

## ritus wired sacerdos - Ritualistic NIME

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Fig. 1. The ritual places the Object (a hemispherical speaker array) at the center of the idolatric ritual. All sounds, interactions, and confessions are presented to, and projected through, the Object.

### Abstract

Across cultures and historical periods, collective sound practices have structured ritual life. Circles of bodies and voices and repeated gestures have long served as interfaces for binding communities together, mediating relationships between individuals and forces perceived as larger than themselves. Anthropological accounts of ritual, from liturgy and chant to shamanic invocation and communal song, reveal a shared grammar: repetition, cyclical time, call-and-response structures, and the transformation of individual voices into a collective sonic body.

Within such contexts, sound does not merely communicate meaning; it produces social and symbolic order. The voice, in particular, occupies a privileged position. When amplified through choral repetition or ritual mediation, it becomes detached from singular authorship and re-emerges as something collective, authoritative, or transcendent.

Technological cultures have not abandoned these structures. Rather, they frequently reproduce them in new forms. Gatherings centered around electronic instruments, speaker arrays, and computational systems often replicate ritualistic patterns of congregation. In these contexts, machines and interfaces may function as focal objects around which collective sonic experience is organized.

Within this perspective, we ask: what are the intellectual, spiritual, and aesthetic boundaries of NIME? If musical interfaces mediate collective sonic practices, can they also participate in ritual structures? Can technological systems become objects of symbolic focus, or even forms of contemporary idolization? By foregrounding repetition, circularity, feedback, and mediated voice, this work reflects on how communities formed around musical technologies may unknowingly reproduce the ancient architectures of ritual practice.

Rather than offering answers, the work proposes a speculative anthropological lens through which the culture of musical interface research might be reconsidered: as a space where technology and musical expression intersect with human rituals of gathering, invocation, and shared sonic experience.

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## 1 Project Description

Placing an object well established in the NIME literature (the laptop orchestra hemispherical speaker[4]), at the center of an idolatric ritual (henceforth known as the Object), *ritus wired sacerdos* channels long-standing humanistic practices of gathering, sound-making, and spiritual community within a secular and desacralized academic conference.

The system, which is a real-time neural audio instrument, utilizes timbre transfer, internal latent space manipulation, and machine learning model-mediated feedback systems controlled by the two performers (stage names Father Shaheed and the Holy Gry) to perform the ritual described below. The Holy Gry provides audio input, that is then encoded into a latent vector, which is then manipulated by Father Shaheed before being decoded back into audio to be projected through the Object. The models are two different variational autoencoders[1][2] trained on the same dataset of approximately 6 hours of downtempo house. The relationship between sound generation (which is entirely real-time and performer-controlled) and performance is obscured through the chaotic nature of feedback, the black-box characteristic of machine learning models, and complex interrelation of the two performers whose interactions manipulate the same signal chain of the system.

Heiddeger positions modern technology as a means of reducing our world-view to that of resources to be used or extracted ("Gestell" or "Enframing")[3]. The hemispherical speaker array is originally proposed as an "orchestral-instrument inspired hemispherical speakers"[4], framing the scope of this object to a specific, practical purpose in aid of the broader concept of the laptop orchestra. Its use providing both auditory and visual clarity in the ensemble context it was originally designed for, as an outwardly radiating point source channeling individual instrumentalists of a conventional orchestra. By staging the hemispherical speaker array as the central object of worship/performance, the theatricality of the costuming – both performers having mostly obscured faces – and the obtuseness of the relation between performer, sound, and interaction, this well-established technology in the NIME literature that provides a practical solution suggests a challenge to this enframing in order "to experience the call of a more primal truth"[3] through the ancient medium of ritual.

*ritus wired sacerdos* is a ritual that occurs every day at the same time, for the duration of NIME 2026. Each ritual will have a duration of 10-15 minutes. Every ritual will consist of a cycle of three sections, led by the mic-wielding leader, the Holy Gry. First, the feedback section: the microphone is placed near the Object to bring forth the Word. Next, the Holy Gry will begin speaking into the microphone, mediating the voice of the leader through the Object, thus elevating it. Finally, the congregation will be given the opportunity to whisper into the microphone. Here they will present secrets and confess sins to the Object, who will present divine judgement. Religious ceremonies often contain three elements: objects of worship, priestly figures leading to lead, and the interaction of the congregation. This leader/follower/object observance cycle puts forward each of these aspects. Cyclicity is present both in the form of the ritual, its daily occurrences, as well as the auditory feedback of the system. The act of disembodiment of the voice of the Holy Gry elevates it to the Voice of the Object. Through this cyclicity, we offer no answers, ask no questions, offer no function, but give space for internal inquiries and for the unsaid to be shared with the Object.

## 2 Technical Notes

The ritual requires a laptop, a hemispherical speaker, costumes for the performers, a gametrak controller, and stool or table to place the hemispherical speaker on, power, and a space to enter and exit from (to get into and out of costumes). No external speakers are required.

## 3 Media Links

The following performance demonstrates the first two sections of the cycle in a concert setting.

- Video: <https://www.youtube.com/watch?v=Iy2pM-R1-6k>

## 4 Ethical Standards

This ritual will rely on unspoken communication between the Holy Gry and the prospective congregation. Because the ritual does not allow for verbal communication from either performer, the audience participation portion of the ritual will take care to give participants space to be optional: people be approached, and the microphone offered to them, but will be withdrawn if they indicate that they do not wish to participate.

The two machine learning models were trained on a collection of approximately 6 hours of downtempo house music. The total computation time in training these models was roughly 6 days using an Nvidia RTX 3090.

The authors are aware of no potential conflicts of interest.

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## References

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