

Abstracts

Angela McArthur

Swimming in space: exploring spatial sound through underwater experience

Spatial sound is under-theorised, in terms which combine the aesthetic with the practical. Practical aspects of sound space are universalised through technologies, though these tools have a limited range of affordances, and a tendency to direct our conceptual engagement. Yet much theory is too abstract to be of pragmatic value to practitioners. This article takes the phenomenological experience of being underwater, as a means of exploring the gap between the aesthetic and practical, for spatial sound. Watery orientations can avoid habitual, terrestrial ways of engaging with phenomena, and offer medium-specific correspondences which can be helpful for those making work.

Keywords: Spatial sound, aesthetic, phenomenological experience, underwater.

Ji Youn Kang

Artistic approach to the WFS system

This paper, “Artistic Approach to the Wave Field Synthesis system,” explores the diverse characteristics of the WFS system as a musical instrument and examines artistic approaches to spatializing sounds in electroacoustic music composition. It delves into the unique attributes of the system, providing detailed examples of compositions and discussing potential challenges and limitations. The paper raises questions about how such a spatial audio rendering system can impact our listening experience, particularly in relation to fixed media compositions. Additionally, the possibilities of using WFS in live electronic music are also explored.

Keywords: Spatialization, electroacoustic music, Wave Field Synthesis, spatial audio.

Giulia Vismara

The aesthetic implications of 3D technologies on the spatial conceptualizations, configurations, and articulations of my compositional process

Incorporating 3D spatialization technologies into my artistic practice allowed me to explore a different perspective about the sound capacity to transform and broaden our understanding of space. This article delves into the effects of various methods, techniques, and 3D spatialization tools on the way I approach composition. It offers insight into my creative process, covering conceptualizations, configurations, and articulations, through the presentation of two projects and future trajectories.

Keywords: 3D audio technologies, spatialization, aesthetic, electroacoustic composition, different configurations.

Brona Martin

3D Spatialisation Technologies and aesthetic practice within electroacoustic composition: A journey through Listening, Composition and Performance

This paper discusses the relationship between creative practice and spatial audio technologies. Various compositions are discussed based on the author's experience with spatial audio, reflecting on how different technologies, workflows and performance scenarios inform and influence the compositional approach within the genre of electroacoustic composition. This includes working with different spatial audio software tools including channel-based audio, object-based audio, ambisonic workflows and different types of performance setups. This paper also reflects on how these technologies and spatial audio aesthetic influence various project outcomes.

Keywords: Creative practice, spatial audio technologies, aesthetic, spatialization techniques, electroacoustic composition.

Luc Döbereiner, David Pirrò

Contingency and Synchronization: Conceptual Framework, Artistic Experiments and Speculative Syntheses

Contingency and Synchronization is an ongoing research project exploring the interplay between openness and predictability in computational art. Utilizing distributed multi-agent networks, the project investigates computational synchronization phenomena across installations and visualizations. Central to the project are the concepts of contingency and synchronization, providing a framework for understanding aesthetic nuances arising from computation, sound, site, and collaborative decision-making. This paper examines the project's conceptual and artistic impact. It explores the relationship between contingency and synchronization and addresses repercussions for

concepts of listening, emergence, computation, space, and performance, and presents speculative theses outlining preliminary findings.

Keywords: Computational art, openness and predictability, synchronization phenomena, contingency, collaborative decision-making.