

Creative Aya

Studio for Immersive and
Interactive Experiences



Title

Rhythmic Wave 1.5

A speculative, immersive, interactive
performance and living archive

Venue

The Music Center

Los Angeles, California, USA

Date

December 2025

Artist and Researcher

Faih 'Aya' Umoh

- 4 **Aya's Artist Statement**
- 6 **Context: Cultural Memory Under
Conditions of Erasure**
- 8 **Proposition: Cultural Memory as
Infrastructure**
- 10 **Narrative Design & Performance
Architecture**
- 16 **The Living Archive System: Participatory
Memory as Protocol**
- 18 **Living Archive Pilot Results: Audience
Impact**
- 20 **The Three Engines of Rhythmic Wave 1.5**
- 22 **Immersive Experience Research Insights**
- 24 **Rhythmic Wave II: Next-Phase Cultural
Infrastructure**
- 26 **Creative Aya x Serpentine Arts
Technologies**



Three-channel installation presenting a responsive Unreal Engine environment in which motion-captured performance activates the speculative world of Rhythmic Wave, 2025
Image courtesy of Anastasia Velicescu



I create participatory systems that invite people, algorithms, and ancestral memory into a movement experience. I treat technology as a vernacular language, bending it toward expansive imagination and cultural recovery through transformation rather than extraction. The Rhythmic Wave series extends this inquiry through collective embodiment, evolving gesture into data and data into illuminating relation. Set in the year 5054, each iteration time travels toward a future where movement itself becomes the archive a living rehearsal for co-creative ways of remembering together in and for our present moment. - A y a

p3

2023



Faith 'Aya' Umoh wearing a handmade Akwa Ibom ceremonial headpiece developed as part of Rhythmic Wave, 2025. Image courtesy of Iesh Lal.

Context: Cultural Memory Under Conditions of Erasure

Across global contexts, the infrastructures that sustain cultural memory are increasingly fragile. Traditions are compressed, decontextualised, or rendered invisible by extractive digital and political systems. Algorithmic feeds flatten the difference. State and platform governance disproportionately impact marginalized cultural lineages. Communities experience both hyper-documentation and accelerated loss.

Rhythmic Wave I is an award-winning, three-channel, immersive interactive performance, positioning these pressures within a speculative future: Nigeria in the year 5054, where cultural preservation has been outlawed, and memory survives only through embodied protocols that evade state infrastructures. This speculative framework functions as a diagnostic tool for the present, revealing how cultural continuity is shaped by surveillance, digital erasure, and uneven access to preservation technologies.

Rhythmic Wave I at The Music Center, Los Angeles, in 2025, and was developed through the Royal Shakespeare Company Artist Research Fellowship, the MIT Open Documentary Lab workshop, the Level Ground Artist Residency, and the Black Public Media Fellowship. The work operates simultaneously as an immersive performance, an archive prototype, and a discursive design study.



Faith 'Aya' Umoh performing a motion-captured duet with her AI avatar within a three-channel immersive installation developed for Rhythmic Wave I.5, 2025. Image courtesy of Anastasia Velicescu.



Audience members contributing personal cultural memory fragments to the Living Archive, activating the participatory archive through reading, writing, and pinning during Rhythmic Wave I.5, 2025. Image courtesy of Anastasia Velicescu.

PROPOSITION: CULTURAL MEMORY AS INFRASTRUCTURE

Rhythmic Wave proposes cultural memory as a living infrastructure shaped through embodied practice, computational systems, and collective participation. Rather than approaching preservation as a static archival act, the work frames it as an ongoing design process in which memory is activated, transmitted, and sustained through use.

How might cultural memory infrastructures endure across political, technological, and planetary conditions of erasure?

Three principles guide this proposition:

1. Movement as data, ritual, and algorithm
 - a. Choreography functions as both cultural knowledge and computational instruction, encoding memory through embodied repetition, variation, and activation.
2. Bodies as distributed storage nodes
 - a. Embodied traditions operate as resilient, decentralized memory networks, carried across generations through practice rather than centralised archives.
3. Participation as activation, not documentation
 - a. Cultural memory persists through collective engagement, where presence, voice, and contribution act as protocols that sustain the archive rather than merely document it.

Within this framework, computational systems and AI are treated not as representational tools, but as co-evolving partners shaped by vernacular knowledge. In alignment with techno-vernacular creativity, Rhythmic Wave positions technology as something communities do with culture, not to it, enabling adaptive, community-authored infrastructures of memory.

FIGURE 1: DESIGNING CULTURAL MEMORY AS INFRASTRUCTURE

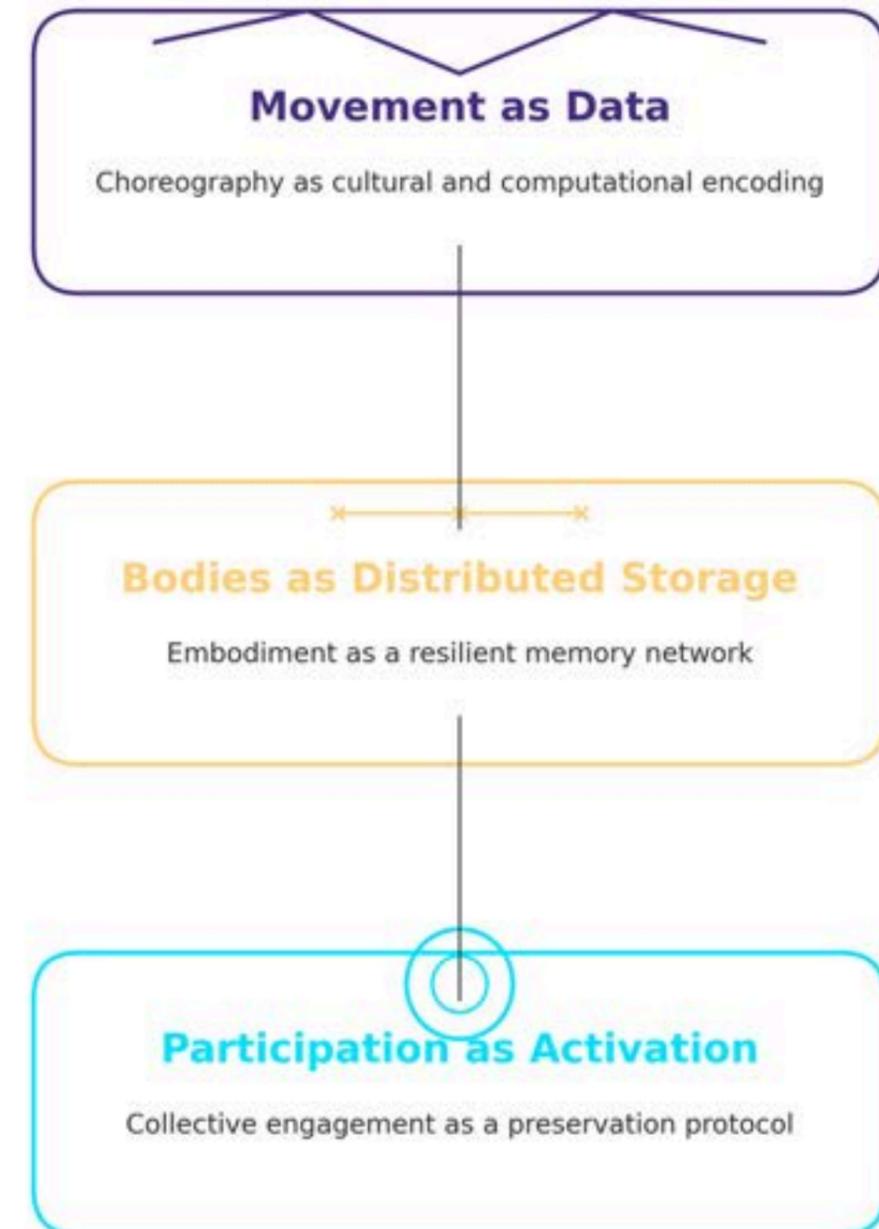


Figure 1. A conceptual model of cultural memory as infrastructure, illustrating how movement, embodiment, and participation function as interdependent protocols for preservation, transmission, and collective resilience.

NARRATIVE DESIGN & PERFORMANCE ARCHITECTURE

Rhythmic Wave I unfolds within a speculative future where cultural practice has been rendered illegal, and state power is exercised through computational surveillance systems that monitor, classify, and erase embodied traditions. In 5054 Nigeria, Idara, a young movement artist and creative technologist, encounters her late mother's encrypted archive of dances and journals. A solar glitch exposes ancestral rhythms that can only be restored through embodied activation, positioning cultural memory as a dynamic and recoverable system rather than a fixed inheritance.

Audience members enter this world as ancestors and become part of the immersive and interactive performance. Through naming rituals and call and response greetings in *Ibibio*, a Nigerian language, they activate spatial and digital environments, revealing how voice, movement, and collective presence operate as mechanisms for restoring cultural memory in real time. The performance draws from techno vernacular creativity, where diasporic ways of knowing shape the use of technology, allowing choreography and computation to work together as a speculative, co creative practice of cultural preservation.

Following a Yorùbá derived movement practice of spatial protection, Idara engages her AI avatar in a mocap duet for the ancestors, prompting the system to reveal its underlying cosmology. The work concludes by transforming the audience into co authors of cultural memory through the zine and Living Archive, where guests complete the preservation formula left by Idara's late mother and contribute their own traditions. This final act extends the performance into a distributed cultural memory framework that is activated through community participation and kept alive beyond the walls of the installation.

*A concept from Nettrice Gaskins describing how diasporic communities reshape technology through culture, turning inherited knowledge into inventive, future-making practices.



Faith 'Aya' Umoh as Idara during the closing of Rhythmic Wave I.5, where the zine functions as a carried relic initiating participatory memory transmission, 2025. Image courtesy of Anastasia Velicescu.

IMMERSIVE EXPERIENCE SEQUENCE

Act 1. Naming Protocol

Audience members receive sealed envelopes containing their true Nigerian names. The act establishes a distributed ancestral network, situating each participant as a node within the archive rather than a spectator.



Act 2. Ancestral Invocation

Collective greetings in *Ìbíbíọ̀* establish a relational bridge between Idara and the ancestral network. Voice and presence initiate spatial and visual shifts, signaling that memory responds to being addressed.

Act 3. Spatial Protection Protocol

A broom-based movement sequence asserts spatial guardianship and prepares the system for ancestral access.



IMMERSIVE EXPERIENCE SEQUENCE

Act 4. Embodied Algorithmic Key

Faith 'Aya' Umoh as Idara enters a motion-captured duet with her AI avatar across a three-channel installation, where embodied cultural knowledge functions as the operative key within the archive's internal logic.



Faith 'Aya' Umoh as Idara, Act 5
Idara welcomes the audience back to the year 2025 and invites them to extend the archive through collective memory, 2025. Images courtesy of Anastasia Velicescu.



The interactive zine carried from the speculative world of 5054, left by an underground preservation network as a relic for audience contribution, 2025.
Image courtesy of Trevor Sangiorgio.

Act 5. Archive Reveal and Memory Transmission

The performance resolves with Idara addressing the audience and reading the opening of Rhythmic Wave II, positioning the zine as a carried relic and inviting collective contribution to the Living Archive of cultural memory.



Audience members read the zine and complete cultural memory prompts, contributing their own preservation formulas to the Living Archive, 2025.
Images courtesy of Anastasia Velicescu.



Participants engage in one-to-one reflection, recording personal cultural memories through written prompts as part of the distributed archive, 2025.
Images courtesy of Anastasia Velicescu.

THE LIVING ARCHIVE SYSTEM: PARTICIPATORY MEMORY AS PROTOCOL

The Living Archive is the project's research instrument, developed through discursive design at MIT Open Documentary Lab. Participants complete cards that ask them to imagine cultural endangerment and articulate preservation strategies. These responses generate situated, embodied, and intergenerational knowledge.

Preliminary Outcomes

- a wide spectrum of traditions
- intergenerational lineage mapping
- diasporic reflections on loss and inheritance
- personal strategies for safeguarding practice
- emotional responses ranging from grief to agency

The aggregated wall forms a temporary, community-authored index of endangered memory, echoing participatory infrastructures explored in precedents such as Data Dealers.



Audience members engage with the Living Archive wall, pinning written memories and preservation formulas to a community-authored memory index, 2025. Images courtesy of Anastasia Velicescu.



Participants read the zine and complete cultural memory prompts, contributing personal reflections to the Living Archive system, 2025. Images courtesy of Anastasia Velicescu.

LIVING ARCHIVE PILOT RESULTS: AUDIENCE IMPACT

The Living Archive pilot demonstrates how participatory performance can function as a research surface for observing cultural memory under speculative threat. As participants completed their cards, they articulated traditions, lineages, and preservation strategies that reveal memory as an active, relational infrastructure rather than a fixed inheritance. These initial insights anchor a broader research programme emerging from Rhythmic Wave I and will support deeper analysis as the archive expands.

Across the dataset, participants described cultural transmission through language, ritual, movement, and everyday practice, patterns aligned with the project's focus on embodied and decentralized systems of knowledge. The Sankey diagram visualises these tendencies, mapping how personal traditions flow into preservation strategies and culminate in public declarations of visibility or resistance. This emphasis on refusal and resilience underscores the emotional and cultural impact of the experience.

This analysis forms part of Aya's fellowship research with the Royal Shakespeare Company and the Cultural Preservation Systems Workshops, which examine how communities imagine safeguarding heritage amid shifting technological and social conditions. These findings inform the Rhythmic Wave Toolkit's impact plan and contribute to an emerging framework for understanding how participatory storytelling activates cultural memory and communal intelligence. Ultimately, the Living Archive offers a scalable method for evaluating agency, reflection, and connection within immersive environments.

FIGURE 2: CULTURAL MEMORY & RESISTANCE PATHWAYS

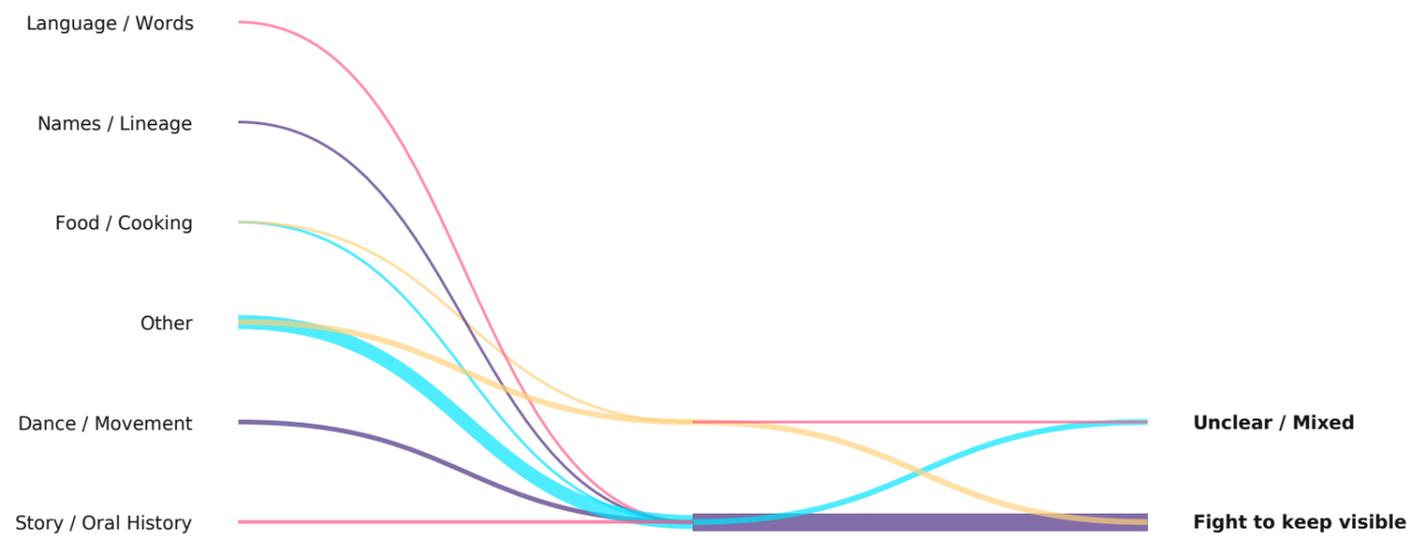


Figure 2. Memory flow visualisation modelling how participants route traditions through preservation protocols and visibility stances, offering an early schematic of the cultural memory infrastructure emerging from the Living Archive.

THE THREE ENGINES OF RHYTHMIC WAVE 1.5

Rhythmic Wave operates through three interlinked engines that together propose a cultural memory infrastructure. Each engine reflects actual production across dramaturgy, embodied research, computational prototyping, and collective authorship.

A. Narrative Engine: Speculative Worldbuilding

We treat dramaturgy not as storytelling but as protocol design: naming, guardianship, ancestral activation, and encrypted transmission. Working with choreographer Diddi Emah, whose practice bridges Nigerian social movement traditions and transnational concert vocabularies (including Beyoncé's visual performance worlds), we explore storytelling movement as infrastructural, not representational.

B. Technological Engine: Motion, AI, Spatial Computing

The computational layer examines movement as both a carrier of cultural knowledge and a condition through which memory becomes visible. Motion capture, real-time world systems, spatialized sound, and responsive Unreal Engine and TouchDesigner pipelines form an embodied access system, where gesture functions as the key and choreography operates as both cultural transmission and system logic.

C. Participation Engine: The Living Archive

The performance extends beyond the stage into a distributed memory ecology. The zine operates as an ethnographic instrument: participants articulate what they would preserve, how it is transmitted, and where resilience resides. These inscriptions become micro-protocols of continuity, collectively authored.



Faith 'Aya' Umoh working with choreographer Diddi Emah on choreographic development for Rhythmic Wave, integrating diasporic movement research with performance systems design, 2025. Image courtesy of Aaron Wilson.



Faith 'Aya' Umoh in motion capture, translating choreographic performance into a computational system where gesture functions as archival logic for Rhythmic Wave, 2025. Image courtesy of Himerria Wortham.

IMMERSIVE EXPERIENCE RESEARCH INSIGHTS

Insights emerging from the full immersive performance system including live activation, computational environments, and the Living Archive include:

Insight 1: Cultural Memory Requires Distributed Systems

Cultural memory emerges through bodies, gestures, and social relations rather than centralized repositories. These distributed networks demonstrate resilience, adaptability, and redundancy, offering models of preservation that remain responsive to social and political change.

Insight 2: Participation Functions as Cultural Computation

Collective participation operates as cultural computation, activating memory through shared presence and decision-making. This model foregrounds audience agency and demonstrates how immersive systems can nurture social connection and collective authorship within institutional contexts.

Insight 3: Algorithmic Systems Can Support Regenerative Archives

Motion capture driven systems enable cultural practices to be extended, recomposed, and regenerated rather than fixed or exhausted. Algorithmic processes function as adaptive partners, allowing traditions to evolve while remaining grounded in embodied knowledge.

November 2021 - April 2023 - June 2023

Insight 4: Worldbuilding Can Prototype Governance Futures

The speculative frame functions as a space for testing alternative cultural governance models. By staging memory preservation as a rule based system, worldbuilding becomes a civic rehearsal for resilience, continuity, and collective care.



A rendered scene from the Nigeria 5054 environment used in the avatar-human duet, visualising how speculative worldbuilding and computational systems scaffold the choreographic archive in Rhythmic Wave, 2025. Image courtesy of Evan Siegal.

RHYTHMIC WAVE II: NEXT-PHASE CULTURAL INFRASTRUCTURE

Rhythmic Wave II expands the system into a scalable cultural memory infrastructure, including:

- Motion capture field research trip across five Nigerian regions
- a live adaptive AI choreography engine
- a distributed AR Dance Archive
- ethical AI frameworks for consent and lineage
- community preservation toolkits
- adaptable performance and installation formats

The long-term goal is a cultural survivability protocol deployable across diasporic, Indigenous, and marginalized communities.



24 Excerpt from the Rhythmic Wave II zine outlining the five ancestral dance rhythms required to complete the archive, serving as a narrative and research map for the forthcoming motion-capture fieldwork across Nigerian regions. Image courtesy of Trevor Sangiorgio.



Render of Rhythmic Wave II as a three-channel installation, proposing a spatial framework for exploring scalable cultural memory infrastructures, 2025. Image courtesy of Creative Aya



25

CREATIVE AYA X SERPENTINE'S ARTS TECHNOLOGIES

Creative Aya proposes a research-led collaboration aligned with Serpentine Arts Technologies' focus on socio-technical imaginaries, participatory systems, and the cultural implications of emerging technologies.

- Present Rhythmic Wave I.5 as a live, iterative installation that integrates performance, computational environments, and participatory archive-building within an Arts Technologies context.
- Design and apply social impact narrative models for the Serpentine Gallery's immersive exhibitions and experiences.
- Create and produce immersive commissions for gallery contexts, including creative coding, co-creative interactive systems, and XR-based installations tailored to Serpentine's programme.

This collaboration positions Creative Aya's practice as a hybrid of artistic production and applied research, offering Serpentine a scalable framework for curating immersive works that function simultaneously as artworks, research instruments, and cultural infrastructures.



Three-channel installation environment from Rhythmic Wave 1.5, where live performance, computational landscapes, and speculative worldbuilding converge to function as a cultural memory system, 2025.
Images courtesy of Anastasia Velicescu.

CONCLUSION

Rhythmic Wave reframes cultural preservation as a futures-oriented system challenge. Through algorithmic choreography, participatory design, and speculative worldbuilding, it proposes infrastructures for memory beyond traditional archives. The work aligns with Serpentine’s commitment to socio-technical imaginaries and alternative cultural infrastructures. Rhythmic Wave is not only an artwork but a prototype for future cultural systems. Aya welcomes the opportunity to explore this research within Serpentine’s ecosystem.

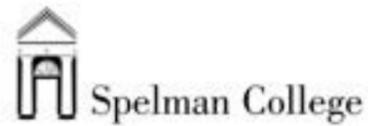
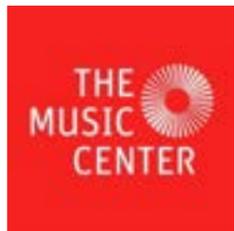


Idara initiates ancestral communication through spoken greeting, activating the environment through call-and-response and establishing the conditions for embodied access, 2025.
Images courtesy of Anastasia Velicescu.



Faith ‘Aya’ Umoh as Idara activates the system’s algorithmic layer, performing a live motion-captured duet with her AI counterpart within the three-channel environment, 2025.
Images courtesy of Anastasia Velicescu.

Collaborators



UCLA Design Media Arts

LEVEL GROUND STARFISH



Guests read the Rhythmic Wave zine as a narrative artifact from an underground cultural preservation network within the project’s speculative world, 2025.
Image courtesy of Anastasia Velicescu.



A participant reads the Living Archive, encountering community-authored memories and preservation strategies within the collective record, 2025.
Images courtesy of Anastasia Velicescu.

Creative Aya

Studio for Immersive and
Interactive Experiences

Contact: aya@creativeaya.ai



CREATIVE AYA