

## Reimagining Transcultural Cemeteries Through Art, Science, and Technology

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### Abstract

This article describes an art-based research creation developed within the OASis Europe project during the *Shadow Architecture* residency, which reimagines transcultural cemetery structure through the perspective of Indonesian Indigenous practices and emerging technology. The project challenges Western paradigms of concealment by reframing cemeteries as neglected urban spaces and sites of relational memory. The artwork consists of two speculative outputs: “*Native Signals from a Resting Ground*,” a physical installation inspired by *Trunyan* open-air burial traditions that integrates a generative soundscape from a live Indonesian seismic data and AI-based chatbot “*A Cemetery of Possibilities*,” a custom GPT-based interface that invites participants to imagine their own memorial forms. Through these works, the project explores how art, science, and technology can operate as media of memory of transcultural identities and co-authorship by enabling individuals to articulate their personal narratives within the site of the cemetery. By integrating cultural practices, seismic science, and computational creativity, it proposes an experimental speculative necro-aesthetic art grounded in reciprocity between human and more-than-human worlds.

**Keywords:** Transcultural, Indigenous Practices, Trunyan Cemetery, Art, Technoscience.

### 1. Introduction

This research article emerges from the OASis (Open Art Spaces in Synergy) programme, a European project co-funded by the Creative Europe framework of the European Commission. OASis supports collaborative artistic practices that engage local communities while respecting cultural specificity and place-based knowledge. Between 2025 and 2027, eleven organizations across ten countries host thirteen Open Art Spaces, providing free

access to artists across disciplines. Each residency results in at least one co-created artwork developed through sustained collaboration with local communities and partner audiences.

As a transmedia artist and heritage researcher, my inquiry is grounded in a residency at *Fundacja Inna Przestrzeń* (Other Space Foundation) in Warsaw (2025). This research was developed within the curatorial framework of *Shadow Architecture: Cemeteries*—the fourth iteration of an ongoing artistic research program led by architect Aleksandra Wasilkowska. The program interrogates cemeteries as dynamic spatial, cultural, and political infrastructures that continuously negotiate the urban environment. In the specific context of Warsaw, a city characterized by profound historical rupture, cemeteries operate as a node where memory, loss, and urban transformation intersect. The residency challenged artists to speculate on the future necropolis as an open, shared, and culturally plural space.

My work responds to this call by inserting alternative perspectives by experimenting the elasticity of the cemetery as a site for transcultural dialogue. It questions *how art, science, and technology can operate as media of memory and co-authorship, enabling individuals to articulate personal narratives and cultural identities within funerary environments*. Grounded in Indigenous Indonesian perspectives on death, land, and continuity, the work introduces alternative funerary imaginaries that reframe cemeteries as relational infrastructures connecting human, environmental, and technological forms of remembrance.

## **2. Contextual Review: From Culture to Art and Technoscience**

Recent scholarship in contemporary art and heritage studies positions cemeteries as active cultural infrastructures that mediate memory, identity, and power. As Laqueur (2015) argues, the "work of the dead" is foundational to the construction of national and cultural narratives; however, these infrastructures often impose monocultural standards that exclude or erase transcultural experiences. By resisting these static norms, this project engages the cemetery as a speculative space utilizing artistic provocation to explore the complex intersections of ecological processes and embodied memory with the design-led methodology of Dunne and Raby (2013). This art-based research investigates it as a "transcultural laboratory" to challenge traditional necro-politics, introducing as a space for articulating alternative futures of the urban landscape.

### ***2.1 Transcultural Cemeteries as an Intervention***

Research in multicultural contexts demonstrates that burial practices are more than expressions of individual grief; they are active sites where memories are materially and socially configured. Migrants and minority groups negotiate their sense of belonging within multicultural societies by making specific choices about burial locations and funeral rituals, revealing that cemeteries become practical arenas for establishing "future memories" (Conradson & Mackay, 2022). Recognizing cemeteries as transcultural sites is therefore essential to understanding how they contribute to urban diversity, social cohesion, and cultural inclusion. When cemetery governance, design, and ritual negotiations are handled collaboratively, they accommodate minority needs and shape community values (Nordh et al., 2023). When cemeteries actively involve diverse communities in their planning, they function as shared public spaces of deep cultural significance and lived citizenship, rather than exclusive repositories of dominant cultural norms.

## ***2.2 The ambitious connections of art, sciences and technology***

There is a significant history of artistic interventions that interrogate memorial and cultural practices surrounding cemeteries, funerals, and burials. Many creative and art practitioners explore these themes through the lens of the physical body, cultural heritage, and the spiritual engagement required to bridge the gap between life and the afterlife. While these interpretations are often brought to life through various experimental mediums which my specific interest lies in the intersection of these rituals with science and technology. By projecting this artistic research through a technoscientific lens, I utilize the concept of "Two-Eyed Seeing" (*Etuaptmumk*). This framework offers a methodology for navigating epistemic tensions by positioning Indigenous knowledge systems and Western science as coexisting, non-hierarchical modes of knowing (Bartlett et al., 2012). Rather than merely synthesizing or integrating these different epistemologies which often leads to the dilution of the Indigenous perspective, this framework supports relational accountability and epistemic plurality, particularly in environmental and technoscientific contexts where Indigenous voices are frequently marginalized.

### **3. Art-based Research Practices**

#### ***3.1 Indigenous Perspectives of the Trunyan Tribes***

Animism describes a world saturated with presence, a reality where forests breathe and geological features carry an inherent spirit. Within this ontological circle, all entities belong to the same current of existence. While death also is not a finality but a passage and a return to another form within a greater cyclical web. This understanding informs rituals that prioritize environmental reciprocity, resisting the illusion of human exceptionalism and inviting a state of care for both human and more-than-human flourishing (Todd, 2016).



Figure 1. Trunyan Tribe Cemetery, Bali-Indonesia. Courtesy: Yusuf IJsseldijk

This practice is fundamentally an act of inheritance; my understanding of spirituality is shaped by the ancestral lineages and communal knowledge that guide my perspective. Indonesia, an archipelago of over 17,000 islands, is home to over 1,300 recognized Indigenous tribes, each maintaining a unique and culturally diverse celebration of life and a profound spiritual connection to their environment (Ananta et al, 2015). The Trunyan funerary tradition in Bali exemplifies an epistemic divergence from both Western norms and mainstream Balinese Hindu practices. Located at the foot of Mount Abang on the eastern shore of Lake Batur, Trunyan is the ancestral seat of the *Bali Aga*—the island’s original inhabitants whose lineage traces back to the ninth century. Anthropological research characterizes the *Trunyanese Mepasah* as an open-air decomposition practice embedded within a cosmology of animacy (Reuter, 2002). Unlike the *Ngaben* (cremation) practiced by the majority of Balinese Hindus, the Bali Aga return their dead directly to the earth, protected by triangular bamboo cages (*Ancak Saji*) beneath the sacred Taru Menyan tree.

In this landscape, the presence of the deceased is not obscured by fire or subterranean burial but remains visible, held in a state of transit by the mountain and the lake. These practices organize a temporal continuity with maintaining an active, lived bond between the community and their ancestral presence (Lansing, 2006; Reuter, 2002). My engagement with *Trunyanese* funerary epistemology is not an attempt at ethnographic reproduction, but rather a speculative translation which I found it fascinating where it focused on the intersection of ecology and society. This aligns with contemporary artistic research that utilizes Indigenous knowledge as a robust methodological framework rather than mere representational content (Smith, 2012). Through this approach, the "transcultural cemetery" emerges as a site of epistemic negotiation, where alternative orientations toward death are articulated through contemporary technoscientific perspectives (Whyte, 2018).



Figure 1. Trunyan Tribe Cemetery, Bali-Indonesia. Courtesy: Yusuf IJsseldijk

### ***3.2 Cultural Symbols: The Significance of Yellow***

During the development of this research residency for the Shadow Architecture, it became essential to examine this indigenous prestige was also historically challenged by colonial perspective and connections through European maritime protocols. From the 17<sup>th</sup> century

through the late colonial period, the "Yellow Jack" a plain yellow signal flag representing the letter "Q" (Quebec) served as the universal maritime marker for quarantine (Chase-Levenson, 2020). When ships entered the harbors of the Dutch East Indies, such as Batavia, suspected of harboring "foul" diseases like cholera or smallpox, they were forced to hoist this flag as a warning of contagion (Garuda, 2021). Consequently, in the colonial maritime imagination, yellow was stripped of its royal divinity and repositioned as a signifier of the "floating coffin."

Long before the onset of European imperial trade, the color yellow functioned within the Indonesian archipelago as a site of profound semiotic tension. Within local ontologies and traditional wisdom, yellow serves as a "luminous threshold," marking the body's transition from a material vessel to a spiritual ancestor (Wisesa, 2021). Throughout various sultanate eras, yellow was often a protected hue, strictly reserved for royalty to symbolize political legitimacy and spiritual purity (Syarif, 2018). In this indigenous context, the color functions simultaneously as a symbol of divine sovereignty and a marker of the sacred transition inherent in biological decay.



Figure 2. Sacred Spaces and Cemetery in Kalimantan, Indonesia  
Courtesy: Kapuas.info

This duality created a unique historical paradox in the Indonesian landscape: a single hue represented the highest form of spiritual life and godliness within the interior palace, while signaling the lowest point of biological threat and isolation at the colonial port. In the context of this installation, the yellow fabric-wrapped base (see Section 3.3.1) embodies this tension. It acts as a site of epistemic negotiation, holding the memory of both the "sacred shroud" of the Trunyan ancestor and the "quarantine signal" of the colonial archive.

### 3.3 Artistic Results

#### 3.3.1 Native Signals from the Resting Ground



Figure 3. Physical Installation – Native Signals  
Fundacja Inna Przestrzeń (2025), Courtesy by the artist (Eko Saputra).

The first outcome ‘*Native Signals from the Resting Ground*,’ becomes as a bio-rhythmic monument representing the *Bali Aga* ontological view from the material choices, shape and the reference. This installation is becoming also a geoscience receptor that translates the tectonic instability of Indonesia into a sensory experience, mirroring the people of *Trunyan* live in constant dialogue with the volcanic soil of Mount Batur.

The materiality of the installation is a deliberate selection of active substances that facilitate spiritual fragment from the funeral tradition:

- Hand-bound Bamboo Frame: Drawing directly from the *Ancak Saji* (bamboo cages), the frame represents a porous boundary. Bamboo allows the "breath" of the earth to pass through, echoing the *Trunyan* belief that the body must remain open to the air to be purified.
- Incense & Fragrance: This serves as a chemical surrogate for the *Taru Menyan* tree. It transforms the scent of decay into the "scent of divinity," engaging the viewer's olfactory senses to trigger a primal recognition of sacred space.
- Ceramic, Wood, and Soil: These represent the *Pratiwi* (Earth) element. The ceramic vessel acts as a womb/tomb, holding "captured" time, while the scattered wood symbolizes the fragmented nature of memory as it returns to the forest floor.
- Yellow Fabric-Wrapped Base: symbolizes the West and the *God Mahadeva*, often associated with higher consciousness and the transition of the soul. It grounds the installation in a specific ritual color palette, signaling that the ground beneath is consecrated.



Figure 5. Physical Installation,  
Fundacja Inna Przestrzeń (2025). Courtesy by the artist (Eko Saputra)

The installation structure is designed to function as a transducer by facilitating the conversion of planetary movements into audible signals. The structure adopts a triangular verticality, pointing toward the celestial while remaining firmly rooted in the soil. This geometry represents the *Aksis Mundi*, the cosmic axis that facilitates connection between the underworld (*Bhur*), the realm of man (*Bhuwah*), and the divine world of the gods (*Swah*).

As Indonesia still exists in a state of constant geological and seismic flux. For many Indigenous tribes within the archipelago, its presence is not merely a geographic hazard but a daily encounter that informs spiritual guidance and security. While contemporary seismic science treats the vibrations as a rigorous index of tectonic movement, Indigenous belief frame these vibrations as responsive breath of the earth itself. By sonifying the live seismic streams, the installation aligns with vibrational ontologies, where sensing infrastructures are reframed as experiential interfaces rather than abstract visualization systems (Gallagher, 2016). The seismic soundscape is translated through an embedded electronic system utilizing a Raspberry Pi and portable speakers. The system operates on a Python-based pipeline that interfaces with the IRIS (Incorporated Research Institutions for Seismology) database via the ObsPy framework.

This computational pipeline acts as a digital medium, allowing the soundscape to respond to the vibrations of the Indonesian ground in real-time. The technology treats geological data as the connection of the ancestors through transposing the literal shifting of tectonic plates into audible frequencies, in this context, the Raspberry Pi is becoming consecrated component of the *Ancak Saji*, enabling a dialogue between the deep time of the earth and the immediate presence of the viewer.



Figure 6. Physical Installation,  
Fundacja Inna Przestrzeń (2025). Courtesy by the artist (Eko Saputra)

### *Performative and Meditated Listening*

The installation's sensory strategy centers on the Indonesian ritual concept of *Pingit*, which dictates that the sacred veiled to maintain its spiritual potency. By intentionally concealing the hardware within the yellow fabric-wrapped base, the work avoids the spectacle of "high-tech" and instead establishes an animistic presence. This concealment serves as a methodological boundary suggesting that the resulting soundscape is not a broadcast from a computer, but an internal signal from a consecrated ground. The removal of visual technological cues allows the observer to enter a state of heightened relational attunement with the unseen forces of the landscape (Becker, 2004) The generative soundscape functions as a real-time translation. During periods of seismic stability, the system produces a low-frequency hum that mimics a body in deep sleep, echoing the stillness of the *Trunyan* cemetery. This moves from the auditory to the haptic allows the viewer to feel the movement through their own skin with a process known as haptic aurality (North, 2024).

By making these "Native Signals" physically palpable, offering a method for recalling home through the materiality of sound, the installation bridges the gap between abstract geophysical measurement and vibrating of the heritage, effectively enacting a "Two-Eyed" mode of knowing mediating between the mundane and the sacred that is both scientific and spiritual.



Figure 7. Physical Installation – Meditated Listening  
Fundacja Inna Przestrzeń (2025). Courtesy by the artist (Eko Saputra)

### 3.3.2 *A Cemetery of Possibilities: AI, Memory, and Place*

The second outcome called ‘*A Cemetery of Possibilities*,’ extends this inquiry by inviting participants to imagine their own resting places through a poetic exchange with contemporary technology. By synthesizing human storytelling with machine interpretation, the work reframes the cemetery as a site of care, imagination, and speculative co-authorship. Mirroring the logic of the installation, this generative AI interface adopts a relational rather than an extractive computational model. While traditional cemeteries primarily serve to preserve stories of the past, this AI-driven interface offers an alternative horizon where the future of remembrance can be actively conceived.

Most commercial generative systems reproduce predictive logics that instrumentalize memory and narrative (Benjamin, 2019). In contrast, this artwork positions as a provocational agent. By structuring the interface as a poetic dialogue, the work tries to aligns with storytelling traditions that frame knowledge production as situated and relational (Lewis et al., 2018). In this context, technology becomes a medium of memory and interpretation; through this conversational interface, individuals can articulate alternative forms of remembrance and "pre-author" their own narratives while still alive.



Figure 8. QR Link to CustomGPT  
Courtesy by the artist (Eko Saputra)

Questions flows through Custom-GPT:

*“Welcome. You may write in any language you feel most comfortable with. Take a deep breath and imagine we are walking slowly through a quiet ground. This is a space for reflection, care, and imagination. Here, you are invited to design your own resting place, a memorial shaped by your story, your heritage, and your wishes. There is no right or wrong answer. Let’s begin.”*

*“Which traditions, cultures, or spiritual paths would you like to gently weave into your place of rest?”*

*“Close your eyes, what form rises from the earth in your vision? A simple stone, a quiet mound, a pillar, or something yet to be imagined?”*

*“What materials hold your memories best: stone, earth, clay, wood, metal, or something alive and growing?”*

*“Are there words, languages, symbols, or patterns that should live here? Are there any you would prefer to keep away?”*

*“If your own space could speak, what sound or scent would it carry on the air?”*

*“Would you like this resting place to remain unchanged through centuries, or to soften with weather, moss, and time’s slow touch?”*

*“If a stranger found this place a hundred years from now, what feeling would you hope they carry with them when they leave?”*

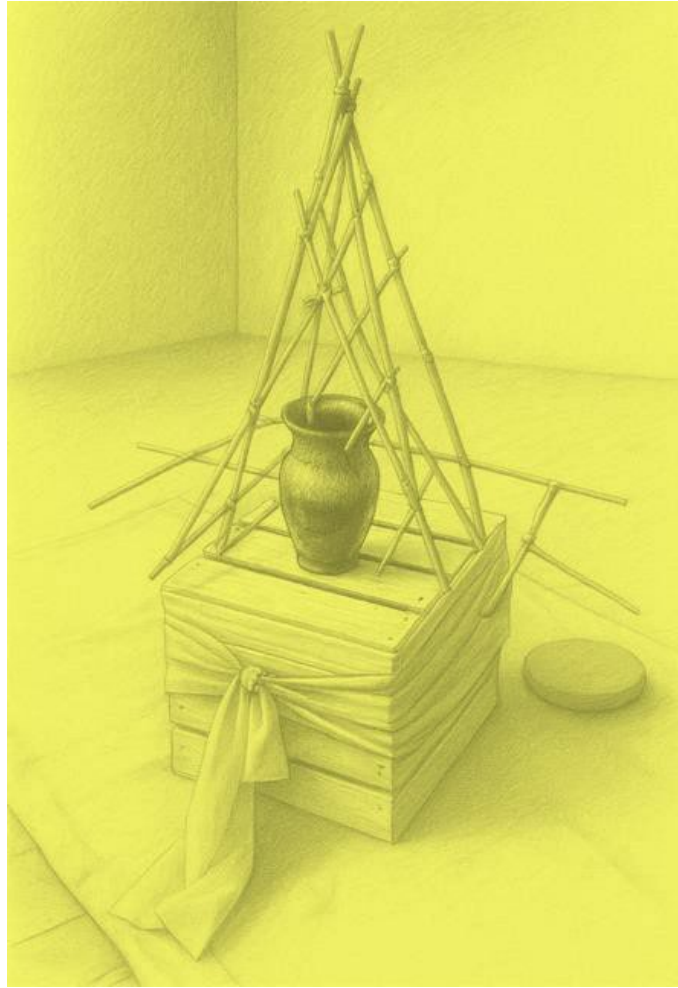


Figure 10. Memorials – GeneratedAI by CustomGPT  
Courtesy by the artist (Eko Saputra)

#### 4. Conclusion

This research reimagines the cemetery as a "two-eyed" interface where Indigenous funerary ritual and technoscientific converge. By centering the Indonesian Trunyan Tribe, the project challenges Western anthropocentric views proposing an alternative vision and environmental reciprocity where the body remains in active dialogue with the more-than-human world.

Through the development of the *Native Signals* and *A Cemetery of Possibilities*, the installation functions as a transducer. The integration of the seismic activity framework and AI-memorial assistant demonstrates that technology need not be an instrument empirical logic only. Instead, when recalibrated through the lens of Indigenous ontology, these tools could become "spirit guidance," capable of carrying fragments of home and memory across physical and temporal distances.

This work perhaps offers a new horizon for the Transcultural Cemetery: a speculative space where the graveyard is as a living archive. It suggests that co-authoring our futures with the machines. The project moves beyond ethnographic documentation into a state of

relational accountability, ensuring our heritage continue to vibrate within the technoscientific landscapes of the future.

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