



Slow Blooming

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This project seeks to highlight the **cultural and social significance of female gardeners** at Kew Gardens. By bringing their inspiring stories to life through immersive installations in the Princess of Wales Conservatory, we aim to celebrate their legacy, explore the intersections of social equity, female expression, and conservation, and deepen public engagement with the living history of the gardens.

Kew Gardens' narrative has been largely male-dominated, even though **women have played a crucial role in its development** since its founding by Princess Augusta in 1759. As cultural institutions increasingly seek to acknowledge diverse contributions, this project responds to the need for a more inclusive historical perspective. By showcasing women's roles at Kew, we align with contemporary movements advocating for gender representation in science, conservation, and public history.

Through extensive research, we examined Kew's **architecture, microclimates, and cultural symbolism**, uncovering the ways in which gardens serve as both preservers and shapers of human experience. Building on the evidence of women's contributions, we sought to craft a design approach that celebrates the historical and cultural significance of women at Kew Gardens and makes their stories tangible and immersive for visitors. Our storytelling blends together these elements to allow **visitors to have firsthand experience of female gardeners' stories**, creating compelling narrative environments within the Princess of Wales Conservatory.

The project culminates in **a series of immersive installations** that not only recognise the overlooked contributions of female gardeners but also invite visitors to reflect on the broader role of gardens as spaces of knowledge, conservation, and cultural identity. By integrating history, ecology, and design, this initiative fosters a deeper appreciation of Kew Gardens as both a symbolic and functional landscape shaped by the dedication and expertise of women throughout its history.

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TRACING THE ROOTS

RESEARCH & INSIGHTS

KEY WORDS:

FEMALE GARDENERS, HISTORY, IMMERSIVE, INSTALLATIONS

- * How have the untold stories of female gardeners at Kew Gardens shaped its history and legacy?
- * How can these stories be celebrated?

One Sentence

This project celebrates the impact of female gardeners at Kew through immersive installations in the Princess of Wales Conservatory, showcasing their inspiring stories, past and present.

Three Sentences

This project explores the social and cultural significance of female gardeners at Kew Gardens. Through immersive installations in the Princess of Wales Conservatory, we bring to life the often-overlooked stories of these women while examining Kew's architecture, microclimates, and cultural symbolism. By analyzing historical records and botanical contributions, we uncover how gardens serve as both preservers and shapers of human experience, revealing the evolving role of women in Kew's development.

One Paragraph

This project explores the social and cultural significance of female gardeners at Kew Gardens. Through immersive installations in the Princess of Wales Conservatory, we bring to life the often-overlooked stories of these women, past and present. Kew Gardens exemplifies the garden as both a symbolic idea representing knowledge, conservation, and cultural identity, as well as a functional space where people connect with nature and each other. Gardens are interwoven with social values, intellectual concepts, and ecological awareness, whether as large-scale demonstrations of power, healing spaces, or venues for cultural events. They can serve as records of lives, values, and beliefs while also influencing the future. Through extensive research, we examined Kew's architecture, microclimates, and cultural symbolism, uncovering how gardens act as both preservers and shapers of human experience. We analyzed historical records, botanical contributions, and the evolving role of women in Kew's development. We explored these themes through the lens of control, power, and expression, unearthing forgotten stories within archival collections to share experiences that are not commonly known.

Living Archive

The garden represents **a dynamic relationship between nature and humans**; in the case of Kew Gardens, it connects individuals, organizations, arts, and science with nature (Francis & Hester, 1995).

What do gardens mean in contemporary society? They serve as settings for life, symbols of control, spaces for healing and tranquillity, and microcosms of larger worlds. The garden typology, as an idea, place, and action (or act), was developed by Francis and Hester Jr. in 1999. They identified the botanic garden as an “act”—an active, living project. It is a place-making endeavour that prepares for the future: earth futures, plant futures, art futures, exploration, and cultural and social relationships.

Gardens can be seen as **capsules of humanity’s past, present, and future**, carrying ideas and values within them. They serve as tangible intersections of history and identity. Kew Gardens, with its long-standing presence, embodies this permanence and continuity.

Female Expression

Nature has long been a metaphor for gendered power structures, reflecting societal efforts to cultivate, discipline, and control. The transformation of wild landscapes into **structured gardens mirrors the ways gender roles particularly femininity** have been shaped by social expectations.

Historically, gardens have embedded gendered power dynamics, framing both women and nature as subjects to be shaped rather than as active agents. Through Kew, we can examine how power has influenced scientific inquiry and artistic representation, reinforcing traditional views of masculinity as the force of control and femininity as the subject of cultivation. By critically analyzing sites like Kew Gardens, we can challenge conventional narratives and advocate for more inclusive representations of gender and identity.

Rather than serving as spaces of control, gardens can become places of liberation—where gender expression, agency, and ecological belonging coexist.

Cultivating Nature

The themes of **control, power, and representation** within garden spaces, particularly glasshouses, deeply intersect with issues of social equity and gender. Glasshouses have evolved from simple enclosures into advanced structures that regulate environmental conditions for plant conservation and research. By reconsidering who has access to and agency within these spaces, we can use garden design to promote social equity, challenge historical power structures, and envision new possibilities for gender representation in cultivated nature. For instance, the Princess of Wales Conservatory, with its diverse climatic zones, embodies a progressive approach—prioritizing sustainability and adaptation over control. This evolution parallels **shifting gender perspectives, embracing fluidity in both nature and identity**.

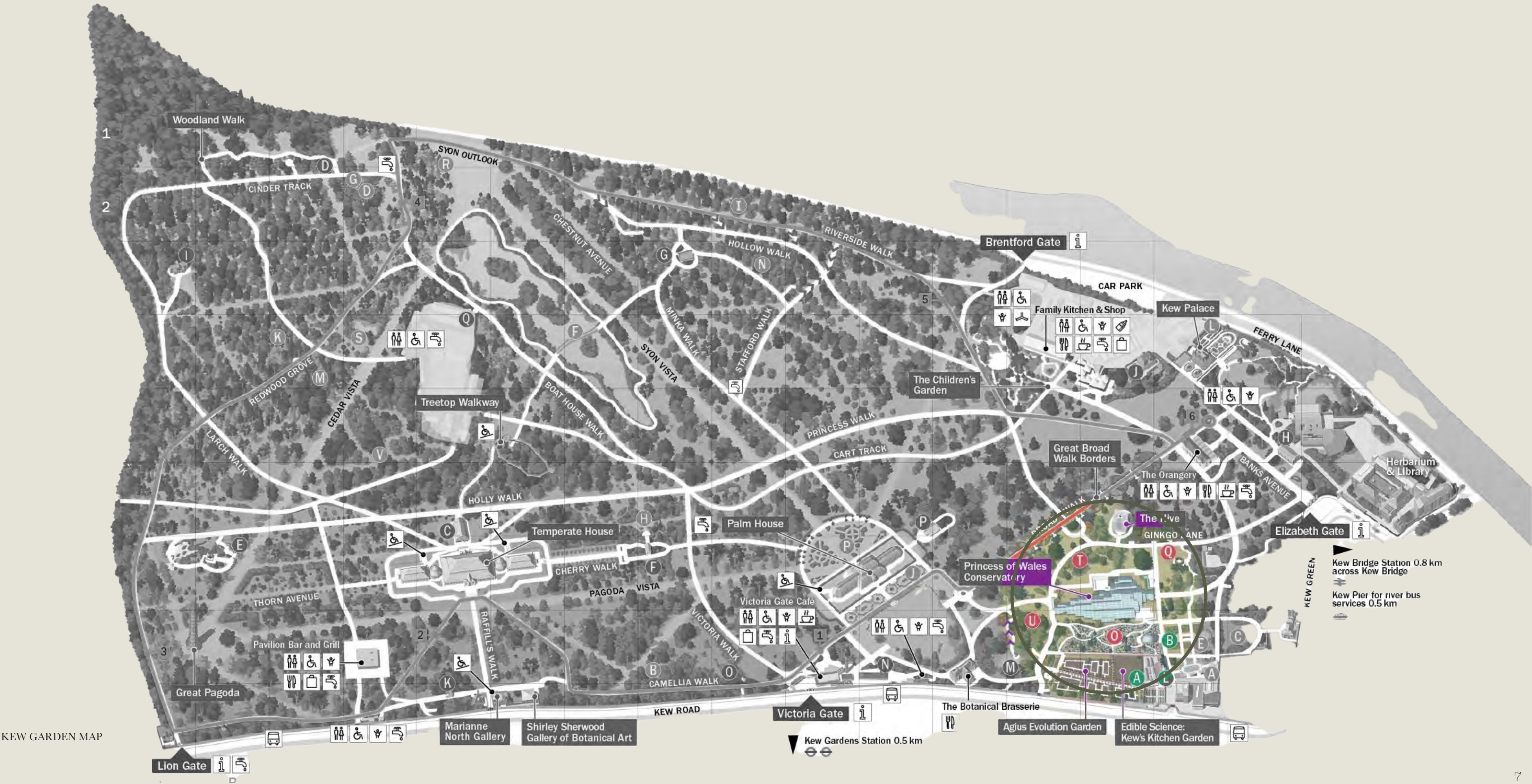
THE STORY TO BE TOLD

Gardens empower and reclaim agency, transcending boundaries of time, culture, and geography. Women have played a vital role in the history and development of Kew Gardens, contributing across various domains. Princess Augusta laid the foundation for the gardens in 1759, and many women have since shaped its legacy. We uncovered the origins of women’s histories within Kew, including stories of the first female gardeners became pivotal to our storytelling. Their roles and contributions shed light on the many women who followed in their footsteps, guiding us toward narrating the broader history of Kew’s female gardeners. The garden is a boundless, harmonious blend of history, expression, innovation, control, and dialogue between humans and nature. It is a timeless environment, serving as both a preserver and a shaper of human experience through its historical structures, landscapes, and scientific research.

KEW GARDEN

ENVIRONMENT

Situated in Richmond upon Thames, southwest London, **Kew Gardens** is a globally renowned institution where nature, history, science, and art converge. Established in 1759 by Princess Augusta, the gardens have transformed from a royal pleasure ground into a pioneering centre for botanical research and conservation. Among its many iconic glasshouses and built structures, the **Princess of Wales Conservatory** stands as a tribute to female leadership in horticulture, making it an ideal site for our project.





PRINCESS OF WALES CONSERVATORY FLOORPLAN

PRINCESS OF WALES CONSERVATORY

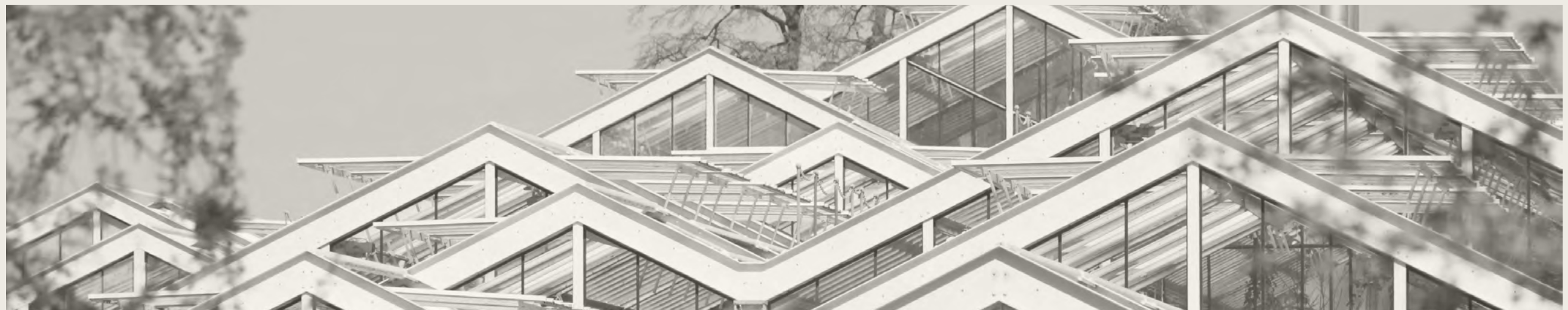
ENVIRONMENT

The conservatory, inaugurated by Princess Diana in 1987, **honours Princess Augusta, the founder of Kew Gardens.** It's ten interlocking climatic zones, each simulating distinct climates—from arid deserts to lush tropical rainforests—allow visitors to explore a range of ecosystems in a single walk. The structure's advanced computerized climate-control system and the arrangement of sloping glass panels maximise natural light inside the conservatory, making it a fitting venue for hosting events.

The **time capsule** buried by David Attenborough **reflects the role of gardens in bridging past and future, encapsulating contemporary concerns about biodiversity and conservation.** Its eventual unveiling will offer future generations insights into 20th-century environmental priorities, mirroring our project's ambition to unearth and celebrate the often-overlooked contributions of female gardeners throughout history.

Slow Blooming, our series of installations, will unfold within this dynamic space, tracing the journey of women in horticulture from the Victorian era to the present day. By embedding their narratives into Kew's living landscape, the project aims to honor their legacy and inspire future generations to cultivate a deeper connection with nature.

SOUTH ENTRANCE - PRINCESS OF WALES CONSERVATORY



THE STORIES OF FEMALE GARDENERS

Unearthing the legacy of female gardeners at Kew Gardens - Narrative

How can the Princess of Wales conservatory become a compelling narrative environment?

How can the untold stories of female gardeners at Kew Gardens be celebrated?

In 1759 Princess Augusta established the garden; Kew Gardens began as a royal endeavor to showcase botanical collections and assert Britain's prominence in plant exploration. Despite its mission, the realm of gardening remained predominantly male, with scant records of female participation during its early years.

The project, "Slow Blooming," seeks to transform the Princess of Wales Conservatory into an immersive narrative environment through a series of installations that celebrate and illuminate the invaluable contributions of female gardeners at Kew Gardens. Spanning from the Victorian era to the present day, this exhibition aims to honour these pioneering women whose stories have often been overshadowed, yet whose work has been instrumental in shaping the gardens' legacy.

Through the research study, we identified three overarching themes within Kew Gardens: control, power, and expression. Our focus converged on female expression and presence, exploring the evolution and impact of women gardeners throughout Kew's history. This narrative is **vital to contemporary discourse as it addresses historical gender disparities, acknowledges the contributions of women in horticulture, and inspires future generations** to pursue

How have the untold stories of female gardeners at Kew Gardens shaped its history and legacy? How can these stories be celebrated?

In 1759 Princess Augusta established the garden; Kew Gardens began as a royal endeavor to showcase botanical collections and assert Britain's prominence in plant exploration. Despite its mission, the realm of gardening remained predominantly male, with scant records of female participation during its early years.

A significant shift occurred in 1896 when Director William Thistleton-Dyer appointed Annie M. Gulvin and Alice Hutchins as the first female gardeners at Kew. These trailblazers challenged societal norms by undertaking equivalent responsibilities as male gardeners. Their presence marked a watershed moment in the professionalisation of women in horticulture. Anne Gulvin was not only the first appointed female gardener in Kew but also one of the first Graduates of the Horticultural College at Swanley, Kent. These accomplishments inspired our first installation, which breathed life back into Annie Gulvin's story.

While looking at the contributions of female gardeners, there were many female artists in the horticulture industry like Marianne North who represents the diverse skills women have brought to the horticulture industry and showcases their contributions beyond traditional gardening. The botanical illustrations impacted how the garden researched and utilised

During World War I, the depletion of male staff led to the employment of over 30 women gardeners at Kew. These women were instrumental in maintaining the gardens, ensuring their preservation amidst global turmoil. Their dedication not only kept the gardens flourishing but also demonstrated women's capability in roles traditionally held by men. Yet, when the war ended, tradition swiftly reasserted itself. By March 1922, not a single female horticulturist remained at Kew. The return to the status quo was complete until history repeated itself with the outbreak of the Second World War, once again calling women back into the gardens. During World War II, women played an even more critical role, not only maintaining the gardens but also cultivating plants for food, medicine, and scientific research to support the war efforts.

The **post-war era** saw a gradual yet steady increase in female representation within Kew's horticultural staff. Women began to re-enter Kew's workforce, not only as gardeners but also in **scientific and curatorial capacities**. This period marked the beginning of a more inclusive approach, with women contributing significantly to various departments within the institution. Today, women play pivotal roles across various departments, reflecting a more equitable and diverse workforce. This progression underscores the importance of recognising past struggles to appreciate the advancements achieved in gender equality within the institution.



Royal garden established
by Princess Augusta 1759



First female gardeners in Kew



Female gardeners at WW2



Mariann North Art gallery



Female gardeners at WW1



Princess of Wales
Conservatory, 1987

The Selected Stories

The impacts from the past female gardeners still influence today...

STORY SEQUENCES

1896



GREETING FROM ANNIE - HOLOGRAM

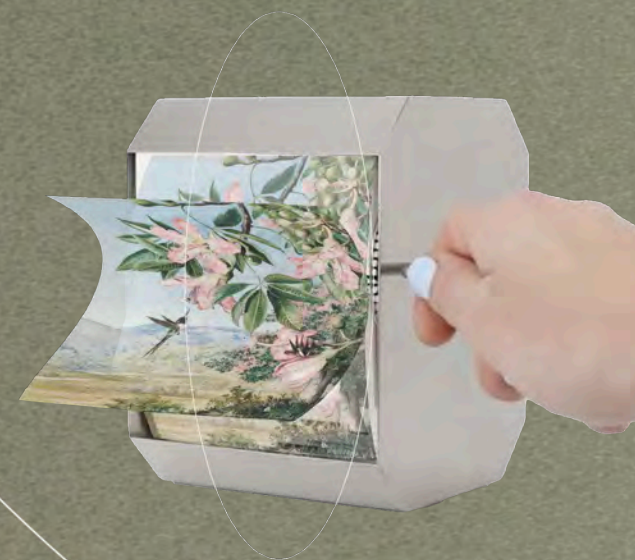
First female gardener,, Annie Gulvin, will greet people at the entrance of Princess of Wales Conservatory

Audiences: Nature Enthusiasts & Kew Members
Aesthetics: Calm, Refreshing

Marianne North

MOVING FLORA

A hand-crank or motor device; is a rolling conveyor belt that is a long strip of painted or printed paper featuring a sequence of botanical paintings that moves seamlessly. It gives the effect of an evolving, living painting of Marianne North's work. (on-going work)



World War Era



EPHEMERAL BLOOMING

Enter the rainforest zone with new chapter of female gardeners during War-time. By using interactive blooming flowers, the stories will be performed in a playful way.



Post War

EMERGING VOICES

Real-time Interaction: a digital garden that grows and blooms figures and their contributions (past and present female gardener, botanical artist, researcher) will appear to end with a physical seed pod as a takeaway that will have wildflower seeds. (on-going design)



MODERN ERA

FLOURISHING FUTURE

A time capsule which the shape was informed by the shape flower petals representing growth accompanied by with paper with holding wild seeds. (on-going design)

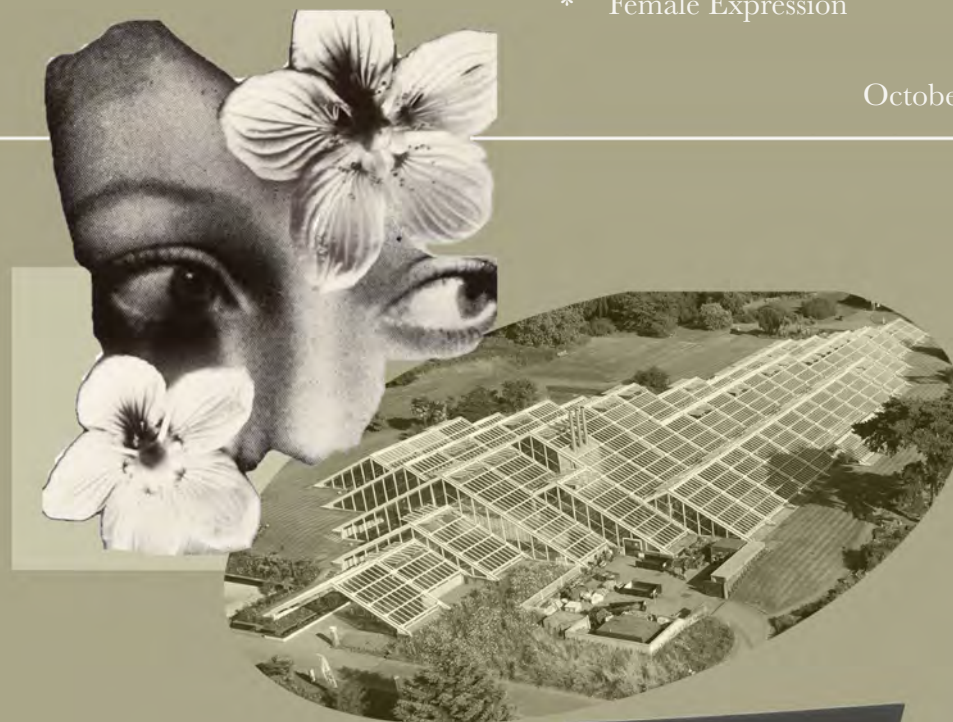
Over summer break

September



- * Site visits
- * Living Archive
- * Micro-climates Glasshouses
- * The Meaning of Garden
- * Female Expression

October



- * Case studies
- * Literature studies
- * Desk research
- * Action research

November



December



- * Identifying the research focus
- * Control * Power * Expression



January

- * Slow blooming
- * Series of installations
- * Representing the stories of female gardeners in Kew
- * From Vitorian time to present time

Feburary



- * Prototyping
- * Hologram - Annie Gulvin
- * Ephemeral Bloomers - Interactive devices
- * Branding

March



- * On-site testing
- * Social media engagement
- * Next steps

Graduation

- * Finalising research focus on **female gardeners in Kew**
- * Understanding potential audiences

OVERVIEW OF THE PROCESS

Renowned designer Dieter Rams aptly stated,

“Good design is thorough down to the last detail.”

This embodies the iterative process we have adopted constantly refining and adapting our concepts while recognizing the importance of detail-oriented approaches within collaborative projects. Our journey involved experimenting with diverse methods, emphasising iteration, adaptation, and collaborative practice.

Our project explored three distinct research focuses, all united by a shared interest in the environment. Over the summer, multiple site visits and interviews at Kew Gardens solidified it as our primary research site. As a heritage location, Kew has a rich and layered history, which we investigated through desk research and literature studies. One compelling aspect was the concept of a living archive, a space where history, power, and narratives intersect. Kew’s diverse historical layers contain hidden, timeless stories, leading us to explore the deeper meanings embedded in garden spaces. Gardens have long held cultural significance, serving as reflections of societal values and structures. By understanding the role of gardens, we sought to uncover how gender expressions have evolved within these cultivated environments. The glasshouses at Kew, in particular, embody a controlled yet thriving ecosystem; an enclosed world that piqued our curiosity and shaped our research trajectory. Through extensive **site visits, action research, and interviews** with visitors and horticulturists, we uncovered a wealth of hidden stories spanning Kew’s past and present.

Synthesising our research, we honed in on two key themes: the history of **female gardeners at Kew (power and expression) and the Princess of Wales Conservatory as our project site (control)**. Collaborative decision-making played a crucial role in refining these ideas. With an abundance of concepts to explore, our team engaged in ongoing discussions, embracing a non-linear approach that required revisiting and re-evaluating ideas at each stage.

Prototyping became essential in our decision-making process, helping us determine which concept to pursue collectively. Our final direction involved a series of installations showcasing the stories of Kew’s female gardeners. **Archival research** at Kew’s Library provided deeper insights into their histories, while an architectural analysis of the conservatory’s ten climatic zones influenced our spatial planning. We used these environmental shifts within the conservatory to shape the narrative flow of our exhibition.

The next phase involved prototyping key elements of our immersive installation. Insights from our research and site visits guided our exploration of various mediums, including **projection mapping, holographic illusions, interactive devices, and wayfinding techniques**. Each experiment helped refine our approach, culminating in installations that seamlessly weaves together history, space, and storytelling.

AUDIENCES

After having a general understanding of who visits Kew, when and why we narrowed down our Primary audience to nature enthusiasts. Kew Gardens attracts a diverse range of audiences, from nature lovers and families to scientists and tourists. Its appeal is broad due to its mix of botanical beauty, educational resources, historical significance, and modern amenities.

Interviews with Kew Gardens staff, a secondary audience, revealed insights into their perceptions of the gardens and recurring visitor questions about plant histories, especially connections to women. We spoke with a horticulturist whose background is in design having learned that she moved to horticulture through Kew’s diversity initiative. **In our conversation we learned that theres a need to highlight the contributions of female gardeners at Kew. Because even those working closely with the gardens were unaware of these historical narratives, underscoring the importance of the project to celebrate these often-overlooked roles and fill an educational gap.**

Beyond nature enthusiasts, this vibrant community includes the Princess of Wales Conservatory staff, dedicated to preserving and showcasing plant collections; artists, who draw inspiration from nature’s forms and colours; and general visitors, students, scientists, tourists, and garden-goers each bringing unique perspectives, from education to leisure and cultural enrichment.

STAKEHOLDERS

We identified Kew Gardens as our main stakeholder due to the emphasis on the story of women with their gardens. As the project is site-specific we believe it is integral to the project’s focus on celebrating the contributions of female gardeners. Their involvement is essential for ensuring the accuracy and success of the initiative, bridging historical narratives with contemporary horticultural practices.

Audiences



Stakeholders

PRECEDENTS

Marc Quinn

“The world is about connections, they are the world they are us”, Quinn. Quinn explores the reflection of the interrelationship between nature and humanity. He is a contemporary British artist renowned for his provocative explorations of the human condition and the relationship between society and the natural world. His artwork delves into themes of impermanence, identity, and the tension between man-made constructs and organic realities. This can be seen in his flora sculptures where he explores the complex overlap of humans with nature—themes of interdependence, sexuality, transformation and impermanence. Nature is something influenced and manufactured by our perceptions and actions (Quinn, 2006).

Quinn and Kew

His exploration of impermanence aligns with Kew’s mission to document the life cycles of plants. Their broader ecological significance makes his artistic themes a conceptual parallel to the gardens’ ethos. The exhibition at Kew confronts the disjointed connection with nature, and a desire to capture fleeting moments parallel to the notions of gardens being an act, Quinn engages with natural elements, reconfiguring these objects through artistic intervention; challenging the viewer’s perception of time, nature and human influence.

Quinn’s work, like Kew’s landscape design, **transforms nature into a medium for storytelling**, highlighting feminine cycles of creation, growth, and renewal. We found we could explore female expression in Kew in a similar fashion giving new tangible life to the stories of the women in Kew. Reflecting the complexities of female expression and how they contributed to horticulture, landscape and garden design. **Using the plant shapes and stories as a form of commuting the emerging narratives** and stories we have uncovered, the use of natural forms in dialogue with human intervention underscores the generative power of both nature and femininity, celebrating their resilience and transformative potential.



‘Burning Desire’, a sculpture where he explores the complex overlap of humans with nature themes of interdependence, sexuality, transformation and impermanence.



'Floral arrangement 1 (After Jan van Huysum, Still-life)', Anne Von Freyburg, 2024

FLOWERS – Flora in Contemporary Art & Culture

Flowers – Flora in Contemporary Art and Culture is an exhibition hosted at Saatchi Gallery; it explores the history of flowers and their presence in art and culture. Flowers are utilised as symbols, identifiers or metaphors for human emotions and impulses. Artists and other creatives use the beauty of nature to tell many kinds of stories and different messages. The exhibition showcases flowers in nine types of rooms: roots, in bloom, flowers and fashion, science: life & death and new shoots, looking at unearthing media and themes.

The exhibition successfully explores how flowers are not just explored there but also function as symbols for myths, emotions, and cultural narratives. With the incorporation of diverse media ranging from traditional paintings to large-scale installations. It also has a section that focuses on deeper exploration going beyond aesthetics touching on themes of life cycles, transformation and mortality. By showcasing the omnipresence of flowers in human creativity, the exhibition reveals how flora continues to shape artistic and cultural expressions across disciplines. The stories have been well communicated through a diverse range of mediums blending history, tradition and contemporary. **Through these immersive installations, digital projection, photography and fashion the exhibition transformed floral imagery into a powerful narrative tool.**

The immersive and interactive nature of the experience enriches the exhibition's storytelling, we are taking away this technique to apply in how we shaped our installation pieces. **By blending materiality, form, and the natural beauty of flowers, we bring these stories to life within a modern context.** Consistent narrative threads guide the structure – from how the rooms are divided to how the story unfolds throughout the conservatory. We want to draw inspiration from real-time interactive digital projections, for our work paying homage to the untold stories of post-war women in Kew, and creating a dynamic, evolving journey for visitors.



'Extra-Natural', Miguel Chevalier, 2025, Saatchi Gallery



"Sugarland," steel, silver, and nickel plated spoons.
All images © Ann Carrington

SPATIAL ANALYSIS

Weather Conditions : an “**arid zone**” is a broader term encompassing any area with **very low rainfall**, which can include deserts in different latitudes, not just the tropics. Temperatures range between **25°C and 30°C** with **low humidity levels**.

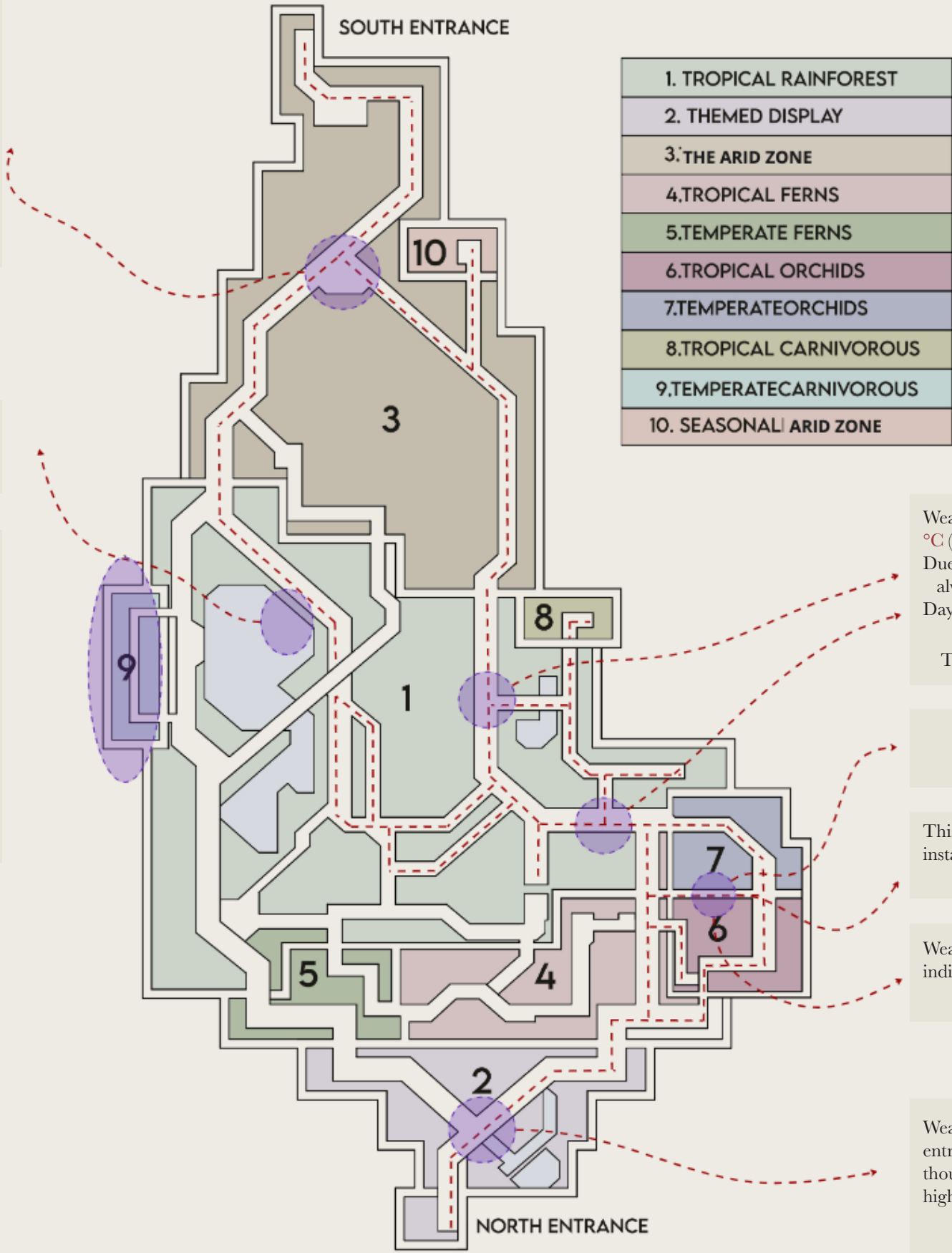
Daylight Conditions : The Arid Zone is filled with **bright, natural sunlight**, enhancing the desert atmosphere. The V-Shaped pathway makes this area as a node for user to stay and think, which makes it a potential pause point in user journey.

SIDE NOTES : Tropical rainforests also have high humidity; about 88% during the wet season and approximately 77% in the dry season.

Weather Conditions : Tropical rainforest regions are between **20 and 29 °C** (68 and 84 °F), and in no month is the mean temperature below 18 °C. Due to the artificial showers that support diverse plant life the air is almost always saturated with moisture, leading to consistently **high humidity**.

Daylight Conditions : Low-hanging plants and dense foliage recreate the **Dim light conditions** of a true rainforest.

This zone captures the sights, sounds, and atmosphere of the tropics, offering visitors a sensory journey. This pause point also makes the user explore two levels of rainforest life.



PRINCESS OF WALES CONSERVATORY, KEW GARDENS

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Daylight Conditions : Low-hanging plants and dense foliage recreate the **Dim light conditions of a true rainforest**.

This area can be a potential pause point, because of the T-Junction.

Weather and daylight Conditions: Moderate climates

This area is not very potential for attracting the user. But if there is any installation that comes with element surprise where a user has to find it then this could be one of the spot.

Weather and daylight Conditions: Tropical orchids zone is with bright, indirect light avoiding direct sunlight on the plants. Designed to create a **rich and authentic tropical ambiance**.

Weather Conditions: Temperate display zone is located near the northern entrance, the Themed Temperate Zone is a dynamic space that combines thoughtful design with **ever-changing plant displays**. This **Adaptable Area** highlights Kew's commitment to energy efficiency and creative botanical presentations.

Daylight Conditions: Natural sunlight (moderate)
The V-Shaped pathway makes this area potential pause point. But a **user can relax by the serene fountain, complemented by a bench** for peaceful contemplation amidst the plant life.

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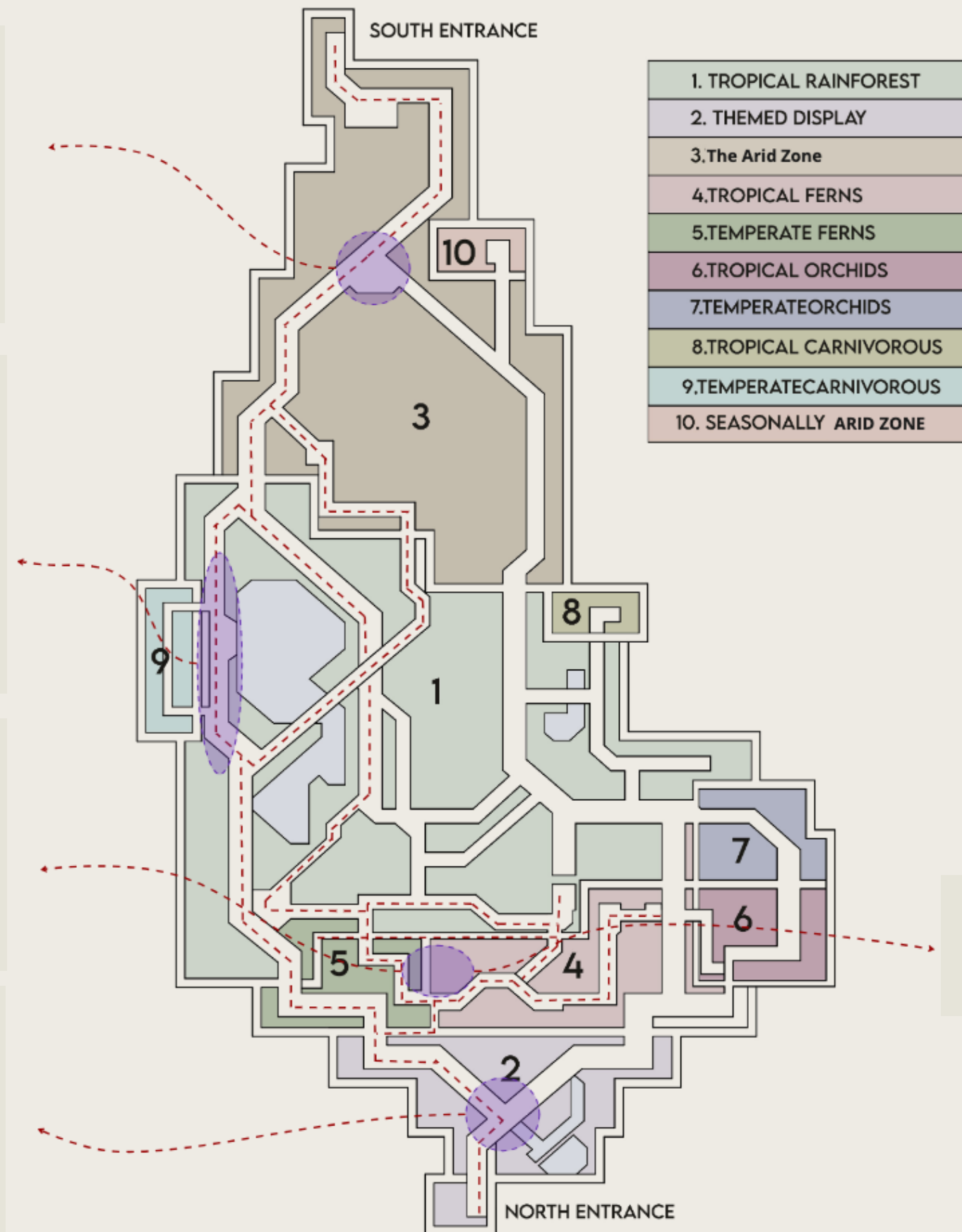
Weather Conditions: architectural climate control: The below-ground design maintains the ideal stable, temperate environment. Mimicking the dappled light of temperate forest floors and creating a calming atmosphere.

Daylight Conditions: Experience naturally subdued lighting (lighting that is not very bright, or that emits or reflects very little light)

Weather Conditions: Temperate display zone is located near the northern entrance, the Themed Temperate Zone is a dynamic space that combines thoughtful design with **ever-changing plant displays**. This **Adaptable Area** highlights Kew’s commitment to energy efficiency and creative botanical presentations.

Daylight Conditions: Natural sunlight (moderate)

The V-Shaped pathway makes this area potential pause point. But **users can relax by the serene fountain, complemented by a bench** for peaceful contemplation amidst the plant life.



Weather Conditions: Temperature and humidity are carefully maintained to mimic tropical and temperate environments.

Daylight Conditions: natural sunlight

PRINCESS OF WALES CONSERVATORY, KEW GARDENS

The Image of the City in the Conservatory

Kevin Lynch's theory of *The Image of the City* (1960) focuses on how people perceive and navigate spaces through elements like paths, edges, districts, nodes, and landmarks. Studying the spatial layout of conservatory through applying this theory was helpful in process of understanding the potential user journey and spatial of the planning the exhibition.

Paths (User Movement and Wayfinding)

Visitors navigate the conservatory through a sequence of climatic zones, each offering a unique sensory experience. The exhibition is structured to guide users seamlessly from one historical period to the next, reinforcing a chronological storytelling approach. The paths ensure intuitive movement, leading visitors from the Victorian Era (Arid Climatic Zone 3) through World War (Tropical Climatic Zone 1) and Post-War (Temperate Carnivorous Zone 9) to the Modern Era (Themed Display Zone 2).

Edges (Boundaries and Transitions)

The transitions between different climatic zones serve as perceptual edges, marking shifts in both temperature, humidity, and botanical variety. These edges create a distinct experience where visitors become aware of crossing from one environment (e.g., arid to tropical) to another, reinforcing the evolving historical narrative.

Districts (Thematic Climatic Zones)

Each climatic zone functions as a district with its own identity. According to that for the exhibition the conservatory is divided into four time period. The Victorian Era (Arid Zone 3) embodies structured, historical botanical exploration; the World War Era (Tropical Zone 1) symbolizes resilience through ephemeral blooms; the Post-War Era (Temperate Carnivorous Zone 9) highlights scientific advancements in botany; and the Modern Era (Themed Display Zone 2) represents forward-thinking conservation efforts.

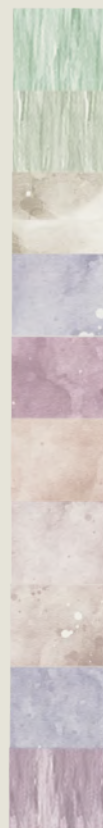
Nodes (Key Interaction Points)

Nodes are focal points where visitors engage with installations. The Anne Gulvin Hologram (Victorian Era), Ephemeral Bloomers Interactive Device and Marianne North's Story & Nothiana (World War Era), Digital Garden (Post-War Era), and Time Capsule (Modern Era) act as key interactive hubs, offering moments of pause, engagement, and learning.



Landmarks (Memorable Anchors for Orientation)

Distinctive installations and plant species act as landmarks, aiding in spatial orientation. The Anne Gulvin hologram, the vibrant ephemeral bloomers, Marianne North's legacy installation, and the Time Capsule provide visually and intellectually significant anchors, enhancing wayfinding and reinforcing memory of the space.

By incorporating Lynch's principles, the exhibition design ensures a legible, engaging, and immersive journey through the Princess of Wales Conservatory. The interplay of paths, edges, districts, nodes, and landmarks enriches user experience, making the botanical and historical narrative intuitive, memorable, and educational.



- 1. Tropical Rainforest
- 2. Themed Display
- 3. The Arid Zone
- 4. Tropical Ferns
- 5. Temperate Ferns
- 6. Tropical Orchids
- 7. Temperate Orchids
- 8. Tropical Carnivorous
- 9. Temperate Carnivorous
- 10. Seasonal Arid Zone

-  Anne Gulvin - Hologram
-  Ephemeral Bloomers Interactive Device
-  Marianne North
-  Digital Garden
-  Time Capsule

EXHIBITION FLOORPLAN





Entrance of Princess of Wales Conservatory

▶ [Link to the Walkthrough video](#)

PLOTTING THE EXPERIENCE

Exhibition Map - the placement of each installation

The Princess of Wales Conservatory already features 10 distinct climatic zones. A planned exhibition series is structured across four historical periods: Victorian, World War, Post-War, and Modern.

- * The first installation, an Anne Gulvin hologram, represents the Victorian Era and is positioned in the Arid Climatic Zone 3.
- * The Ephemeral Bloomers interactive device, part of the World War Era, is located in the Tropical Climatic Zone 1.
- * An installation narrating the story of Marianne North is placed in the Temperate Carnivorous Zone 9. The plant Nothiana, named after her, is also situated in this zone.
- * The Emerging Voices installation representing Kew's women from post-war, is situated in the exhibition hall of conservatory.
- * The final installation, Time Capsule, representing the Modern Era, is housed in the Themed Display Zone 2.

Chapter 1 Annie Gulvin - Hologram
Part 1 - Greeting from Annie
Arid zone



Part 2 - Marianne North
Moving Flora
Arid zone



Chapter 2 Interactive installation
Ephemeral Blooming
Tropical Rainforest



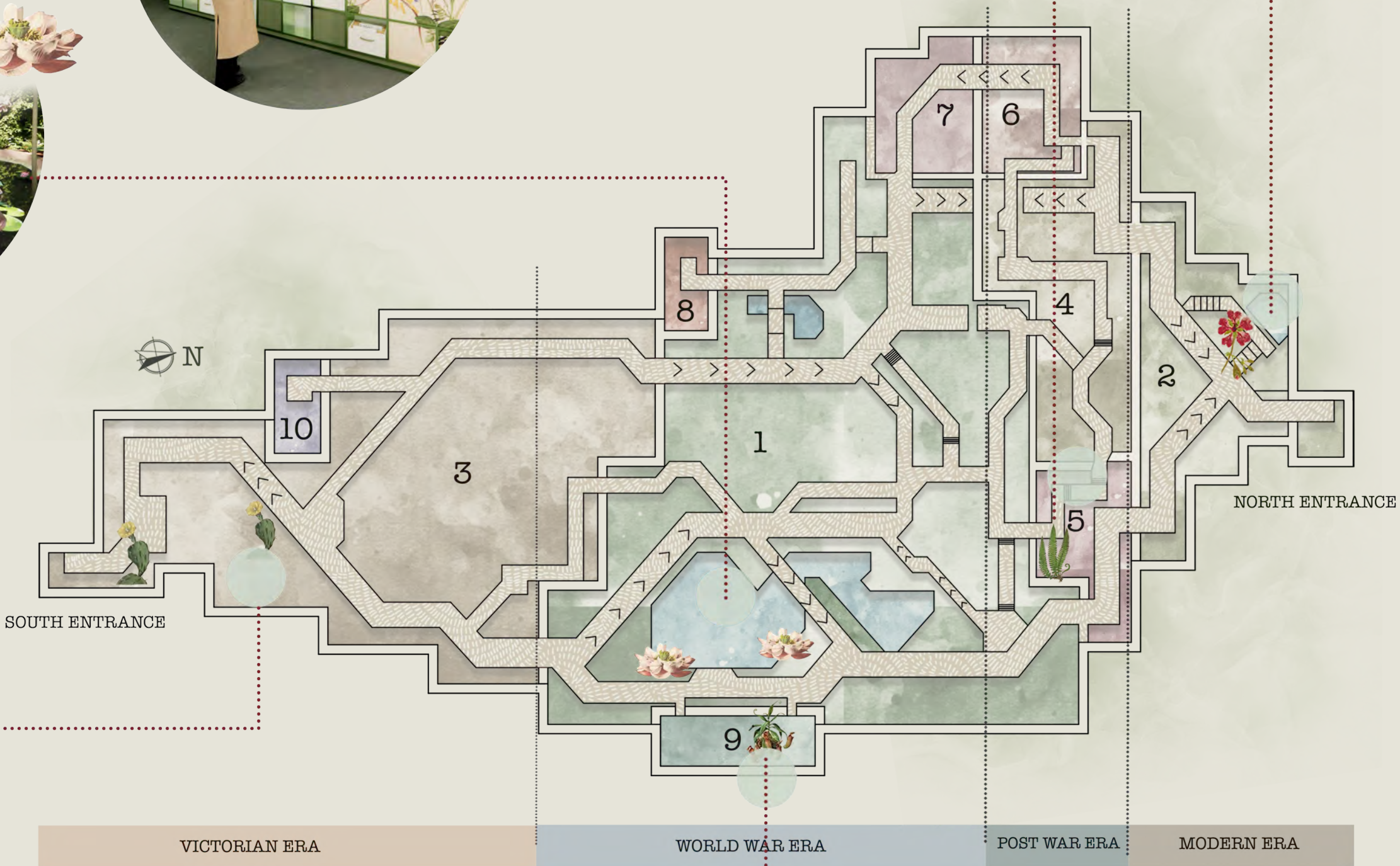
Chapter 3 Digital Garden
Emerging Voices
Exhibition Hall-Temperate Ferns



Chapter 4 - Time Capsule
Flourishing Future
Themed Display



1. Tropical Rainforest
2. Themed Display
3. The Arid Zone
4. Tropical Ferns
5. Temperate Ferns
6. Tropical Orchids
7. Temperate Orchids
8. Tropical Carnivorous
9. Temperate Carnivorous
10. Seasonal Arid Zone



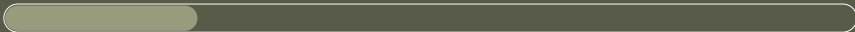
STORYBOARD

Chapter 1: Arid Zone
Greeting from Annie Victorian era

Duration: 8-10mins



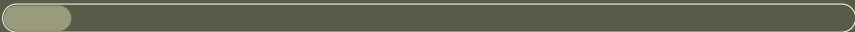
1. Arriving at the Princess of Wales Conservatory



1 mins



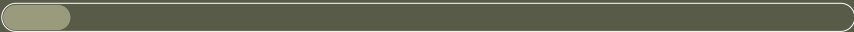
2. Going inside and seeing the first hologram of Annie Gulvin



30s



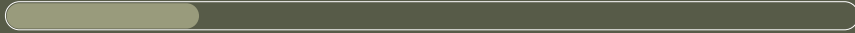
3. Moving towards the Arid zone for the first chapter



30s



4. Looking at the hologram and putting the headphone on



1 mins



5. Walking closer and hearing the story of Annie



5 mins



6. Continuing to the next chapter...



30s



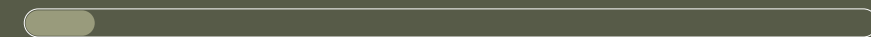
This bar represents 5 min for this experience.

Duration: 10- 15 mins

Chapter 2: Tropical Rainforest
Ephemeral Blooming
World war era



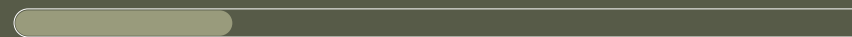
1. Entering into the Tropical Rainforest zone 1



30s



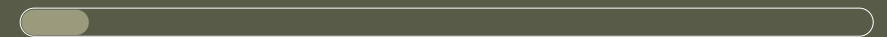
2. Feeling the environment change and moving closer to the pond



2 min



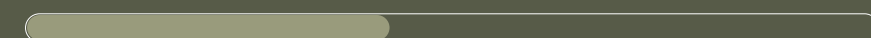
3. See the installations standing above the water



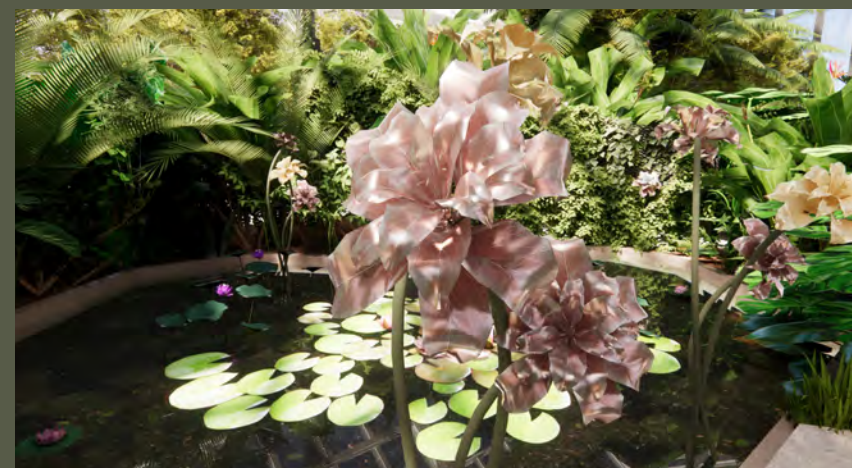
30s



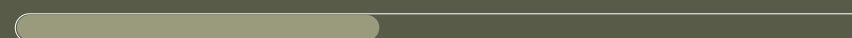
4. Reading the instruction next to it, and started interacting with the installations by touching



3 mins



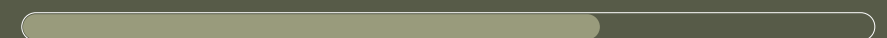
5. The device activates and blooms



3 mins



6. Video and sound begin to play in the background



5 mins



This bar represents 7 min for this experience.

HOW THE STORIES WILL UNFOLD

Chapter 1

Part 1. Greeting from Annie

Part 2. Moving Flora

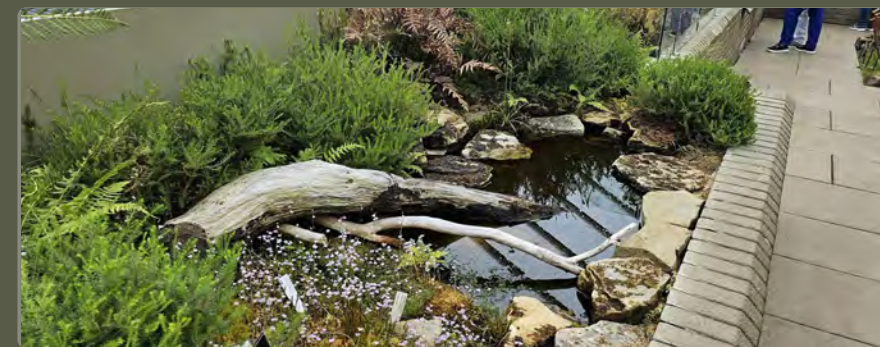
Marianne North

Location

Zone 3: Arid

Zone 9: Temperate Carnivorous

Visuals



Narratives

The story of Annie Gulvin as the first women gardener stepping into the Kew and pioneering the way for female gardeners in horticulture industry.

Contributions of female gardeners beyond traditional gardening to the horticulture industry. They were not only just involved with gardening but also brought varied skills. How Marian North's art has helped the scientist in their study.

Messages

Break In the gender norms: Their story highlights the persistence of women in horticulture, their often-overlooked contributions to science, and how their legacy, like seeds, blossomed into lasting change.

Marianne North's story will highlight the diverse skills women have brought to the horticulture industry, showcasing their contributions beyond traditional gardening.

Design

The hologram illusion of Annie Gulvin will be presented on an OLED display, accompanied by a soundscape that immerses visitors in a visual and auditory storytelling experience.

A hand-crank or motor device: is a rolling conveyor belt that is a long strip of painted or printed paper featuring a sequence of botanical paintings that moves seamlessly. It gives the effect of an evolving, living painting of Marianne North's work.

Time & Action

4-7 Minutes: When the visitor are in front of the installation, there will be instructions to put on the headphones. The visitor will look at the Hologram while listening to the audio.

4-7 Minutes: Audience will walk freely first to experience the moving devices. E.g. the rolling playing which they will crank to operate. Creating the illusion of a living painting.

Chapter 2:

Part 1. Ephemeral Blooming

Location

Zone 1: Tropical Rainforest

Visuals



Narratives

The story of female gardeners during the World War time will be conveyed, their challenges, struggles and progress

Messages

Women proved their expertise, resilience, and ability to nurture and sustain the conservatory and gardens, leaving a lasting mark on horticulture.

Design

Interactive device that will reactively bloom to the engagement of touchpoints, with a response that would allow the visitors to engage with sound and video storytelling of World Wars women's challenges and achievements

Time & Action

5 - 10 mins: Next, walking up to the first pond, they will see the first set of interactive blooming devices and start to engage with the touchpoint that control the devices, while listening and viewing moving imagery of female gardeners during the World Wars.

Part 2.

Women's Garden Movement

Zone 1: Tropical Rainforest



Empowered women by promoting gardening as a means of self-reliance and social change. A movement that foster the female gardeners skills.

Reflecting on the lasting impact of these women, fostering a deeper understanding of the important role women continue to play in the world of gardening.

Natural stepping stones that will be representative of the different aspect of the movement which will highlight pioneers that initiated the movement within Kew.

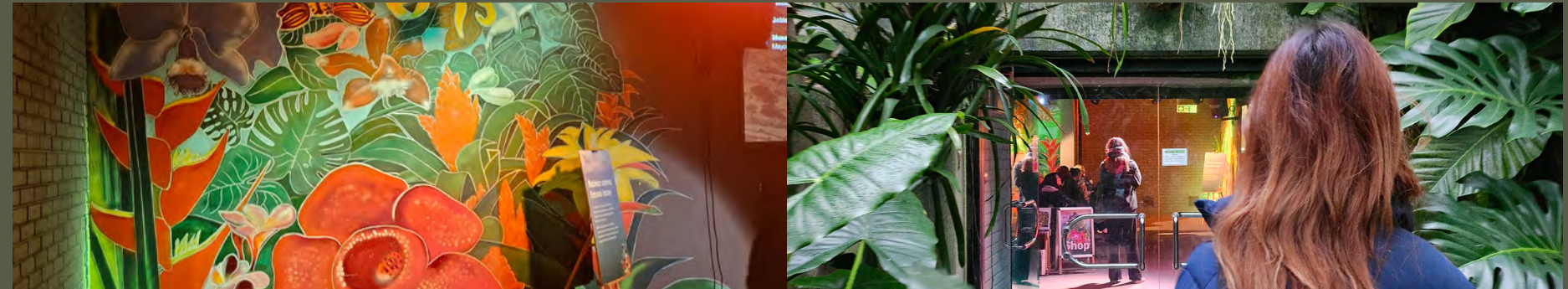
4 -7 mins: on going process...

Digital Garden

Location

Zone 5: Exhibition Hall

Visuals



Narratives

How female gardeners have fought back, stayed after the end of world war and continued to progress their way into the horticulture industry.

Messages

Women began to re-enter Kew's workforce, not only as gardeners but also in **scientific and curatorial capacities**. This period marked the beginning of a more inclusive approach, with women contributing significantly to various departments within the institution.

Design

Real-time Interaction: a digital garden that grows and blooms figures and their contributions (past and present female gardener, botanical artist, researcher) will appear to end with a physical seed pod as a takeaway that will have wildflower seeds. (on-going design)

Time & Action

10 -15 Minutes: Existing the Rainforest area into a intimate lecture hall to present an archival wall display that focuses on women's illustrations and research samples. With the user's next action is engaging with the interactive projection wall by touching different points on the screen, which causes flowers to bloom in real-time. As each flower blossoms, it reveals a woman's background.

Time Capsule

Location

Zone 2: Themed Display

Visuals



Narratives

Once restricted to the margins, women’s presence within Kew and other Horticultural organisations now shape the future of biodiversity, sustainability, and botanical innovation, proving that gardens flourish best with diversity at their core.

Messages

The Time Capsule is a symbolic, interactive object that captures the essence of women’s roles in gardening today and looks forward to the continued evolution of these roles.

Design

A time capsule which the shape was informed by the shape flower petals representing growth accompanied by with paper with holding wild seeds. (on-going design)

Time & Action

5 - 10 Minutes: Visitors will write a message on seed paper, then pick one at random to take home and plant cultivating both ideas and growth for generations to come.

Scripts

Unfinished work, which including:

Post-war ear script/Modern era

INTRO

[Birds and atmospheric noise, walking]

This is an immersive exhibition, Slow Blooming, about female gardeners who have worked and continue to work within Kew Gardens.

Through a series of immersive installations in the Princess of Wales Conservatory, the stories of past gardeners will be celebrated alongside the growth of future generations—stories of those who traveled, studied, and preserved.

(Short pause) [Faint background garden noises]

The conservatory was built to honor Princess Augusta, who established Kew Gardens in 1759.

Slow Blooming uses Kew Gardens as a metaphor for women's contributions to horticulture and conservation, highlighting themes of creation, growth, and nurturing.

As Kew Gardens flourished in the late Victorian age, it became a stage for welcoming female gardeners into horticulture, beginning with Annie Gulvin and Alice Hutchings, Kew's first female gardeners.

Here, it begins with Annie Gulvin.

(Long pause) [Walking... ambient outside noise]

Chapter 1: Greeting from Annie Gulvin

Hello, nice to meet you.

I am Annie Gulvin, Kew's first female gardener. I was a student at Swanley Horticultural College, where I refined my skills (garden tools clinking faintly) and had the honour of applying them here at Kew.

Growing up, I was deeply influenced by the botanical teachings of my secondary schooling.

You see, it was within those walls—those sacred halls of learning—that my heart was truly awakened. I became captivated by botanical studies—sketching plants in the glasshouse, dissecting flowers, and uncovering the hidden stories within their structures. It was the whispers of nature, the quiet song of the plants, that truly called to me. And from that moment, I knew I could not ignore the pull.

[Low atmospheric sounds—air moving, wind rustling through trees and leaves]

Ah, but it was not an easy path. How could it be, when I was not only among the first women to work at Kew but also among the first to step through the doors of Swanley College itself? Yes, we were pioneers—each of us—part of something far greater than we understood at the time.

Working at Kew had its challenges. Every plant and flower felt like a testament not just to progress in nature, but to progress in society as well. Each day, I worked to prove that women could cultivate gardens as skillfully and passionately as anyone else—paving the way for future generations of women in horticulture.

(Footsteps, background music fades in, distant sound of a steam engine as if commuting to work by train)

Chapter 2: World War Era

Welcome to the next chapter.

I am Elsie Wakefield, a proud mycologist and former Keeper of the Herbarium at Kew Gardens.

Fungi and plants led me to uncover the hidden wonders of nature. Today, I want to share the stories of the remarkable female gardeners of Kew during the World Wars.

During World War I, as many of Kew's male gardeners left to serve on the front lines, women took up their spades and shears, ensuring that the gardens remained tended and thriving despite the turmoil of war. Their dedication kept Kew's legacy alive, proving that skilled hands—regardless of gender—could nurture its landscapes.

Yet, when the war ended, tradition swiftly reasserted itself. By March 1922, not a single female horticulturist remained at Kew. The return to the status quo was complete—until history repeated itself with the outbreak of the Second World War, once again calling women back into the gardens.

(Long pause)

And then, during World War II, women played an even more critical role—not only maintaining the gardens but also cultivating plants for food, medicine, and scientific research to support the war effort.

Their resilience and dedication stood as a testament to their strength and served as a powerful reminder of the essential role women played in sustaining both the gardens and the nation in times of crisis.

Soundscapes

The hum of morning birds and distant footsteps of gardeners beginning their day.

Commuting noises
Walking sound

The hum of outdoors distant footsteps of gardeners working in the plant beds.

End Approaching
foot Steps

Low digging background noise (sound of movement of the outdoors)

Gardeners move through the pathways, the sound of rustling leaves and distant birdsong in the background.

Water Misting &
War plane sound

Foot steps reascending

VICTORIAN ERA

WORLD WAR ERA

GREETING FROM ANNIE

Holographic Installation of Annie Gulvin

CONCEPT

Holographic illusion created with a viewing box that will reflect the AI-generated movement in a 3D effect accompanied by a Soundscape.

The development of Annie Gulvin's hologram began with the idea of **bringing her to life beyond a static picture frame**. This gives the installation a moment where her story has both a voice and a face for visitors to connect with. To achieve this effect, we began by testing a prism that worked by reflecting an image onto angled surfaces, creating the illusion of a 3D floating form of Annie Gulvin. However, we found that the prism did not function well within the conservatory environment.

Wanting to continue experimenting with moving images, we developed a prototype for a holographic illusion. We aimed for the effect to be visually prominent within the space, responding to how audiences typically engage with stories—either through written formats or archival collections. The hologram of Annie brings her story to life, adding color and vibrancy to Kew's history.

The hologram serves as an introduction for the audience, guiding them through the journey of women in horticulture and the role they have played within the installation. It highlights a break in gender norms, showcasing the persistence of women in horticulture, their often-overlooked contributions to science, and **how their legacy—like seeds—has blossomed into lasting change**. This is paired with a soundscape and script that sets the tone for the overall immersive installation.

We added audio detail so it will feel like talking with Annie rather than a documentary piece of work where the stories are shown but no life is brought in with its contemporary telling. Within our installation plan, it can be seen that Annie is at the entrance and a secondary location within the conservatory as a way to convey having a conversation on a comforting stroll in the park.

LOCATION



VICTORIAN ERA
ZONE 3 ARID



THE SOUTH ENTRANCE

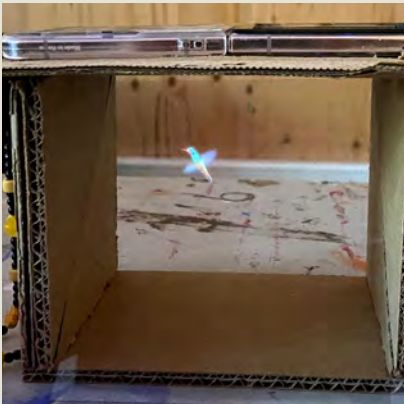
We did this as a way of storytelling, within our design, the ten climatic zones will be maximised to inform the movement of time in our sequence. Engaging the senses with the placement of the events in order from the Victorian Era until the present makes the stories tangible as they move from the zones and it makes it easier for the audience to follow along the stories.

Prism: A transparent pyramid (made of acrylic) is placed upside down on a screen. The screen (below the pyramid) plays a specially designed four-sided video showing different perspectives of the object. The pyramid's slanted walls reflect the image towards the viewer's eyes.

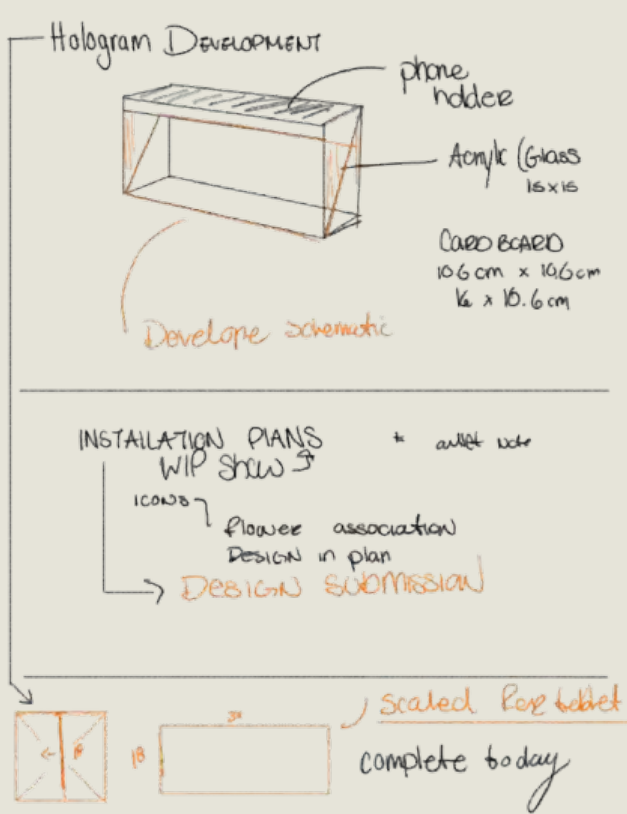
Holographic illusion: A tablet or screen displaying an image or video on a transparent angled sheet (glass or acrylic) placed at a 45-degree angle. Then with the dark box or enclosure to block external light and enhance the illusion a viewing window is placed where the audience sees the reflection



FIRST VERSION OF HOLOGRAM TESTING



SECOND VERSION OF TESTING



SKETCHES

Audio: The tone of the audio is reflective and intimate, drawing the listener into Annie Gulvin's world while blending personal narrative with historical context. The sensory elements (sound design cues like footsteps, wind, birds, and steam engines) effectively enhance the storytelling, making it feel alive and immersive.



SECOND VERSION OF HOLOGRAM



CLOSE-UP VIEW OF THE INSTALLATION

BIRD'S EYE VIEW OF THE INSTALLATION



EPHEMERAL BLOOMING

Interactive blooming flower for celebrating
female gardeners during war-time

CONCEPT

Amidst times of uncertainty and transformation, the dedication of female horticulturists at Kew Gardens remained steadfast. Their work was not defined by turmoil but by quiet resilience, continuous learning, and an unwavering commitment to the landscape they nurtured. Rather than highlighting moments of disruption, **this installation embodies a narrative of growth both literal and symbolically.**

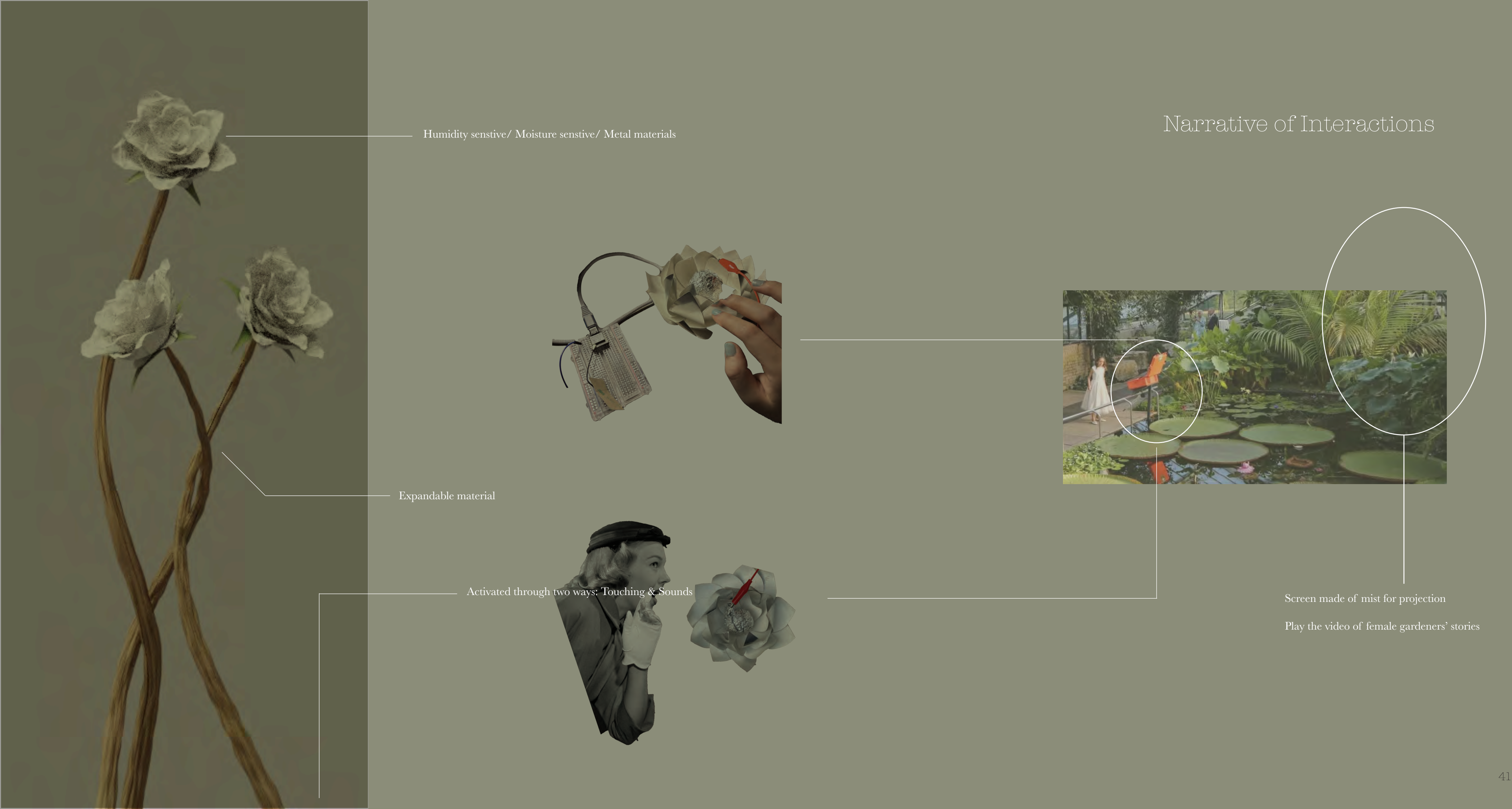
DEVELOPMENT

A gently unfolding floral structure serves as a tribute to these women's contributions. Initially emerging as a closed bud, the structure responds to interaction, gradually blooming over time. This motion echoes the collective efforts of generations of women who, through their knowledge and persistence, cultivated a lasting legacy. As the petals unfurl, their stories unfold alongside offering an intimate, evolving dialogue between the past and the present. By integrating movement, material transformation, and historical narratives, the installation creates an immersive experience that invites visitors to engage with this quiet yet powerful history not as a static memory, but as a living continuum.

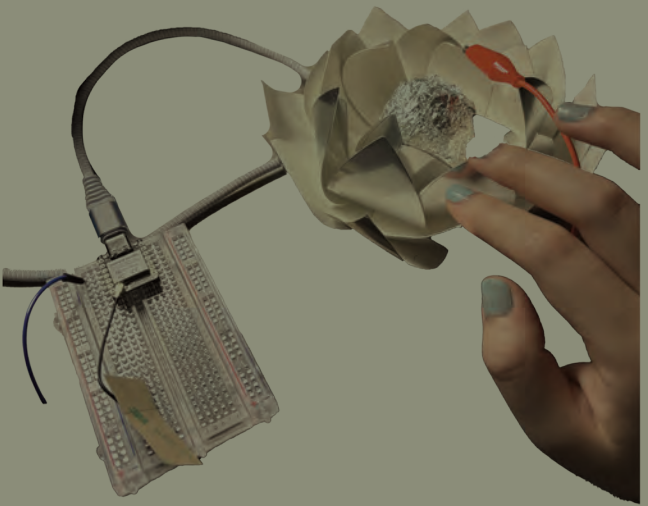
LOCATION



WORLD-WAR ERA
ZONE 1 TROPICAL RAINFOREST



Humidity sensitive/ Moisture sensitive/ Metal materials



Expandable material



Activated through two ways: Touching & Sounds

Narrative of Interactions



Screen made of mist for projection

Play the video of female gardeners' stories



◁ CLOSE-UP VIEW OF THE INSTALLATION

How it will bloom:

BIRD'S EYE VIEW OF THE INSTALLATION



OFFSITE TESTING

AIM

Communication of our storytelling and user engagement with the interactive device.

HOLOGRAM NARRATIVE

Challenging gender norms: Her story showcases the determination of women in horticulture, shedding light on their often-overlooked contributions to science and how her legacy, much like seeds, grew into lasting change.

Prototyped a Holographic illusion of Annie Gulvin, bringing her image of life and depth to a single photo from Kew's Archive.

INTERACTIVE DEVICE NARRATIVE

The stories of female gardeners during the World War era will be brought to life, highlighting their resilience, challenges, and contributions. Visitors will explore these women's struggles, from food shortages to societal expectations, and their progress in transforming landscapes, sustaining communities, and redefining roles in a time of global conflict.

Prototyped to test the functionality of a touch device.

DELIVERABLES: PROTOTYPES

SketchUp Walkthrough: Spatial Visualiser to connect 3D context with the project's environment, Princess of Wales Conservatory, Kew Gardens.

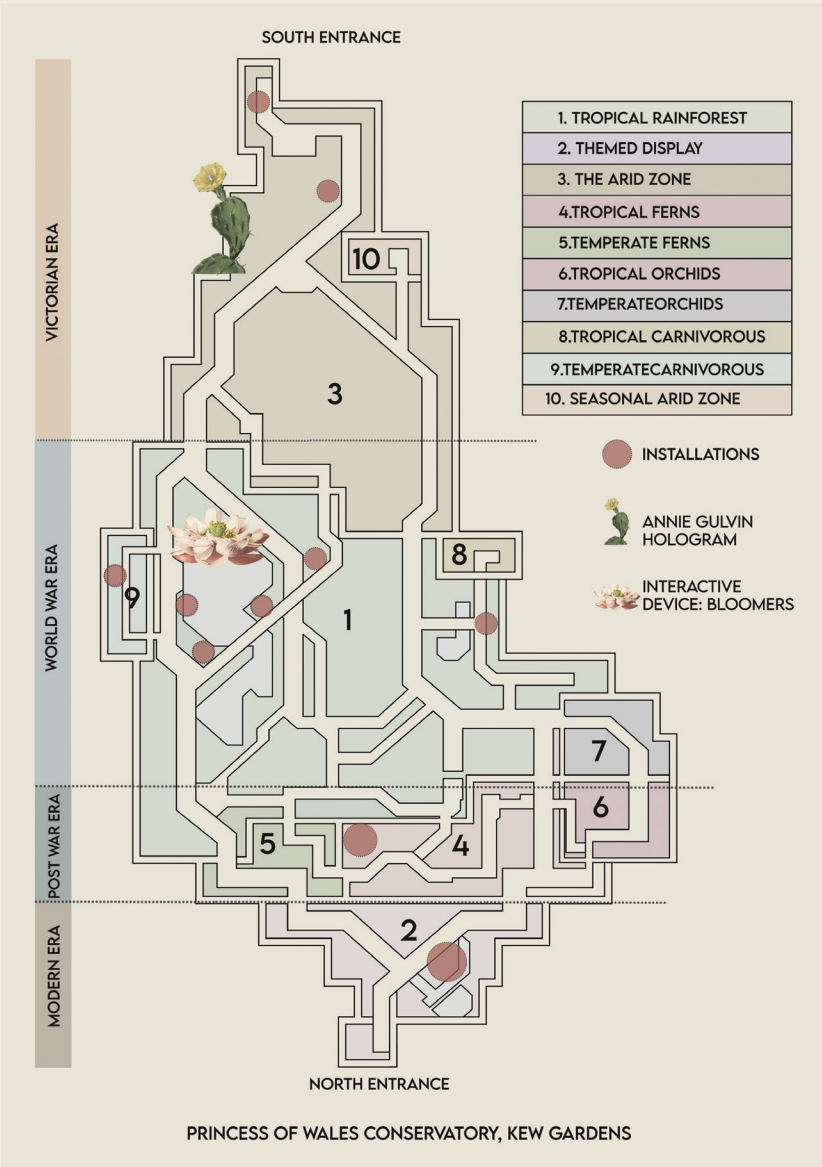


Picture of work in progress show

RESULTS

Our Questions:

- * Was the overarching goal of the exhibition effectively communicated?
 - * Did the Audio create a thoughtful and straightforward tone while maintaining cohesion?
 - * Is the visual language cohesive and appropriate for the overall direction of the work presented?
-
- * Recurring questions: Will you create at least one part of the immersive installation on a 1:1 scale? Will the interactive device be two-way, and will the audience respond to one another? For the WIP show specifically, how could the black be removed from the displays? Have you been in contact with Kew?



Floorplan Testing



Poster Testing

The feedback from the work-in-progress showed **highlighted strengths and areas for refinement in achieving clear communication and user engagement** with the physical prototype. The storytelling was generally well-received, with users appreciating the clarity of the narrative and the intrigue sparked by lesser-known historical stories. The immersive quality of the audio, particularly when paired with the hologram, was praised for maintaining focus on the story without unnecessary visual distractions. However, responses from the tutorial session varied, suggesting that while the story was engaging, there was still room for further development and a more speculative approach in its design.

However, the visual language of the black frames used on the screens and the holographic box received mixed reactions. Some users found the separation created by the black frame slightly confusing, as it disrupted the cohesion between elements. While the holographic illusion was immersive, there was a suggestion to refine the framing to enhance clarity and integration within the overall display. These insights highlight the need to balance structure and fluidity in the visual presentation.

Additionally, while the overall experience was consistent, a few participants felt the narrative was incomplete. The reliance on architectural and interior design elements was also observed, reinforcing the importance of spatial and physical considerations in storytelling. Overall, the experience effectively communicated the intended narratives with a strong foundation for further refinement.

ONSITE TESTING

Installation Pop-Up
Date: March 08th
Duration: 3 hours
Location: Princess of Wales Conservatory North Courtyard

To assess audience engagement and identify areas for refinement, we conducted initial testing at the North Entrance of the Princess of Wales Conservatory on 8th of March which was also Women’s Day.

A significant observation was that none of the participants **ranging from young adults to senior citizens, tourists to local visitors** were previously aware of the role female gardeners played in Kew’s history. However, upon learning about these stories, their reactions shifted to curiosity and enthusiasm. This affirms the importance of our project in addressing the historical erasure of women’s contributions in horticulture. The strong response indicates that an exhibition focusing on this theme could generate interest and engagement among Kew visitors.

Branding: A3 poster printout x2 mounted on black matboard, Instagram QR code access.



Our poster



Setting up for testing

QUESTIONS:

- How frequently do you visit Kew Gardens?
- Have you explored the Princess of Wales Conservatory before? If yes, what drew you to it?
- Were you previously aware of the history of female gardeners at Kew Gardens?
- What aspects of the prototype were most engaging for you?
- Did the holographic display of Annie Gulvin effectively communicate her story? How could it be improved?
- How did the interactive device influence your understanding of women’s roles in World War horticulture?
- What types of storytelling (visuals, sound, interactivity) were most compelling for you?
- Would you be interested in visiting the exhibition on stories of female gardeners in Kew?

AIMS:

- Communicate our story to nature enthusiasts
- Testing the effectiveness of interactive devices
- Gauging interest based on shared stories
- Assessing how much the audience knows, while observing their responses to the interactive devices.

The pop-up will showcase the contributions of female gardeners, focusing on their impact on horticulture and resilience during wartime. It will feature two main elements:

Holographic Illusion:

A holographic portrayal of Annie Gulvin highlights women’s overlooked contributions to horticulture, emphasizing her legacy and its lasting impact on science and society.

Ephemeral Bloomer:

The interactive device explores the role of female gardeners during World War II, focusing on their resilience and transformation of landscapes while testing the functionality of a motion-sensitive touch device. Visitors will have the opportunity to engage with both elements, learn about historical contributions, and reflect on the significance of women in horticulture.

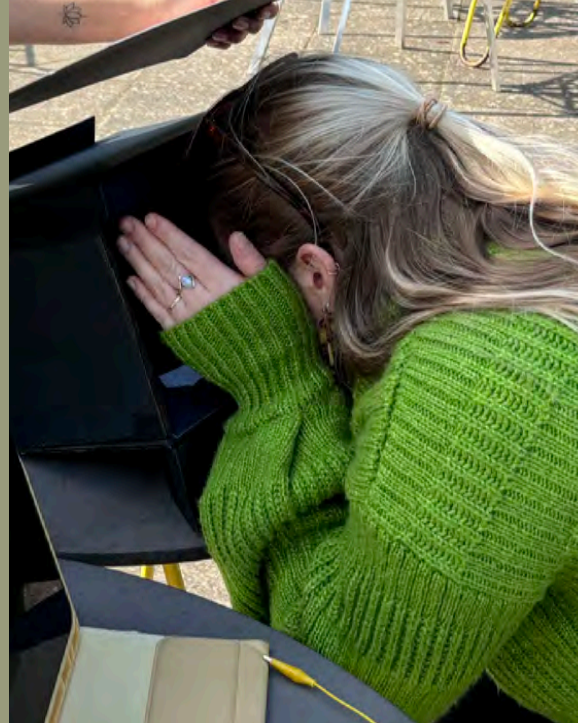


Holographic Illusion – Strengths & Areas for Improvement

The holographic projection of Annie Gulvin was well received, as it provided a striking visual representation of a forgotten historical figure. Visitors found the immersive nature of the installation compelling; however, the structural integrity of the display requires further refinement. The absence of an actual LED display during testing limited the clarity and realism of the hologram, making it clear that the final installation should prioritize higher-resolution visuals and enhanced projection techniques. Additionally, while the inclusion of an audio soundscape helped contextualize the story, some visitors expressed that because of the uniformity of hologram it easier to concentrate on story through audio communication.

Interactive Device – Engagement & Usability

The interactive device, “Ephemeral Bloomer,” effectively captured visitors’ interest, particularly through its touch-responsive storytelling approach. Participants appreciated the tactile engagement, with many instinctively drawn to interact with the conductive material. However, compared to reactions observed during the Work in Progress (WIP) show, a shift in interaction patterns emerged. While audiences at the WIP show repeatedly engaged with the flower component, on-site testing at Kew revealed a stronger engagement with the visual storytelling aspect rather than repeated tactile interaction. This suggests that while the touch feature remains engaging, additional visual prompts or layered interactions may encourage deeper exploration of the stories.



Participant interacting

REFLECTIONS:

Future Considerations & Design Refinements

The holographic installation needs improved materiality and structural design for enhanced realism and visibility.

The interactive device could benefit from refined tactile engagement, possibly incorporating multiple interaction points or varied responses to sustain visitor interest.

Expanding the audio-visual storytelling components could create a more immersive experience, ensuring that historical narratives remain accessible and compelling to a diverse audience.

The overwhelmingly positive response to these prototypes underscores the potential of a full-scale exhibition, reinforcing the necessity of celebrating female gardeners’ contributions in a permanent or long-term capacity at Kew Gardens.

“I come to Kew several times in a year, I never came across these stories, I would love to see the entire exhibition. Looking forward to it.”

Di MacDonald

“In your project what interesting you have is these stories of female gardeners. Being a member of Kew I am interested in knowing these stories.”

C. Martin

“We would like the visit the exhibition if these kind of interactive installations will be there. It seems different that usual exhibitions.”

Marin & Camille

“The project is really interesting, it makes me think about how when there is more women in the job, the quality of pay goes down and the industry look at it differently now.”

Cathy Tombs

CONVERSATIONS WITH AUDIENCES

NEXT STEPS

Chapter 3: Emerging Voices

Digital Garden Post-war era

Emerging Voices is an immersive experience -- a digital garden that grows and blooms, **revealing** figures and their contributions: past and present female gardeners, botanical artists, and researchers. Paired with an archival wall that brings history to the user, this **evolving space redefines how we engage with the past**. Inspired by our frequent visits to the archives at Kew Gardens, where each visit unearthed new layers of women's influence, from the Artists at Kew. This chapter will showcase botanical illustrators to hidden records of scientists and administrators. This project cultivates more than memory; it reshapes narrative power.

This installation is located in the exhibition hall, identified as the most suitable space due to its adaptability, allowing the interactive wall to function optimally within the conservatory. Emerging Voices taps into this dynamic, **empowering the forgotten and overlooked to reclaim their place in the cultivated landscape of history**. It invites visitors to witness not only the beauty of botanical contributions but also the strength and persistence of the women who shaped them. This digital garden, ever-growing, mirrors their enduring legacy a living testament to control reshaped into empowerment, and expression blooming into visibility.

Next steps involve deepening the archival integration of key stories, ensuring balanced representation across different figures, and developing content for the drawers embedded in the archival wall, including tactile elements. Refining visual communication: incorporating botanical prints and layering historical and contemporary imagery to convey a sense of continuity. Exploring spatial experience through techniques that enhance storytelling, while considering atmospheric elements such as a soundscape and sensory immersion.

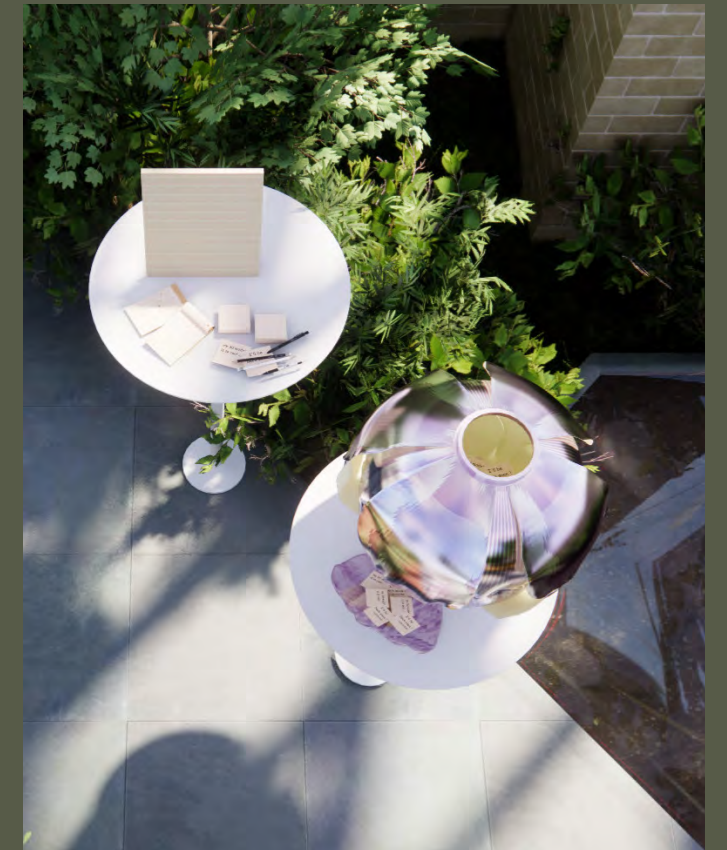




Flourishing Future is the final installation in the series, representing the next generation of female gardeners. This interactive piece features a time capsule and seed paper, inviting visitors to share their thoughts by writing on seed paper and placing it inside the capsule. Simultaneously, they can take another piece of seed paper with them, symbolising the exchange of ideas and the continuous growth of knowledge.

The modern era **represents the theme of expression** — through this installation, we are fostering social engagement by **encouraging the circulation of thoughts** through seed paper, where the seed represents time and growth, and the capsule serves as a vessel, **a passage through time**.

Positioned in the themed display area near the north-side entrance/exit of the conservatory, **Flourishing Future** serves as both a reflective and forward-looking moment, inviting visitors to contribute to an evolving dialogue on the future of women in horticulture.



For the **next steps**, it will be valuable to experiment with different ways for visitors to insert and retrieve seed papers while ensuring the design remains interactive and functional. Additionally, identifying and procuring high-quality biodegradable seed paper that aligns with the botanical themes of Kew Gardens will be essential.

Chapter 4: Flourishing Future

Time Capsule Modern era

ONLINE TESTING

Online Platform: Instagram

Intent:

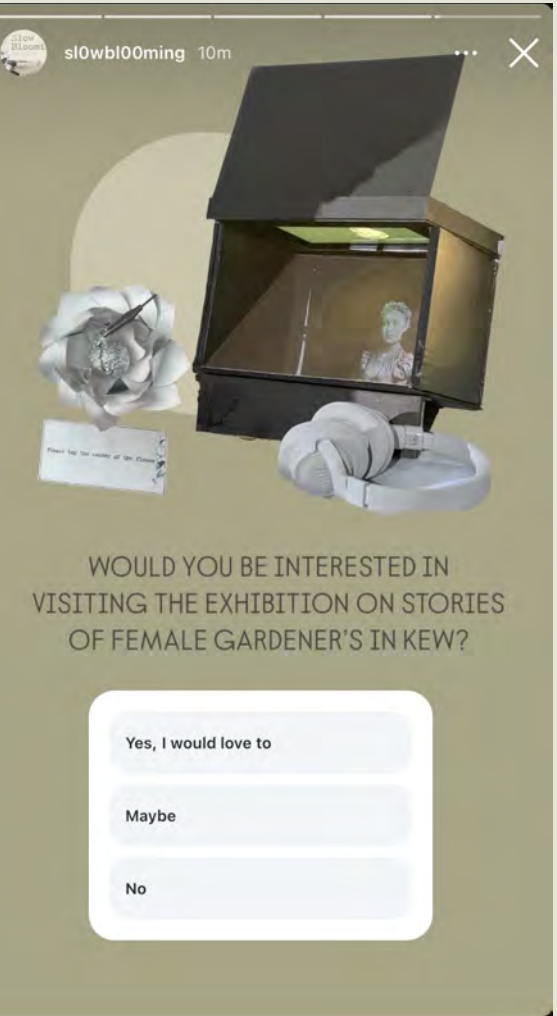
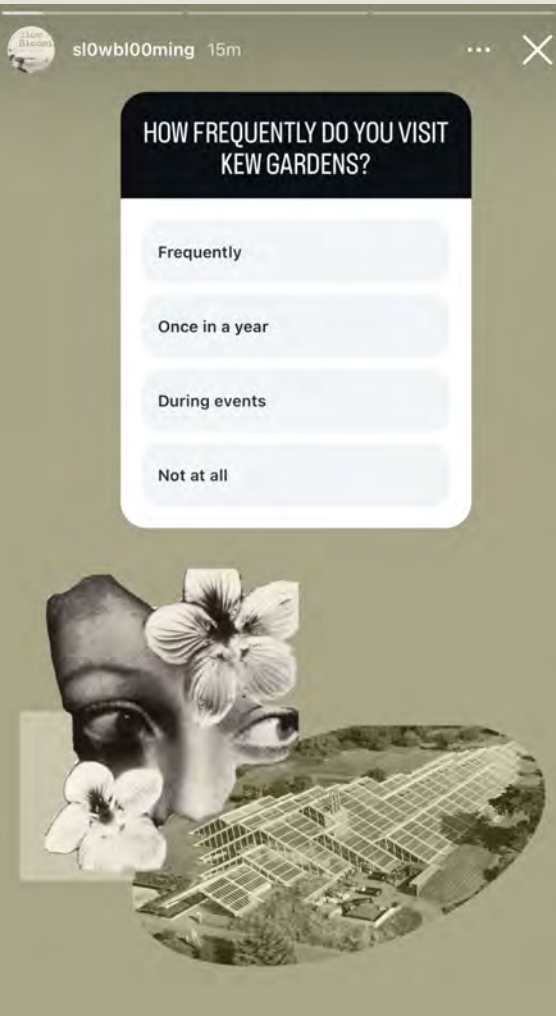
The project’s Instagram is a platform for sharing stories from the archive or those forgotten over time, showcasing the project’s development through posts and publications. It aims to engage with secondary audience beyond the typical Kew visitor, helping to build a community around these untold stories.

Deliverables:

Visual language development: renderings, illustrations and collages created to inform the story.

Social Media Templates:

- Story Templates
- Feed Post Templates



NEXT STEPS

BUILDING COLLABORATION WITH KEW

The goal is to secure Kew Gardens’ backing and collaboration for ‘Slow Blooming’ by aligning the project with their mission, demonstrating mutual benefits, and fostering an ongoing partnership.

Refine the Proposal

- * Create a visually engaging, clear presentation outlining the immersive installation, interactive elements, and key outcomes. (to include finalised designs)
- * Frame the exhibition as an opportunity for Kew to lead in amplifying underrepresented historical voices.

Identify Key Contacts

- * Executives
- * Current gardeners and artists
- * Exhibition Specialists

Discuss Collaboration and Funding

- * Propose partnership structures: co-curation, hosting, or archival access support.
- * Present potential funding strategies: grants, sponsorships, ticketed experiences.
- * Emphasise long-term value — explore options for a semi-permanent or touring version.

NEXT STEPS FOR MARIANNE NORTH

In Chapter 1 part 2, the installation for Marianne North, is a hand-crank or motor device: it is a rolling conveyor belt featuring a long strip of painted or printed paper with a sequence of botanical paintings that moves seamlessly. **It gives the effect of an evolving, living painting of Marianne North.**

Next steps for this particular piece will involve mechanical design, exploring how it will operate and considering how it will be placed alongside the plants in Zone 9 of the conservatory, along with the design of the visual sequence, reflecting on how we can portray her journey and influence in a new way outside of the context of her existing gallery on-site. The goal is to blend mechanical ingenuity with botanical beauty, creating a sense of living, breathing art in motion.

NEXT STEPS FOR

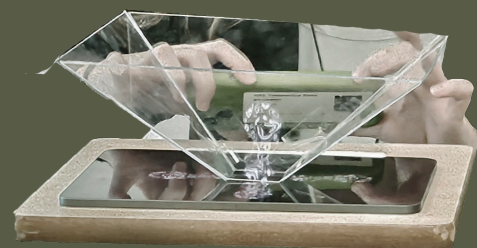
WOMEN GARDENERS’ MOVEMENT

As part of Chapter 2, Women Gardeners’ Movement, the working design takes the form of Wayfinding. Currently, it consists of natural stepping stones, called the **Gardeners’ Path**, that represent different aspects of the movement and highlight pioneers who initiated the movement within Kew specifically.

The next steps include developing short, **compelling narratives detailing the movement in and outside of Kew, balancing historical accuracy with emotional engagement.** Further exploration will focus on design approaches through materiality and content, as well as the potential for embedding digital components to help weave a cohesive aesthetic throughout all of the installations designed for our narrative. The final experience will honor the pioneering women of Kew while providing visitors with a reflective journey through both the physical and historical landscape of the Women Gardeners’ Movement.

Overall, the project’s continued development involves refining both digital and physical design elements, such as prototypes of the hologram and interactive Ephemeral Bloomers devices. Development of cohesive project wayfinding is essential, as the conservatory is a large space to cover, and we want the storytelling to be embedded in every element of the project. Additionally, we are planning the development of components for the remaining installations within the Post-War and Modern Era chapters.

January



Himanshu Bablani - Technician

Stephanie Li - Kew Garden Horticultrist



February



Joni Ayton-Kent - Voice actress

Rilya - Advisor



March



On-site participants



Katherine Joseph - Editor

Collabrators

Brandbook

TYPEFACE 1

Aa

American Typewriter

Light
Regular
Semibold
Bold



TYPEFACE 2

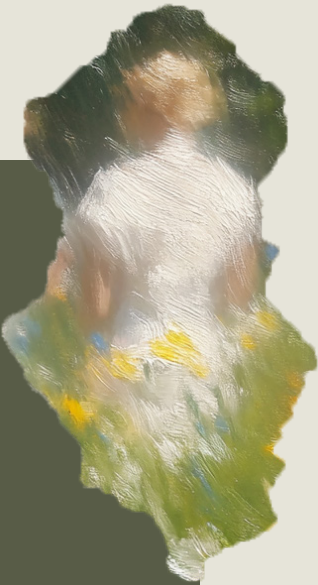
Aa

Baskerville

Light
Italic
Semibold
Bold



R=88 G=92 B=71



PRIMARY
COLOR PALETTE

C=3 M=3 Y=5 K=0



R=90 G=89 B=39

R=153 G=155 B=124

Appendix

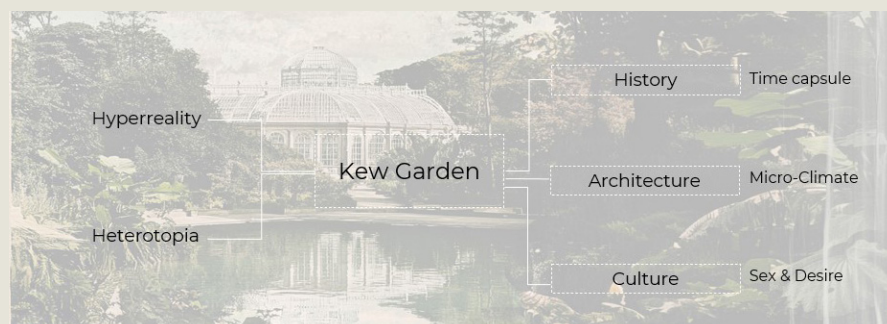
ADDITIONALS:



RESEARCH THEMES

Research Questions

- How do cultural narratives and ideologies contribute to the construction of nature as a subject to be controlled?
- How can contemporary garden design challenge or reinforce traditional narratives of female expression?
- How does creating a microclimate in the glasshouses at Kew Gardens alter the temporal experience of visitors as they move between seasons and ecosystems within a single space?



RESEARCH LENSES



RECURRING THEMES

Kew Gardens

Situated in Richmond upon Thames in southwest London, Kew Gardens stands as a symbol of the intersection between nature, history, science, and art. Founded in 1759 by Princess Augusta as a Royal Garden within the grounds of a pleasure garden. It has evolved from a royal garden to the combined garden now known as a world-renowned scientific institution. It is home to over 50,000 living plants, making it one of the largest and most diverse botanical collections globally. This vast botanical garden covers approximately 330 acres and is world-renowned for its extensive plant collections, research, and beautiful landscaped gardens. Kew Gardens is also a UNESCO World Heritage Site, recognised for its significant contributions to botany and conservation. This historic site serves as a centre for botanical research and conservation and a cultural and architectural marvel.

Recurring Themes in Kew

The recurring themes of control, history, expression, art, culture, power, and collection intertwine at Kew Gardens, shaping it as a living repository of botanical mastery and human ambition, where the structured beauty of cultivated landscapes meets the legacies of imperial exploration, the artistry of design, and the profound influence of science and culture in shaping our understanding of the natural world. Nature, science, and culture are all interwoven in the living fabric of the Royal Botanic Gardens at Kew. Its primary goal is biodiversity conservation, and it works hard to save threatened plant species and lessen the effects of climate change. Kew serves as a centre for research and education, bridging the gap between scientific advancement and public knowledge while highlighting the vital role that plants play in supporting life on Earth. The gardens celebrate the cultural and historical value of plants while showcasing the interdependence of ecosystems and a wide variety of plants from throughout the world. Kew is also a place of artistic inspiration, providing visitors with healing experiences of the beauty of nature through carefully planned landscapes, seasonal exhibits, and creative installations. Its dedication to wellness, sustainability, and the exploration of humanity's relationship with the environment makes Kew a beacon for addressing the challenges of the modern world while preserving its rich historical legacy.

Site Visit

Display Prototype

The prototype aims to foster a deeper connection between visitors and Kew Gardens by making the stories of women more engaging and accessible, encouraging interaction and leaving a lasting impression. Taking influence from how literature uses flora and fauna as a narrative device, after a site visit with the Princess of Wales Conservatory (POWC), we observed how users interact with the plants and their plaque. During a brief interview with more Princess of Wales Conservatory staff, we found that there has been an increase in visitors asking about specific plants associated with women within the conservatory. We found inspiration in the way plants are used as a narrative device in *Beauty and the Beast*. The ‘enchanted rose,’ with its petals falling one by one, beautifully symbolises the passage of time, the fleeting nature of beauty, and the fragility of life itself. Captivated by this interplay between storytelling and symbolism, we drew from the iconic bell jar shape that encases the rose. This imagery became a central element in our design, where we sought to let the plant within the conservatory not only exist but actively convey its own story—an unfolding tale of growth, change, and connection to its surroundings.

Challenges and Opportunities

This prototype concept was trying to effectively blend the physical environment of the Princess of Wales Conservatory (POWC) with the historical and emotional resonance of the women associated with specific plants. Highlighting the plants with the semi-sphere, within the POWC conservatory allows for feature plants linked to these women’s legacies to come to the forefront. As well as allowing visitors to engage directly with nature while learning. This immersive, sensory experience would encourage visitors to connect emotionally with these stories, fostering a lasting, deeper appreciation for both the women’s contributions and Kew Gardens as a living tribute to their impact.

The prototype also faces several challenges. Ensuring the display supports interaction without disrupting the narrative continuity is critical, as mobility or dynamic storytelling elements could fragment the user experience. The material choice—whether transparent and static or interactive and digital—must balance innovation with the need to respect and enhance the natural environment. Additionally, there is a risk of unintentionally isolating the plants by presenting them within another enclosed structure, potentially contradicting the open, organic ethos of Kew Gardens. Overcoming these challenges is essential to ensure the display complements the site’s natural beauty and the stories it seeks to tell.

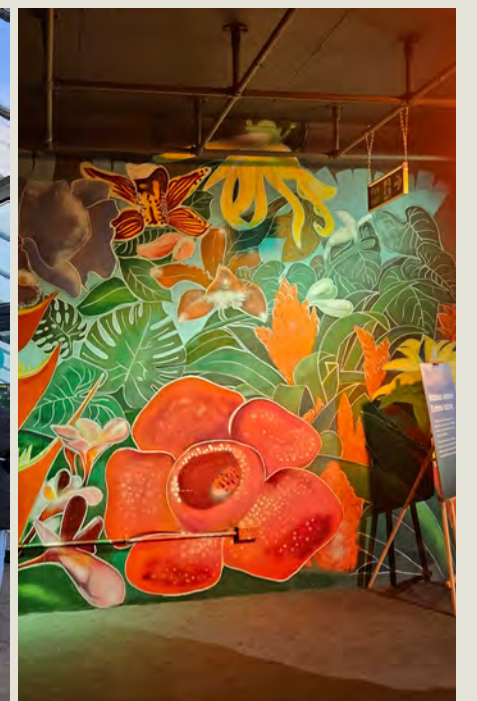
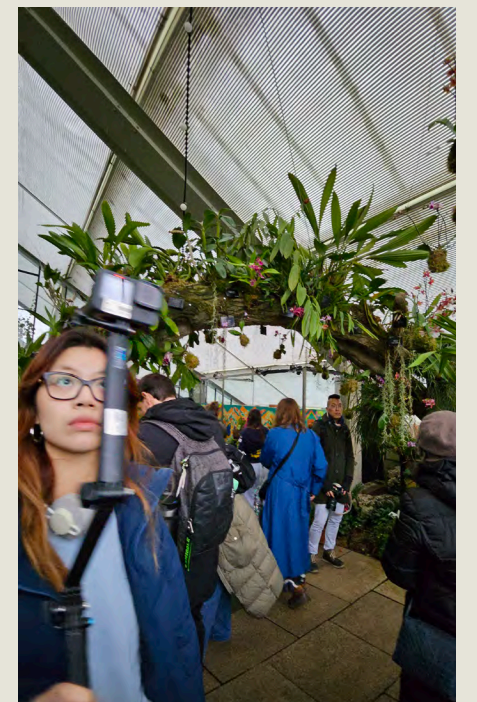


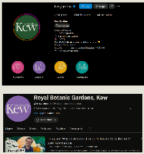








WAYFINDING PROTOTYPE



Insights

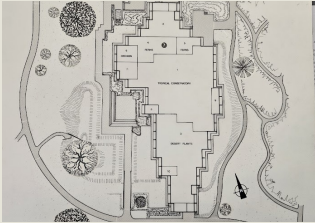
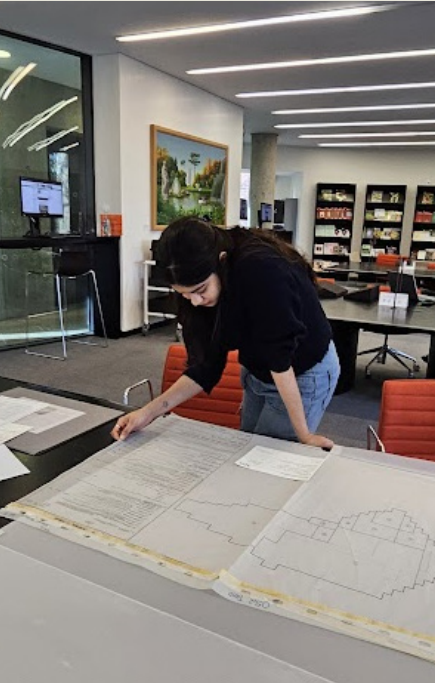
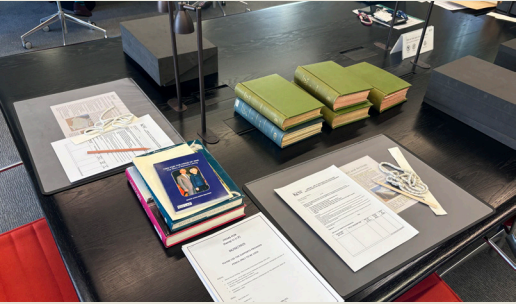
Through multiple site visits to the Princess of Wales Conservatory, we developed a thorough understanding of the space, allowing us to divide sections for each installation and design details based on environmental factors such as diverse climatic zones and existing setups of plants. Repeatedly walking through the paths also helped us notice new areas each time. For example, on our sixth visit, we discovered the exhibition hall for the Orchid Festival, which ultimately informed our design for the post-war era. These visits were essential in refining our spatial strategy and ensuring our installations coordinate with the site.



Location	Kew's website & social media platform	Kew Gardens	Enter into the POW conservatory (south)	Annie Victorian Gardeners (zone 3)	Marianne Northia (Zone 9)	Women Gardener Movement Zone 1	World Wars Zone 1	Post-war Basement Lecture Hall	Modern Era Zone 2
Visuals									
Time	Variable	Variable	2-5mins	5-10mins	5-10mins	10-15mins	5-10 mins	5-10 mins	5-10 mins
Action	Looking into Kew's website & social media platform and getting information.	Arriving at Kew Gardens, after entering through the gate there will be poster and way finders towards POWC.	Enter inside	When the visitor will be in front of the installation, there will be instructions to put on the headphones. The visitor will look at the Hologram while listening to the audio.	Audience will walk freely first to experience the sensory devices. E.g. the sound device or smell device/ installations	Next, showing the development of POWC and the Kew. What have they added and changed with time passing by. (Could be a time tunnel installation...) The time tunnel installation can be near time capsule	People moving closer to the water(Pond), see the devices standing above the water. With the instruction next to it, started playing with movements. The device activated, playing the sounds and videos.	The user's action involves engaging with the interactive projection wall by touching different points on the screen, which causes flowers to bloom in real-time. As each flower blossoms, it reveals a story.	Entering a seperated space, meet with the morden female gardener, start to talk to each other, vebally, spiritually... exchange thought and insights
Emotions	Curious, Excited	Curious, Excited	Curious, interested	Curious, interested, motivated, inspired	amused, uplifting, curious, nostalgia,	Proud, motivated, humbled	Amused, provoked, motivated, inspired	Amused, intrigued, curious	Confident, proud, interested, joyful, fulfilled
NArrative	They will get to know about the exhibition details,	Visitor will know the pathway towards POWC.	Visitor will know the directions towards first installation.	The story of Anne Gulvin as a first women gardener stepping into the Kew and pioneering the way for female gardeners in horticulture industry.	Contributions of female gardeners beyond traditional gardening to the horticulture industry. They were not only just involved with gardening but also brought varied skills. How Marian North's art has helped the scientist in their study.	Empowered women by promotioing gardening as a means of self-reliance and social change. A movement that foster the female gardeners skills.	The story of female gardeners during the World War time will be conveyed, their challenges, struggles and progress.	How female gardeners have fought back, stayed after the end of world war and continued to progresses their way into the horticulture industry.	Percentage of female gardeners in present scenario is more than anyone else working their. Their ongoing innovation and contributions towards horticulture industry.
Message	Celebration of Kew's women and the roles they played in its development and current environment.	The direction towards conservatory. A wayfinding will lead visitor.	The direction towards conservatory. The Power of Persistence showcase how Princess Augusta established the gardens. The Princess of Wales Conservatory is build honoring.	Break in the gender norms: Their story highlights the persistence of women in horticulture, their often-overlooked contributions to science, and how their legacy, like seeds, blossomed into lasting change.	Marianne North's story will highlight the diverse skills women have brought to the horticulture industry, showcasing their contributions beyond traditional gardening.	Reflecting on the lasting impact of these women, fostering a deeper understanding of the important role women continue to play in the world of gardening.	Often overlooked and seen as replaceable, women were only called upon when men were present. Yet, they proved their expertise, resilience, and ability to nurture and sustain the conservatory and gardens, leaving a lasting mark on horticulture."	Women began to re-enter Kew's workforce, not only as gardeners but also in scientific and curatorial capacities . This period marked the beginning of a more inclusive approach, with women contributing significantly to various departments within the institution.	Once restricted to the margins, women's presence within Kew and other Horticultural organizations now shape the future of biodiversity, sustainability, and botanical innovation, proving that gardens flourish best with diversity at their core
Design	Short abstract and collage	Graphic branding identity of the exhibition (a print poster)	Display signage	Hologram Illusion created with Oled Display with a Soundscape accompanying lighting a colour moving picture device that is analogue inspired device for users to turn (like a microfiche film or slide reader)	The device will display Marianne North's paintings of carnivorous plants, accompanied by a soundscape that immerses visitors in a visual and auditory storytelling experience. (Working Design)	Natural stepping stones (gardeners path) that will be representative of the different aspect of the movement which will highlight pioneers that initiated the movement within Kew. (Working design)	Interactive device that will reactively bloom to the engagement of touchpoints, with a response that would allow the visitors to engage with sound and video storytelling of world wars women's challenges and achievements	Real-time Interaction: a digital garden that grows and blooms figures and their contributions (past and present female gardener, botanical artist, researcher) will appear to end with a physical seed pod as a takeaway that will have wildflower seeds. (working design)	A time capsule a symbolic, interactive object that captures the essence of women's roles in gardening today and looks forward to the continued evolution of these roles. (working design)

STORY MATRIX

Archive Visit



Insights

There were several times when we struggled to find stories of female gardeners from the Victorian and post world war era. Thanks to valuable archive visits, we discovered previously unknown stories and built our narrative design around them. The librarians were also incredibly helpful, guiding us on how to search for information and, more importantly, providing positive feedback on our project concept.

Hyperlinks

The story of female gardeners during World war era:
<https://vimeo.com/1066186069>

Annie Gulvin's hologram:
<https://vimeo.com/1066729299/4247dfe93a?share=copy>

SketchUp Walkthrough:
<https://vimeo.com/1066726329/4b85e8e8bd?share=copy>

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