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Title	Artificial media in ubimus (Panel)
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Publication date	2025
Original Citation	Keller, D., Zagalo, N., Bridges, B. and Roddy, S. (2025) 'Artificial media in ubimus (Panel)', Proceedings of the Ubiquitous Music Symposium 2024 (UbiMus 2024), Macao, China, 31 October - 2 November 2024, pp. 27-29.
Type of publication	Conference item
Link to publisher's version	10.5281/zenodo.14887887
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Download date	2026-10-31 13:27:06
Item downloaded from	https://hdl.handle.net/10468/17482

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Artificial Media in Ubimus (Panel)

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Abstract. *Artificial media is proposed as a core concept of a variety of emergent practices. These practices dissolve the boundaries between local and distributed knowledge through the incorporation of extant data. The implications for design, development and deployment of ubimus ecosystems are manifold. We address some of these issues by focusing on three aspects: the resurgence of cybernetics in the sonic arts, the tensions implicit in interacting with retrieved vs. enacted sonic information and the push toward a conceptual overhaul of creative practice that targets artificial media.*

1. Emergent trends toward artificial media ecologies

Within the context of the recent developments in artificial intelligence (AI), machine-learning (ML) and large-scale language models (LLM) based techniques, the application of large language models tends to change the face of media production, hinting at alternative ways to interact with computer-mediated resources and processes. For instance, some systems furnish guidance to develop new software, reducing the learning curve of code design; computationally assisted writing lets novice writers draft fictional stories or reports, reducing the amount of labor dedicated to the mechanical tasks involved in these processes; furthermore, these approaches may expand the palette of techniques that enable the incorporation of lay participants in music-making, a key goal of ubimus research. As a general trend, interaction with media resources may be fostering the emergence of new entities within diversified and fluid ecosystems. A tentative name for these entities is Artificial Media [Zagalo and Keller 2024].

Generative techniques may impact the established notions of media creativity. What are the consequences on the conceptual landscape of creativity frameworks? What place will human stakeholders occupy in a creation pipeline populated by nonhuman agents? By adopting generative methods both for producing and assessing content, what role will originality and relevance have in revamped media-based practices?

2. Reimagining cybernetics in music-making

There has been a rapid proliferation of AI and ML-based generative music techniques in recent years, with global tech corporations, like Google and Meta, producing their own models [Roddy 2023]. In response to these developments, a renewed interest in ideas and processes originating in the field of cybernetics has begun to sweep across music composition and performance circles. We first examine some of the roots of cybernetic thinking as applied to music paying particular attention to early pioneers like Bebe and Louis Barron, Roland Kayn, and Brian Eno and their relationship to thinkers like Norbert Weiner, Max Bense, and Stafford Beer. This is followed with a consideration of how similar ideas manifest in the work of contemporary music makers like George E. Lewis, Delia Beatriz (Debit), Moises Horta Valenzuela (Hexorcismos), Nao Tokui, and Stephen Roddy (co-panelist). This cybernetic resurgence is contextualized with reference to N Katherine Hayles' [2023] 'technosymbiosis' and Yuk Hui's [2023] 'technodiversity', two key ideas in modern cybernetic thinking that help to provide a framework for the ethical and effective application of AI/ML technologies in musical contexts.

3. Intersections and tensions with ubimus frameworks

Throughout the 20th century, collective creative processes have usually been handled by humans. These processes are now supported by agents that gather information automatically from various sources available on distributed repositories. This type of knowledge opens previously unexplored possibilities of intercultural and intergenerational dialogue. But it may imply some caveats when the targets are musical experiences.

The ongoing work on second-wave ubimus frameworks has suggested that musical events are multimodal, involving sonic information actualized by experience [Keller et al. 2021]. This perspective implies some subtle differences between the extant information available from data repositories and the actual information produced and consumed by stakeholders throughout musical interactions. Some of the creative processes involved in musical interaction may be absent from musical products generated through data-gathering techniques. Consequently, emerging ubimus frameworks that incorporate automated data-gathering and processing will have to tackle the implications of handling *retrieved* vs. *actionable* sonic information.

In this panel we are considering not only the dissolution of the boundaries within media-oriented creative practices prompted by the application of AI-based methods, we also attempt to unpack the historical usage of AI-based techniques within the sonic arts as a way to highlight the limitations and implications of both historical and current trends for prospective ubimus endeavors. Our goal is to identify implicit barriers and opportunities situated at the intersection between ubimus practice and artificial media.

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