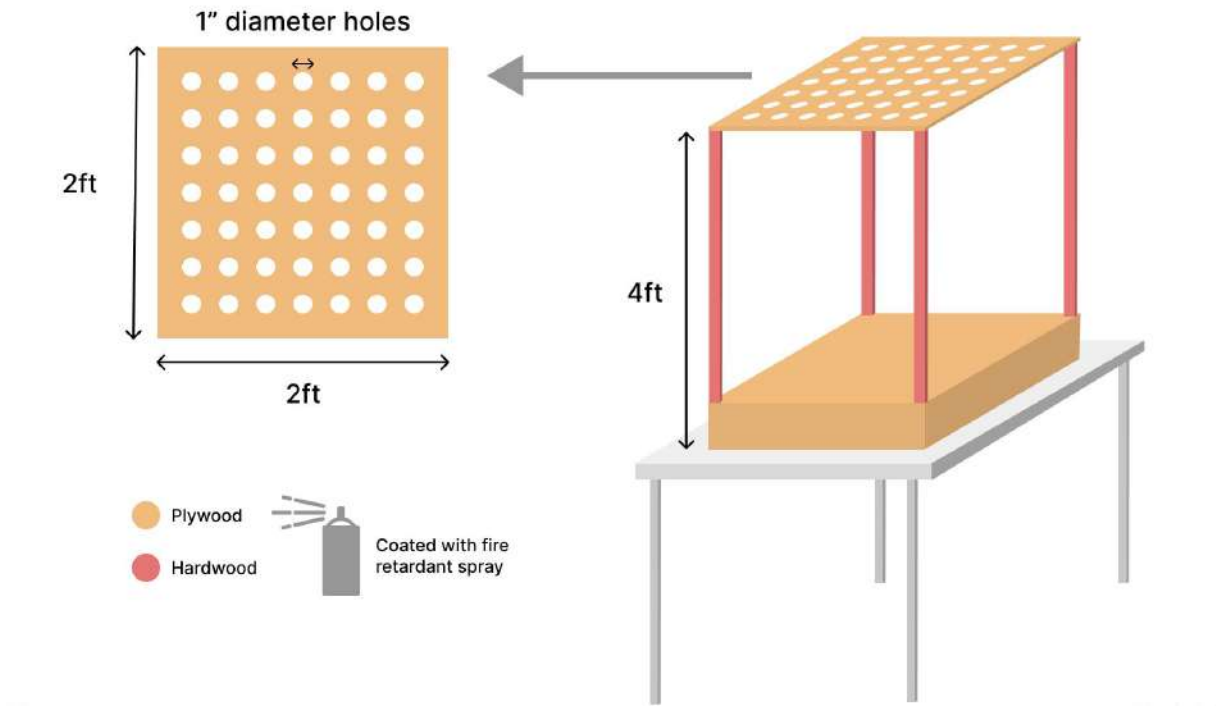
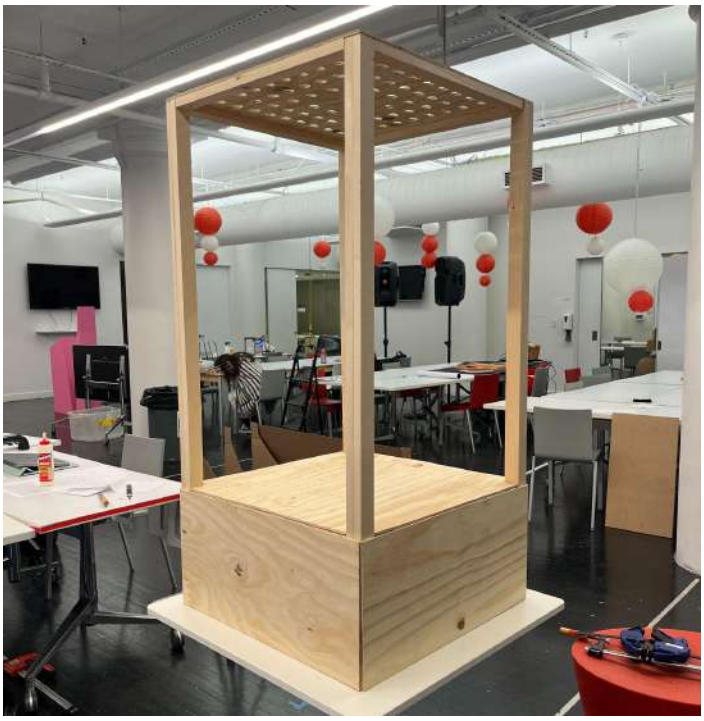


Diagram for the stage's structure incorporating fire safety regulations (img. 74)

Making the stage (img. 75)



Fully built stage (img. 76)

Final Look

Final look with the drapes (img. 77)

Final installation with placards (img. 78)

‘Nascent Ideas’ puppet (img. 79)

Nascent Ideas ///

Behold the delicate form that a new idea takes as it struggles to take shape and hold itself together. It serves to illustrate the importance of approaching undeveloped ideas with care and empathy, for without the necessary support and attention, they are prone to succumb to the perils of overthinking or disregard and turn into a mere shadow of the potential it once held.

‘Self Talk’ puppet (img. 80)

Self Talk ///

Observe the duality of the human psyche and the inner monologue that drives our creative practice – it can be both a source of positive motivation and inspiration, as well as an overwhelming force of negativity that hinders our progress.

‘Creative Blocks’ puppet (img. 81)

Creative Blocks ///

Witness the challenging emotions that arise when one feels empty and stuck, struggling to conjure up new ideas. It serves as a reminder of the frustration that can accompany a creative block, and the sense of disconnection that can arise when we feel cut off from our own creativity.

‘Idealised Vision’ puppet (img. 82)

Idealized vision ///

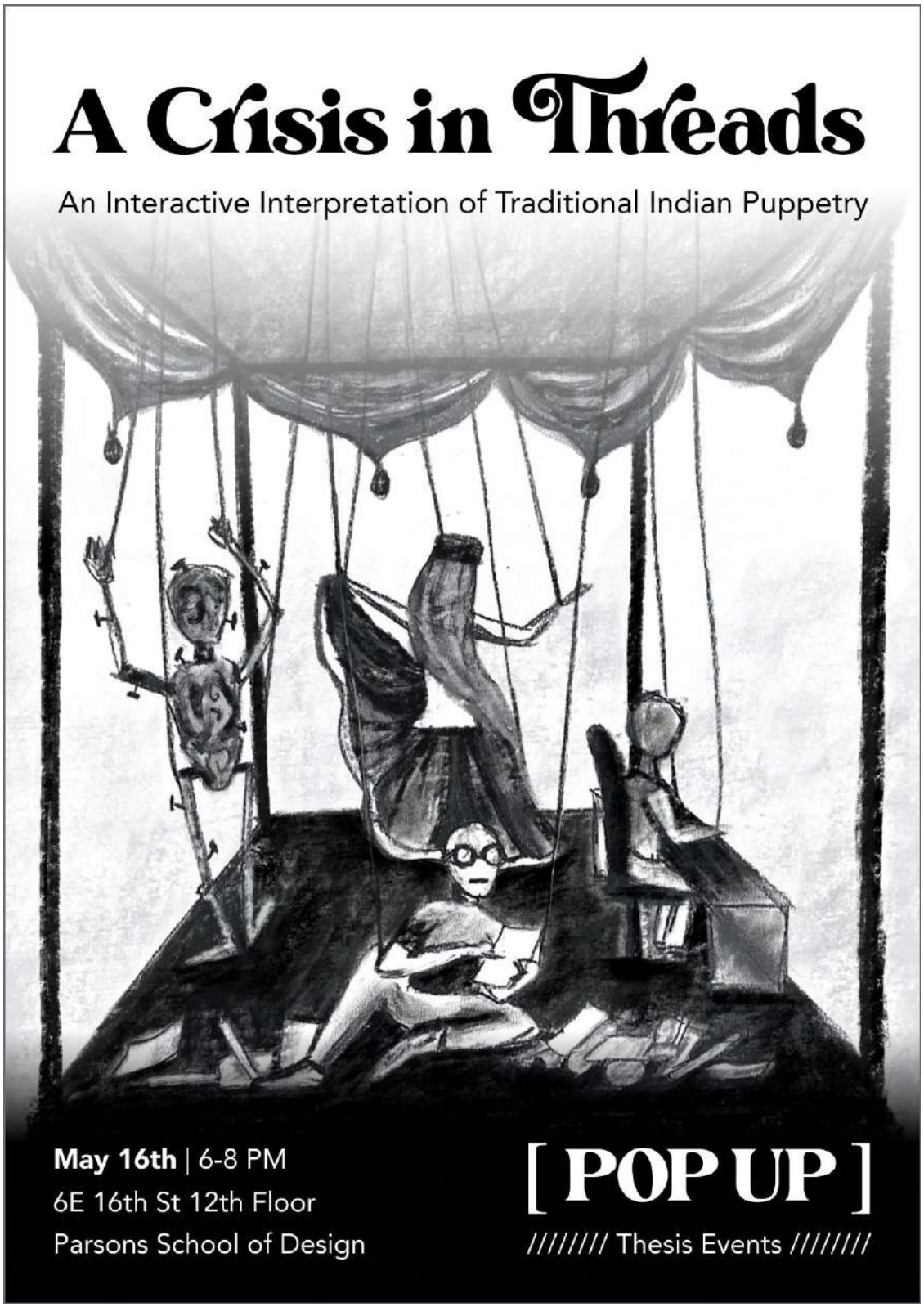
Behold the perfect version of a creation that exists solely in the creator’s imagination, emphasizing the gap between the imagined ideal and the reality of the work. It is the palpable yearning and striving towards the ideal that it embodies, a testament to the creative spirit and the human desire for excellence.

‘Nascent Ideas’ & Idealised Vision’ puppet (img. 83)

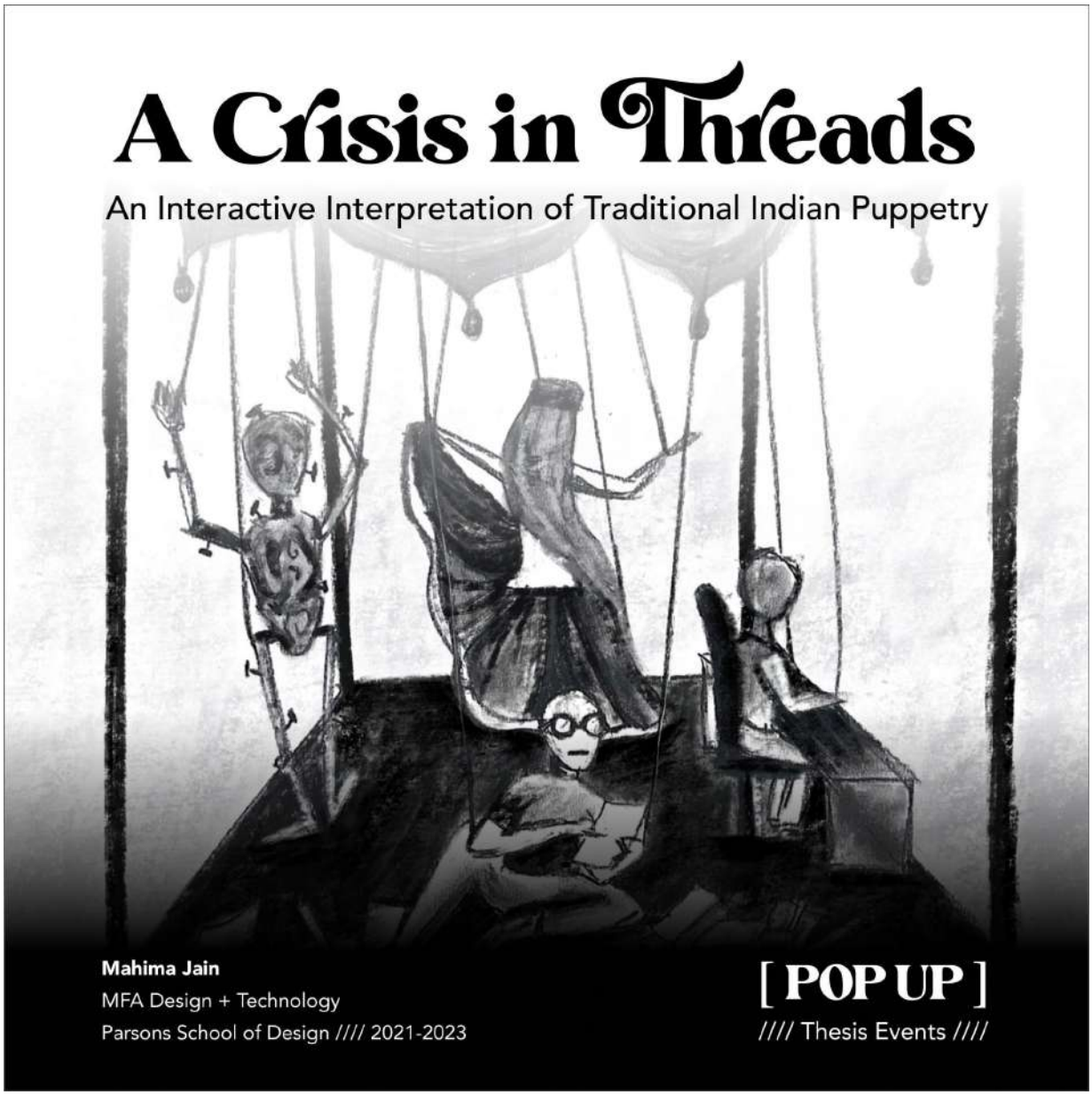
All four puppets (img. 84)

Video of the final installation

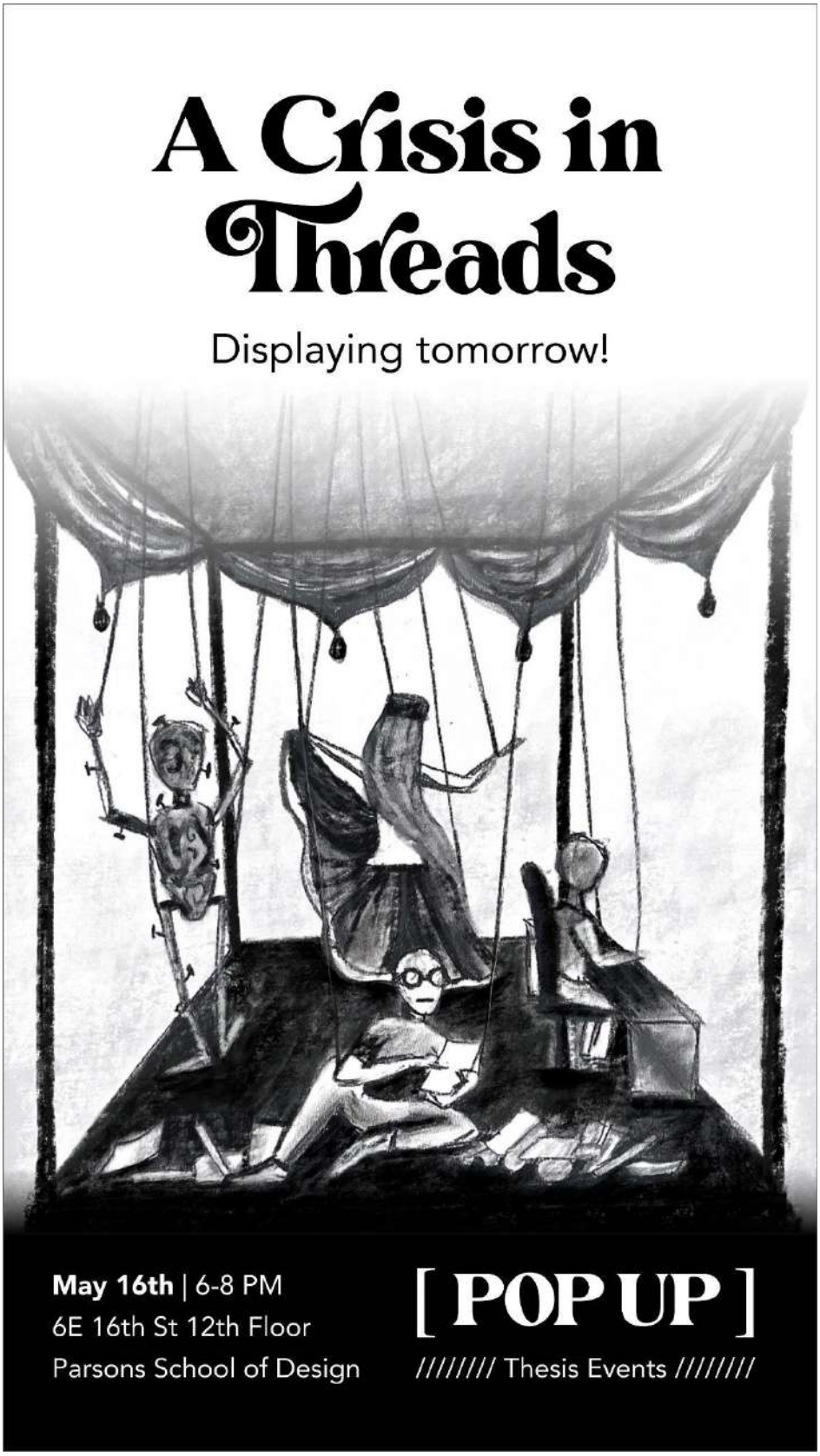
Promotional Material



A4 Poster (img. 85)



Instagram Post (img. 86)



Instagram Story (img. 87)

Evaluation

This project has been the most profoundly cathartic experience throughout my two-year degree. Opting for a physical installation over a digital creation brought immense joy. The process of crafting tangible objects and exploring my affinity for craftsmanship proved fulfilling. While the journey of deciphering physical computation induced anxiety and demanded numerous iterations, designing custom pulleys for motors and delving into various hardware expanded my skills. Venturing into the woodshop for the first time proved captivating, to the point where wood became my instinctive choice of material when it came to creating support structures during circuit troubleshooting.

Visiting Rajasthan and engaging directly with local artists endowed this project with purpose and significance. Witnessing their working conditions and realizing the gradual decline of this traditional art form propelled me to contemplate how technology could augment rather than replace these ancient crafts. Including the voices of these artists in the project was an honor, aiming to expand artistic expression while preserving cultural roots.

Infusing my personal struggles with low self-esteem and creative obstacles into the narrative allowed me to articulate them through the work—a task I find challenging in real life. Combining my passions for film, animation, and making, this project harmoniously integrated all my interests. The research process and engaging with artists added an extra layer of fascination.

Bringing the envisioned stage to life, from initial sketches to its physical manifestation, brought immense satisfaction. This project encompassed multiple stages, from ideation to narrative development, field research, secondary research, 3D modeling, woodworking, stitching, physical computation, and finalizing the visual aesthetics and interaction. This rich tapestry of experiences provides abundant material and topics for my future endeavors, and I really hope I get the opportunity to continue working with these mediums and themes in my career.

Acknowledgements

My heartfelt gratitude goes to my family for their unwavering support and active involvement in the research process. My father's idea to visit Rajasthan and engage with artists firsthand, along with his assistance in organizing the trip, was invaluable. My mother's expertise in stitching and design provided valuable insights for crafting the puppets. Additionally, my brother's assistance in documenting the research in Jaipur was immensely appreciated.

I am indebted to John Sharp and Ethan Silverman for their guidance in shaping the project's narrative and their extensive knowledge, providing a wealth of project references, movies, and artists. Their support in the early stages fueled my motivation to pursue this project. Jesse Harding's expertise in woodwork and physical computation was instrumental in bringing the project to life. His willingness to share hardware and materials has been of immense help. I am grateful to Frances Hoepfner for assisting me in articulating the project's essence in words, capturing the integration of heritage, traditional craft, and technology. Her positive feedback on the concept and writing served as great encouragement.

Leffin Christopher's assistance in tackling coding and circuitry challenges was invaluable during moments of struggle. Franco provided invaluable guidance in structuring and constructing the stage, with invaluable support from the woodshop technicians. Goncalo de Monte was my personal cheerleader throughout the project, while Hong Hua and Bhuvan Srivastava assisted with 3D printing. Zeeshan Khalid beautifully captured the essence of the project with his exceptional photography skills.

I am deeply grateful to each and every individual who contributed to this project, as their support and expertise have played a pivotal role in its realization.

Bibliography

Littlepage , Eric Lee. “Puppets With A Purpose: Folk Arts, Cultural Communication, and Development in India.” *Puppets With A Purpose*, 10 Apr. 2002.

Reddy, Anaha, et al. *Katha Kathputli Ki, Jaipur* , Discover India Program, 2019, https://dip.flame.edu.in/pdfs/reports/2019-20/Kathputli-Jaipur.pdf.

Park, Eunyoung. “Oongsung Oongsung.” *Studio Eunyoungpark*, 2013, https://eunyoungpark.co/portfolio-item/oongsung-oongsung/.

Park, Eunyoung. “Mechanical Cartoon, Study 2.” *Studio Eunyoungpark*, 2014, https://eunyoungpark.co/portfolio-item/mechanical-cartoon-study-2/.

Zoran, Amit. “Hybrid Basketry: Interweaving Digital Practice within Contemporary Craft.” *Leonardo*, vol. 46, no. 4, 2013, pp. 324–331., https://doi.org/10.1162/leon_a_00603.

Zoran, Amit. “Hybrid Basketry.” *Hybrids*, 2013, http://amitz.co/hybrid-basketry.html.

“The McKittrick Hotel, Est. 1939.” *McKittrick Hotel*, 15 June 2022, https://mckittrickhotel.com/sleep-no-more/?gclid=CjwKCAjwwL6aBhBlEiwADycBIOr75P-OA3U-ieLkZS10C5CHSO3StwwZGZ3WZrRxy1v1kc_By7BmbxoCRS8QAvD_BwE#/tickx-widget/?flow=ZJzY8qFg.

Selick, Henry , dir. 2009. CoralineFeature Film. USA: Focus Features, Universal Pictures, Universal Pictures Home Entertainment.

Calder, Alexander. “Alexander Calder: Calder's Circus.” Alexander Calder | Calder's Circus | Whitney Museum of American Art. Accessed April 23, 2023. https://whitney.org/collection/works/5488.

“Guillermo Del Toro: Crafting Pinocchio: Moma.” The Museum of Modern Art. Accessed April 23, 2023. https://www.moma.org/calendar/exhibitions/5504.

Adaptation, 2002. https://www.imdb.com/title/tt0268126/.

The Night Before Christmas, 1993. https://www.imdb.com/title/tt0107688/.

Paheli, 2005. https://www.imdb.com/title/tt0451850/

Kathputli (puppetry). Wikiwand. (n.d.). https://www.wikiwand.com/en/Kathputli_(puppetry)

The Story of Kathputli. (2010, January 18). Story of Indian crafts and craftsmen. https://gaatha.com/the-story-of-kathputli/

Kathputli Ka Khel. World Encyclopedia of Puppetry Arts. (2016, April 12). https://wepa.unima.org/en/kathputli-ka-khel/