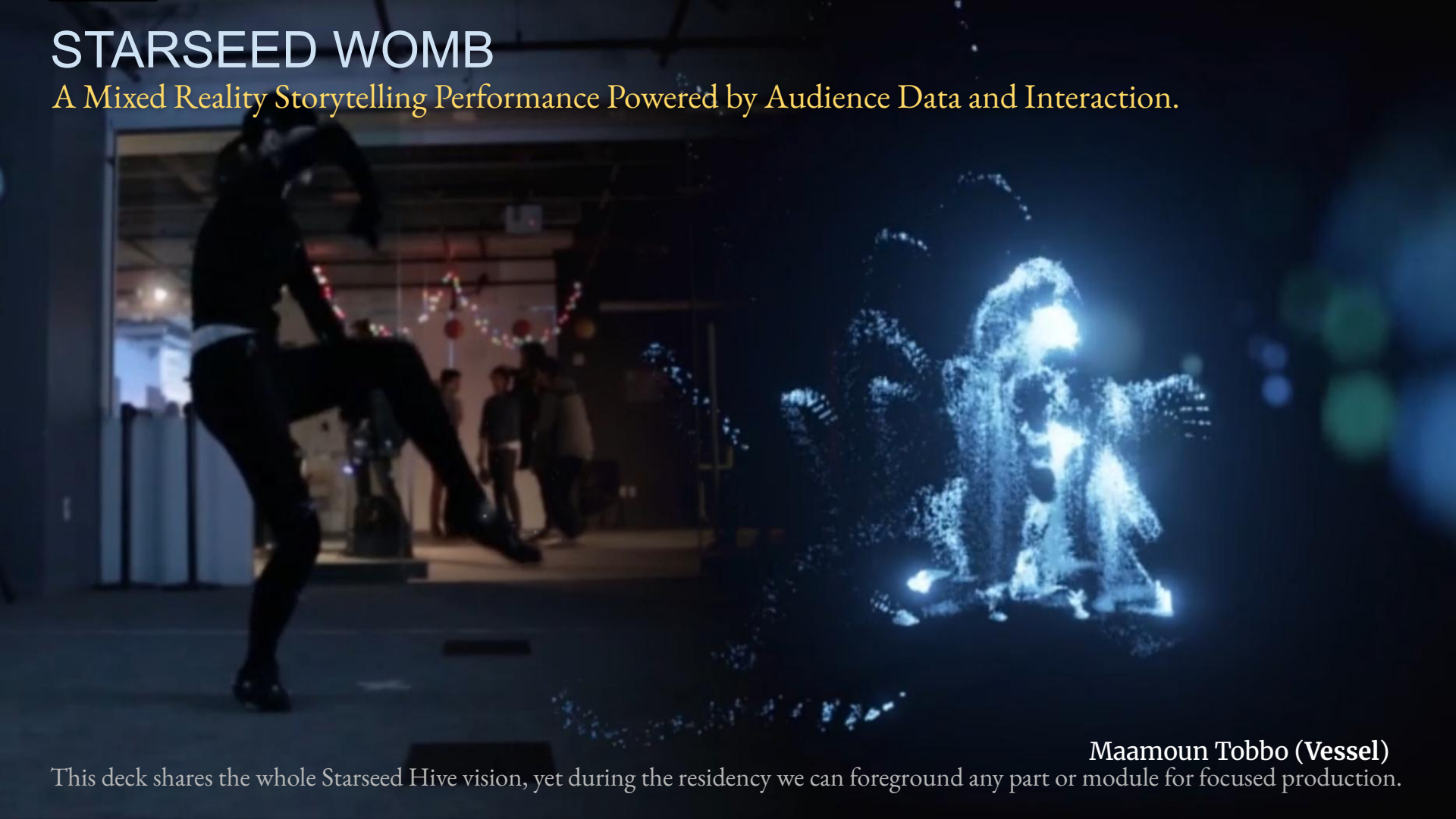
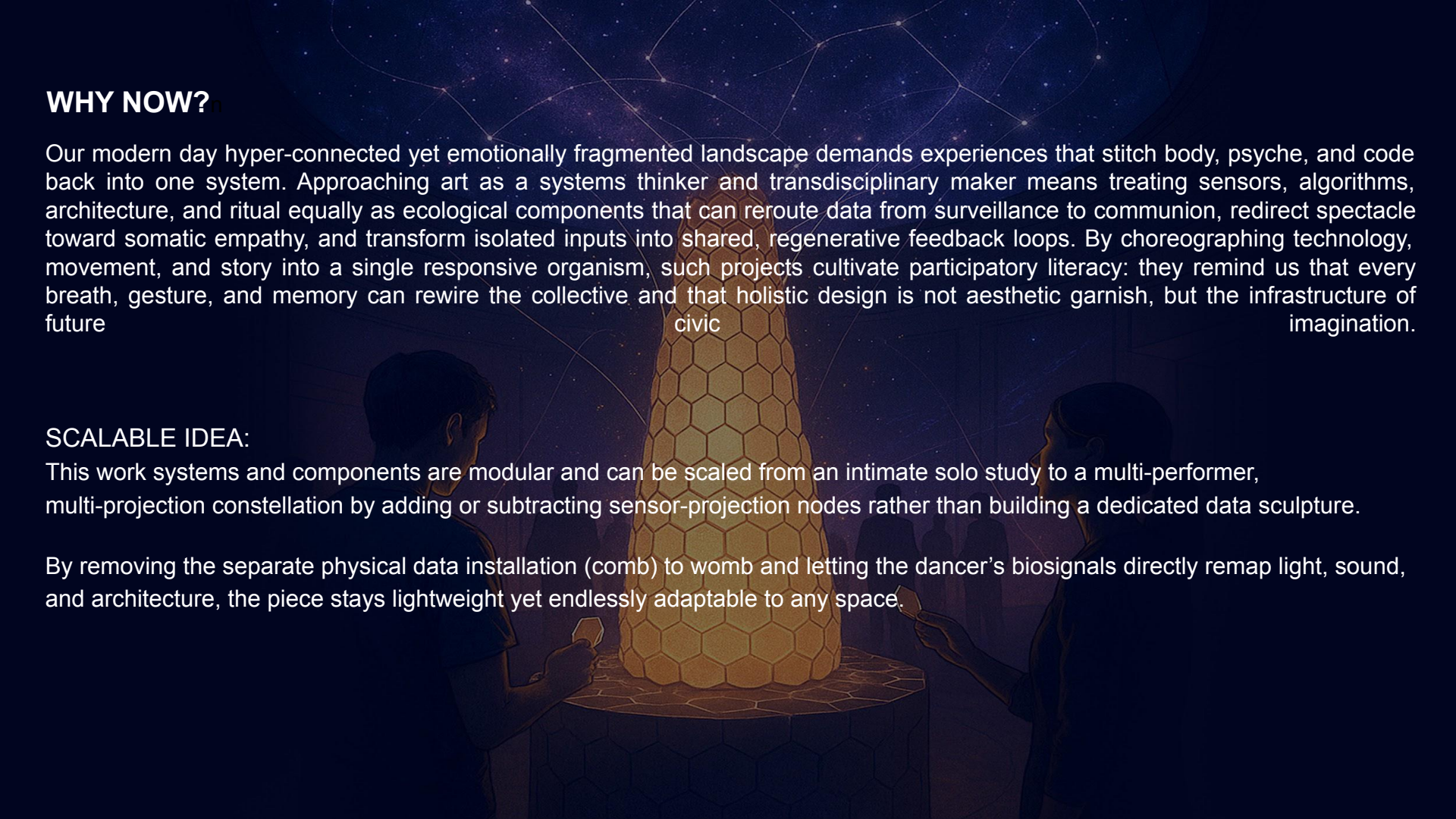
STARSEED WOMB

A Mixed Reality Storytelling Performance Powered by Audience Data and Interaction.



Maamoun Tobbo (**Vessel**)

This deck shares the whole Starseed Hive vision, yet during the residency we can foreground any part or module for focused production.



WHY NOW?

Our modern day hyper-connected yet emotionally fragmented landscape demands experiences that stitch body, psyche, and code back into one system. Approaching art as a systems thinker and transdisciplinary maker means treating sensors, algorithms, architecture, and ritual equally as ecological components that can reroute data from surveillance to communion, redirect spectacle toward somatic empathy, and transform isolated inputs into shared, regenerative feedback loops. By choreographing technology, movement, and story into a single responsive organism, such projects cultivate participatory literacy: they remind us that every breath, gesture, and memory can rewire the collective and that holistic design is not aesthetic garnish, but the infrastructure of future civic imagination.

SCALABLE IDEA:

This work systems and components are modular and can be scaled from an intimate solo study to a multi-performer, multi-projection constellation by adding or subtracting sensor-projection nodes rather than building a dedicated data sculpture.

By removing the separate physical data installation (comb) to womb and letting the dancer’s biosignals directly remap light, sound, and architecture, the piece stays lightweight yet endlessly adaptable to any space.

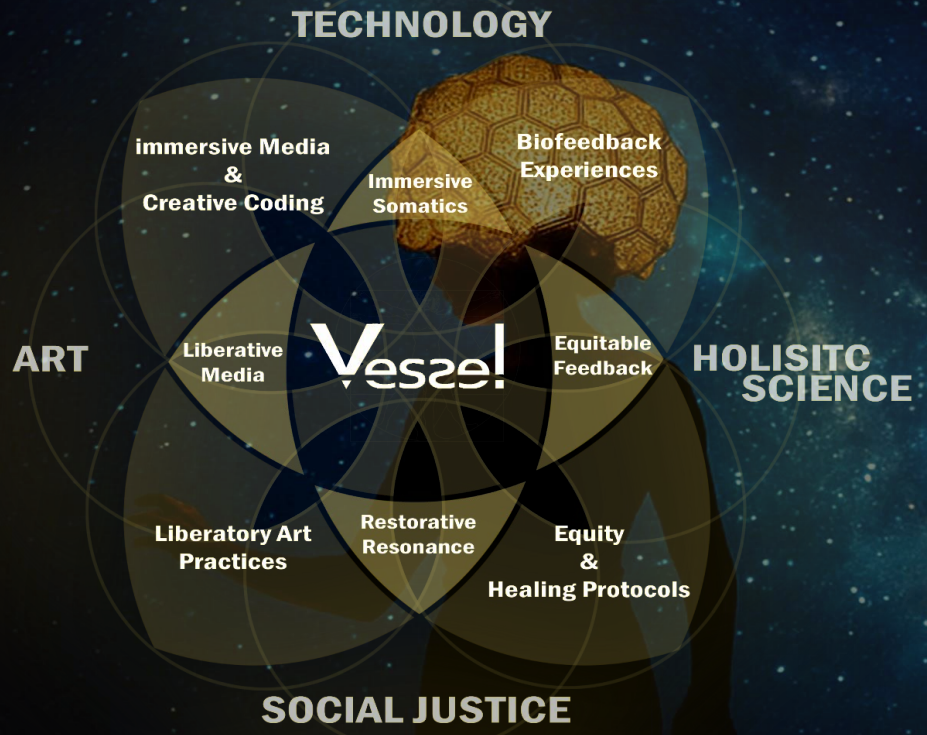
MAAMOUN TOBBO

I'm a Lebanese-born, New York–based transdisciplinary artist who bridges architectural space design, performance arts, and immersive media to turn audiences into co-creators of the story.

My studio-lab, **Vessel**, weaves somatic research, XR/AI technology, and ritual design into multisensory performances, data-driven installations, and workshops that ignite personal insight and collective repair.

As a creative director, I curate each project as a living dialogue between body, memory, and emergent tech extending my own practice into a shared engine for transformation.
www.maamountobbo.com
Vesselexperience.com

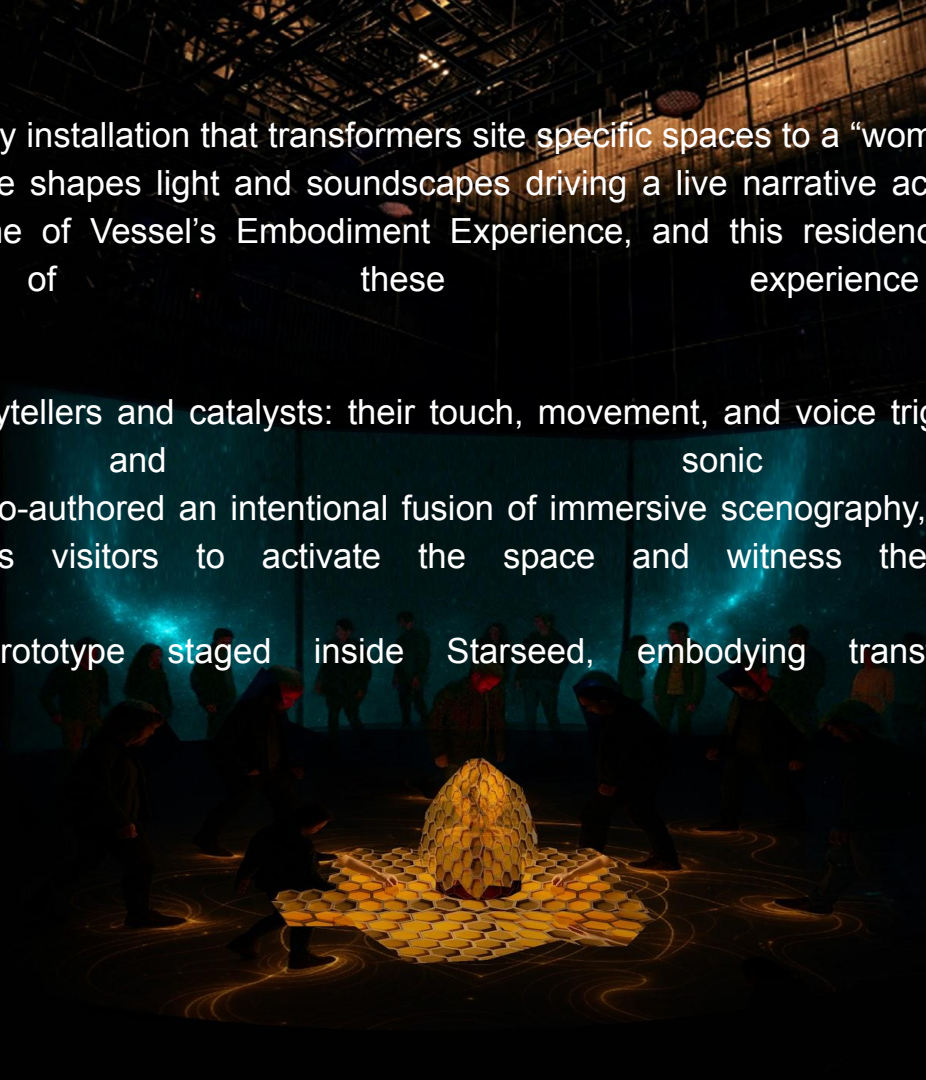
Vessel
is a transdisciplinary studio turning XR/AI tech into ritual spaces for collective authorship and healing. This experimental embodiment lab studio ia a participatory artistic experiences, where each environment is shaped like a living organism that responds to the people who enter it.



Core Vision

Starseed Hive is a mixed-reality installation that transformers site specific spaces to a “womb” where audience memories, stories and expression become shapes light and soundscapes driving a live narrative across physical and VR worlds. This installation is **a** backbone of Vessel’s Embodiment Experience, and this residency would help us create the infrastructure of these experience containers.

Participants become both storytellers and catalysts: their touch, movement, and voice trigger real-time shifts in image, light, and sonic texture.
Every encounter is therefore co-authored an intentional fusion of immersive scenography, participatory technology, and live dramaturgy that invites visitors to activate the space and witness their presence made visible.
RITUALIS
a flagship performance prototype staged inside Starseed, embodying transformation and co-creation.



STARSEED CONCEPT: AUDIENCE AS CO-AUTHOR

This performance is a living dialogue between two worlds physical and virtual.

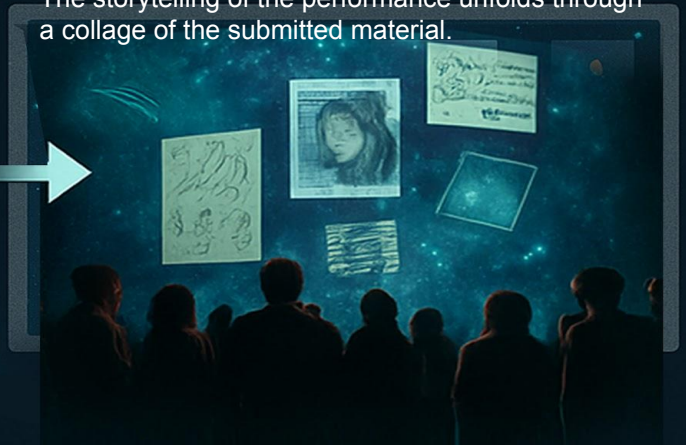
Participants scan invitation Qr code and respond to prompts.

The y can Upload:
Written text, Poetry.
Drawings, Photos.
Voice, Music, Short Video.

Each submission appear in the virtual world as a "**seed**" containing these data fragments.

The VR World translated into the architectural space through projection, lights and 3d mapping.
Floor projection mirrors he geometry of the VR realm and updates with each new presence.

The storytelling of the performance unfolds through a collage of the submitted material.



The seed is translated into *Real-time* interplay between bodies, voices, and projected memory.

Each audience contribution becomes a seed that shapes both realms in real time. Light and movement braid a living score, where the seen and unseen continuously mirror and inform one another.

COMPONENTS: Dual Worlds Installation

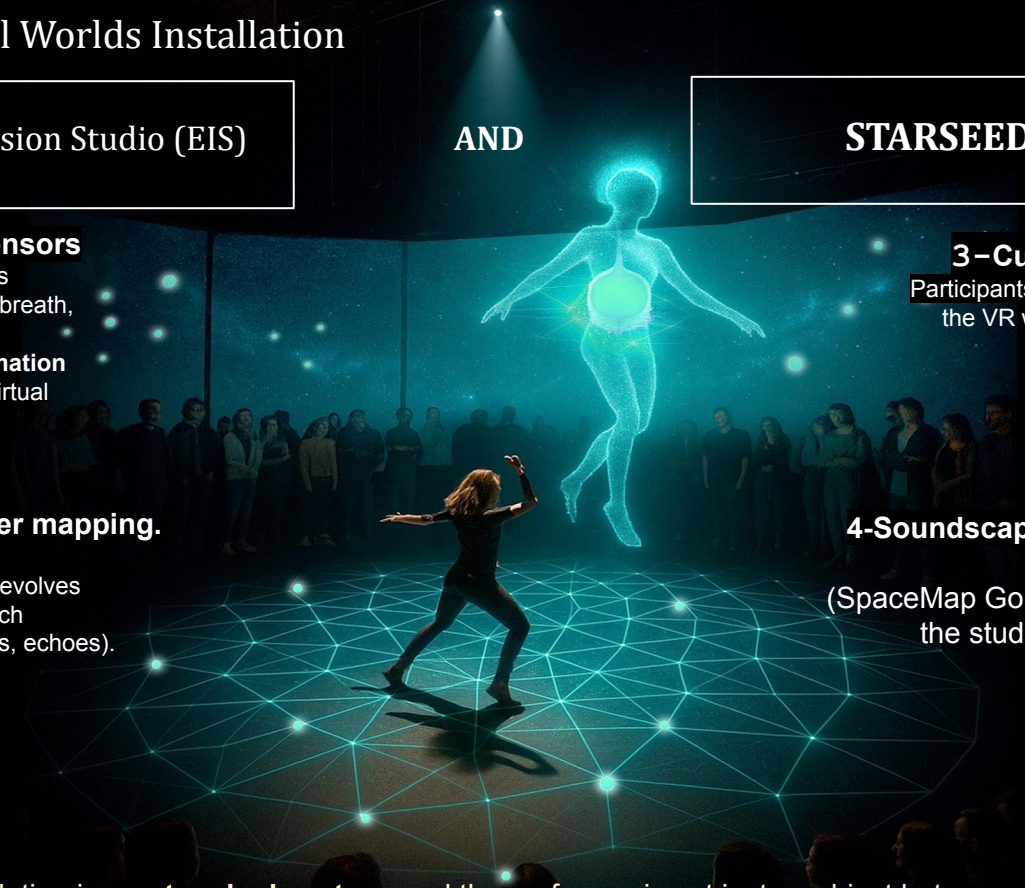
WOMB: Enhanced Immersion Studio (EIS)

AND

STARSEED: Virtual Reality Space

1- Live Dance with Biosensors
The Performer as Catalyst wears **biosensors** tracking heart rate, breath, motion.
This data drives a live **transformation narrative** in both physical and virtual space.

2– Responsive floor laser mapping.
A reactive laser projection floor renders a sacred geometry that evolves with:Audience proximity and touch
Sonic vibration (voices, footsteps, echoes).



3–Curved projection screens
Participants Collected data, represented in the VR world and projected on screens.

4-Soundscape interactive installation.
The spatial soundscape (SpaceMap Go + Ableton Live) transforms the studio into a sonic architecture.

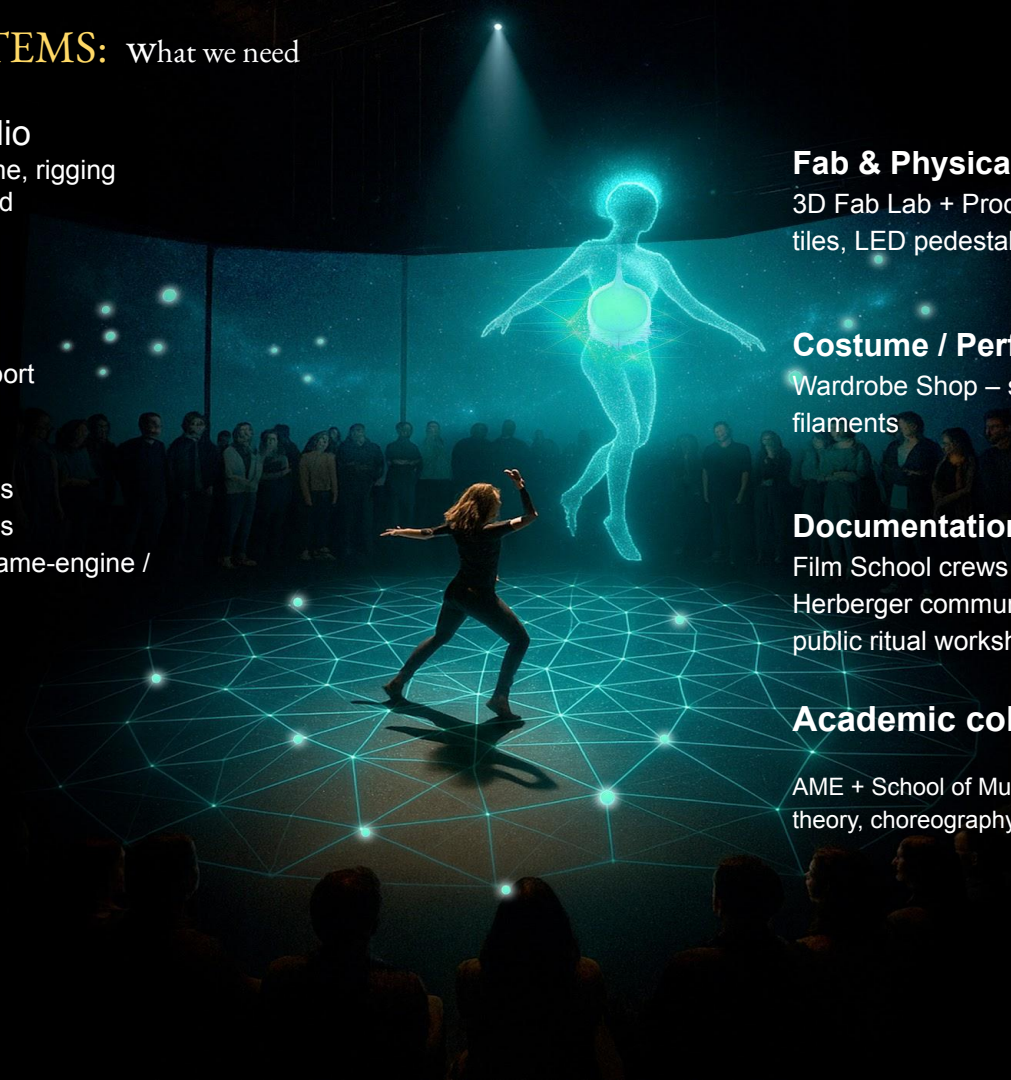
the installation is a **networked system**, and the performer is not just a subject but a **conductor** activating, shaping, and syncing multiple departments in real time.
The audience joins this network through their contributions, making this piece both a **technical collaboration** and a **ritual of co-creation**.

INTERACTIVE SYSTEMS: What we need

Enhanced Immersion Studio
projection grid, 55-ch speaker dome, rigging
Lobby video wall – live “portal” feed

Immersive Audio
Sonora Immersive Audio Lab
ambisonic mixing & playback support

XR & Interactive Media
Resilient Visions + MediatedX Labs
real-time data → generative visuals
Endless Games & Learning Lab game-engine / VR mirror-world



Fab & Physical Computing
3D Fab Lab + Production Shop – honeycomb floor tiles, LED pedestal, mounts

Costume / Performer Tech
Wardrobe Shop – sensor-embedded robe & light filaments

Documentation & Community
Film School crews capture, live feeds, doc short
Herberger community programs
public ritual workshops

Academic collaborations

AME + School of Music/Dance/Theatre – interaction theory, choreography labs

Preliminary residency schedule

This is not a final residency schedule breakdown, we will foreground parts for focused production.

Week	Key Actions	Lead Departments / Labs
W 1 – 2	• Gather story prompts & test biometrics • Build visual / sonic asset library • Code the interaction spine (TouchDesigner ↔ Unity ↔ Ableton)	Resilient Visions, MediatedX (data + ML) AME grad coders (creative coding)
W 3	• Generate VR “constellation chamber” from live data • Calibrate floor projection and body-tracking	Endless Games & Learning Lab (VR) EIS tech crew (projection, tracking)
W 4	• Design and tune 55-channel ambisonic score • Dial in sensor thresholds / latency	Sonora Immersive Audio Lab (spatial sound) MediatedX (sensor fusion)
W 5	• Technical + dress rehearsals • Safety checks and fallback triggers	Artist core team EIS operations crew
W 6	• Public activation run(s)/ workshops • Rapid strike—pedestal & sensors out in < 1 day	

Risk-Managed Manual trigger fallback if sensors fail.

Tiered scope:

Essential — Audience data- Reactive floor and projection + ambisonic performer interactivess,

Expanded — add VR mirror world, with the audience data,

Full Vision — add kinetic totems installation + VR portal + multiple performers.

Collaborators

SATYA HINDUJA: SOUND DIRECTOR ALCHEMIC SONIC ENVIRONMENTS FOUNDER.

Alchemic Sonic Environment

Alchemic Sonic Environment (ASE) is working at the intersection of sound, music, health and technology. We create multi-sensory immersive experiences to foster deep connections with oneself and the ecosystem. ASE blends timeless wisdom with emerging technologies, aiming to enhance physical, mental, and spiritual wellbeing. ASE leverages the therapeutic potential of sound for health and longevity.

PHYSICAL COMPUTING DESIGNER

LaJuné McMillian

LaJuné is a Multidisciplinary Artist, and Educator creating art that integrates performance, extended reality, and physical computing to question our current forms of communication. They are passionate about discovering, learning, manifesting, and stewarding spaces for liberated Black Realities and the Black Imagination. LaJune believes in making by diving into, navigating, critiquing, and breaking systems and technologies that uphold systemic injustices to commodify our bodies, undo our indoctrination, and make room for different ways of being.

VIRTUAL REALITY DIRECTOR

Selim Harbi Immersive Storyteller

Impact & Outcomes

Co-authored art, community data sculpture

Prototype for Vessel’s future experiences infrastructure

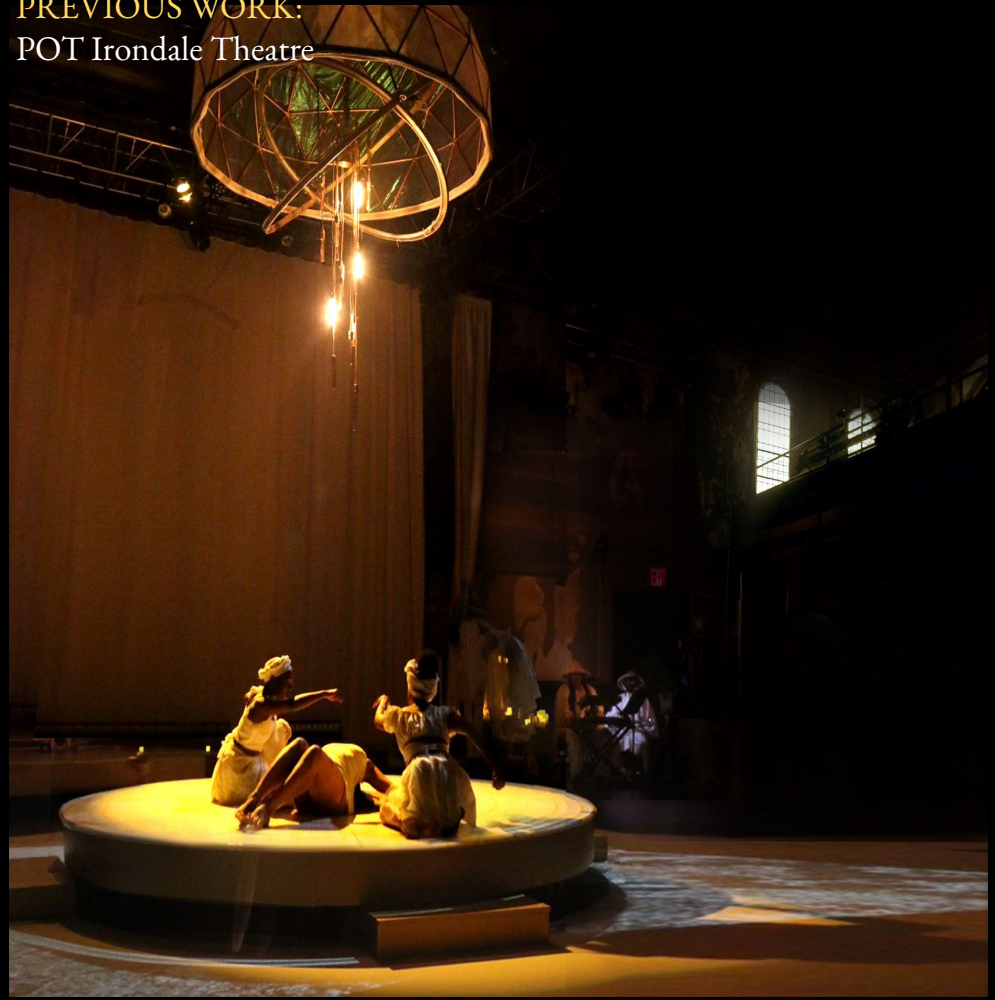
Public workshops & talks bridging Technology, Embodiment and ritual

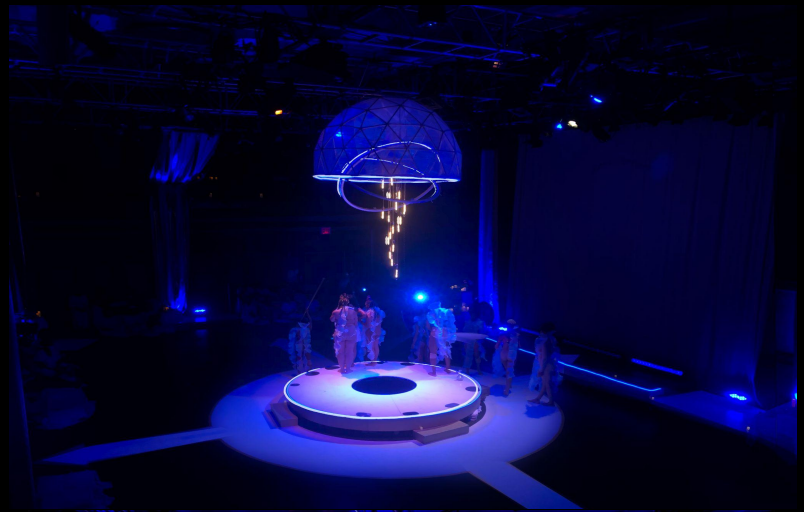
PREVIOUS WORK:

Westerly breath Met Live arts

PREVIOUS WORK:
First down 59E59

PREVIOUS WORK:
POT Irondale Theatre





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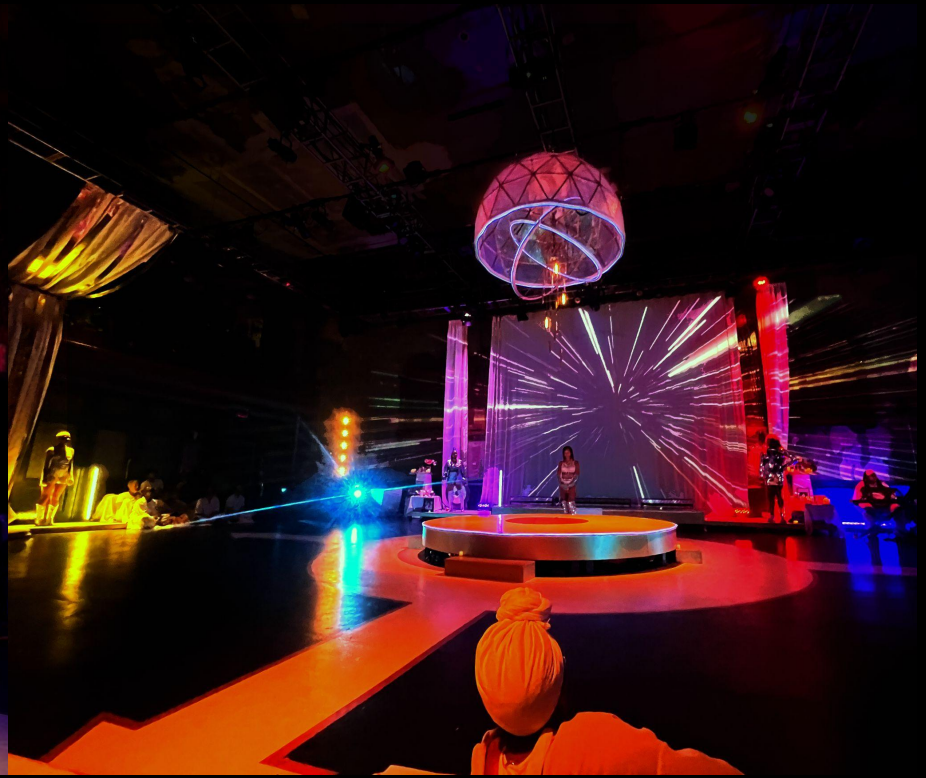

PREVIOUS WORK:
Love of three Oranges

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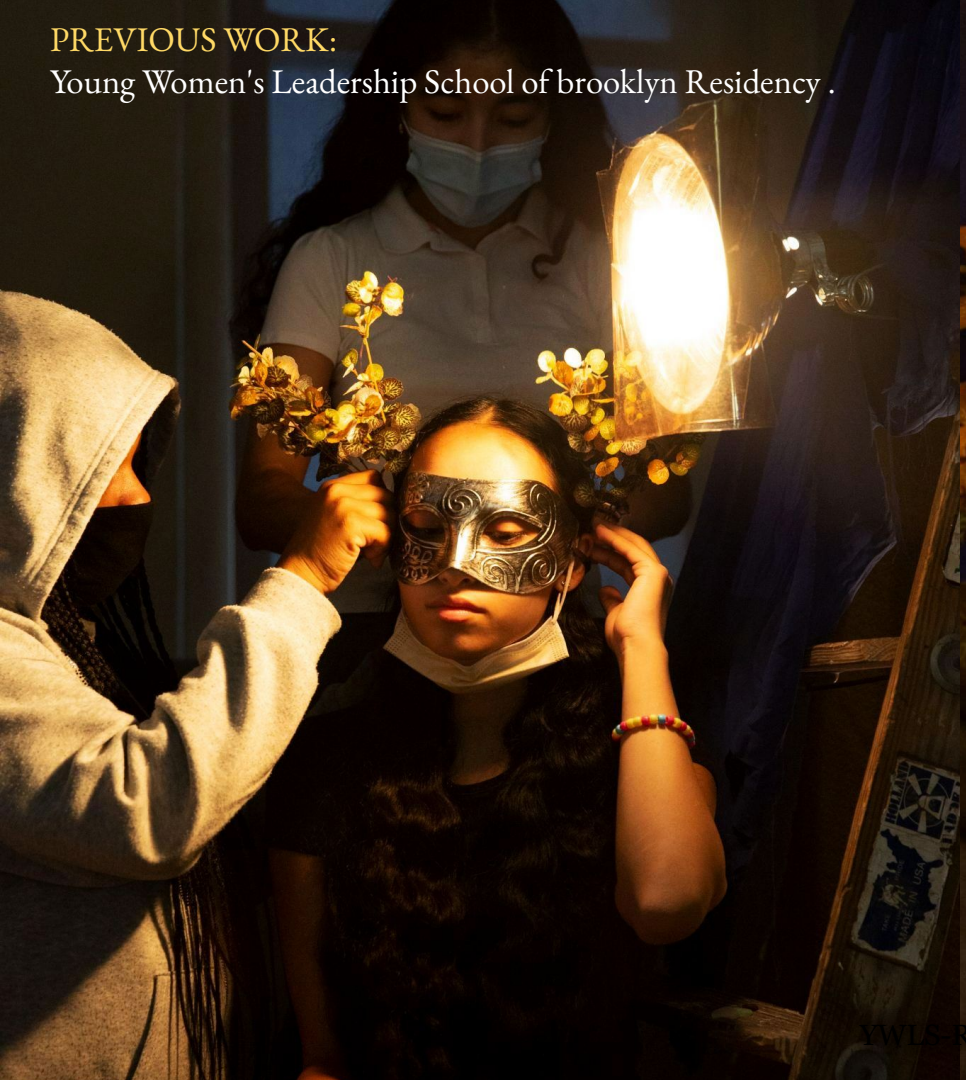
Young Women's Leadership School of brooklyn Residency .



YWLS Residency

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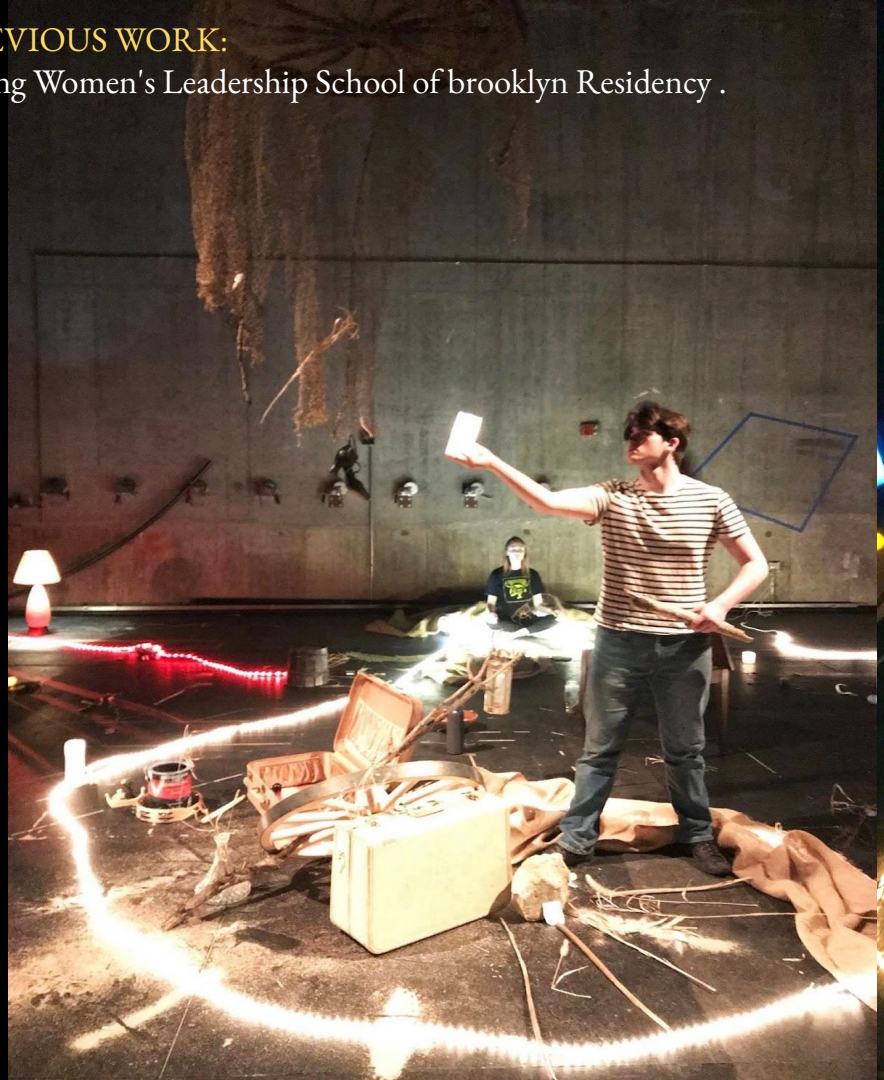
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