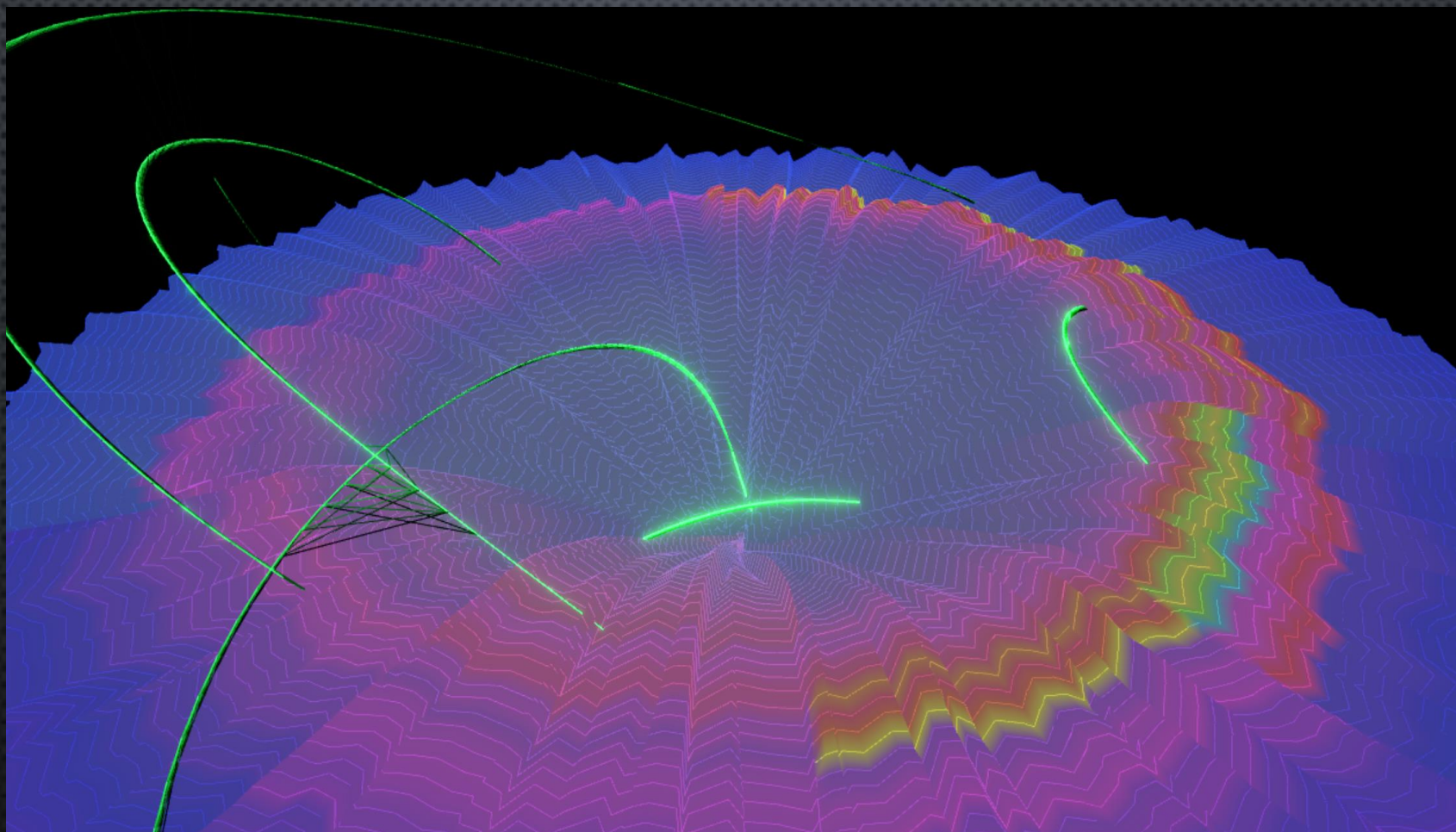


IN-TENTIONS

audiovisuals and gestural interactions in today's music performance

Dr. Giusy Caruso & Umut Eldem



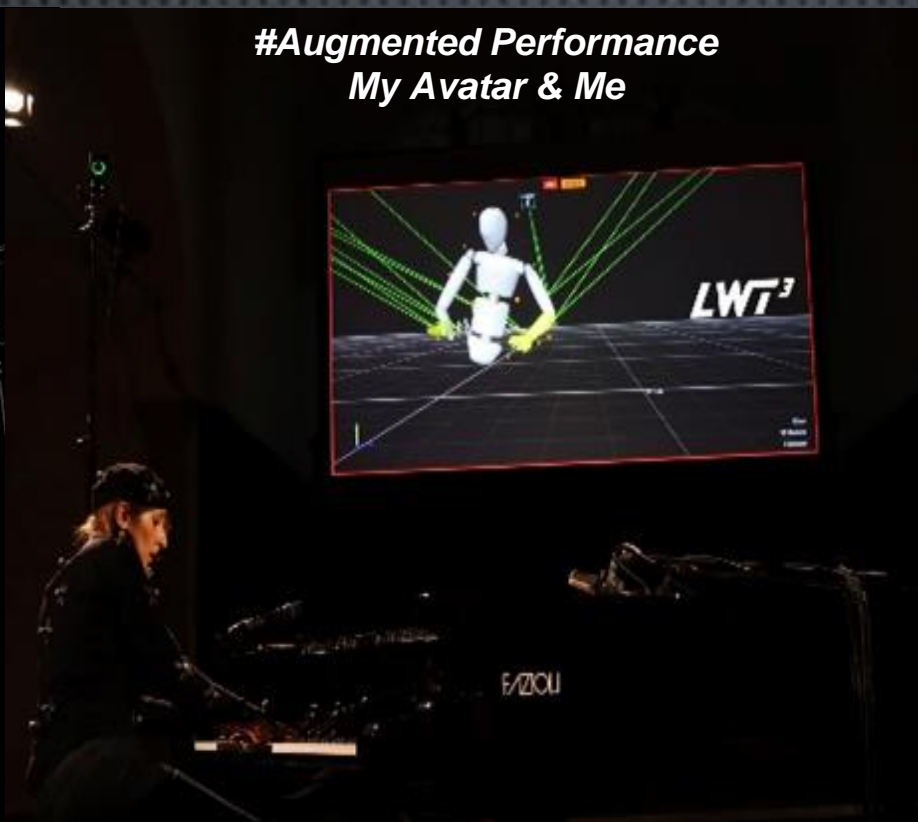
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2021 - 2023

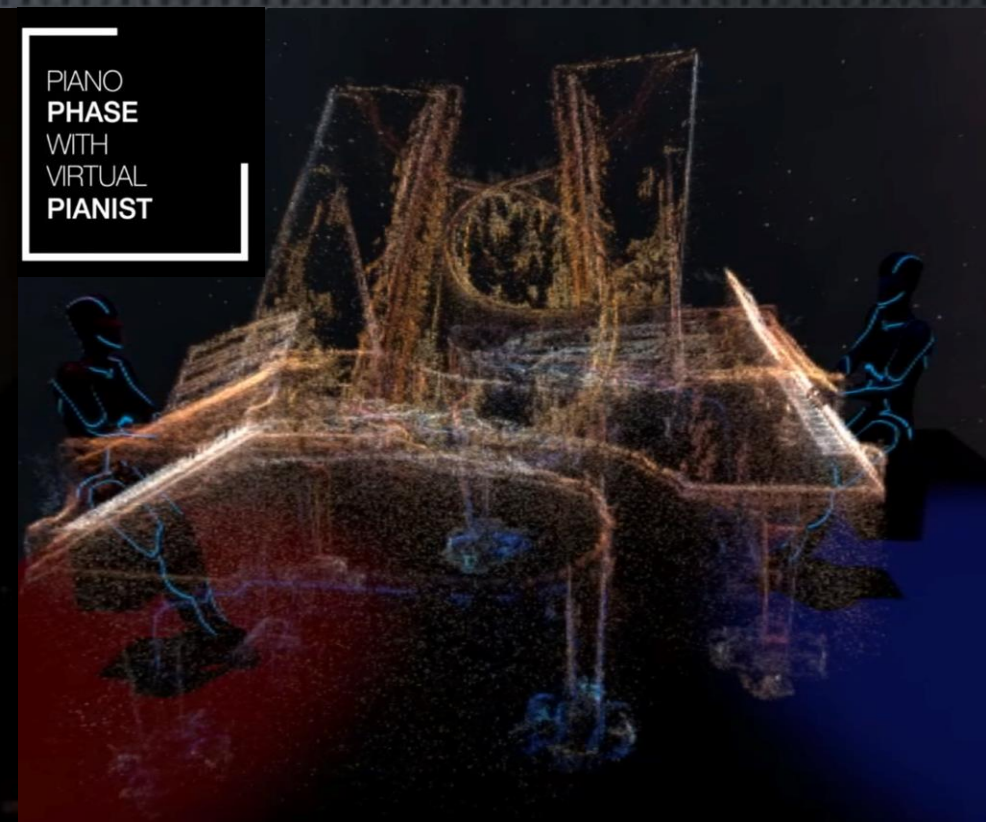
#Sonification of Gesture & Spazialisation of Sound



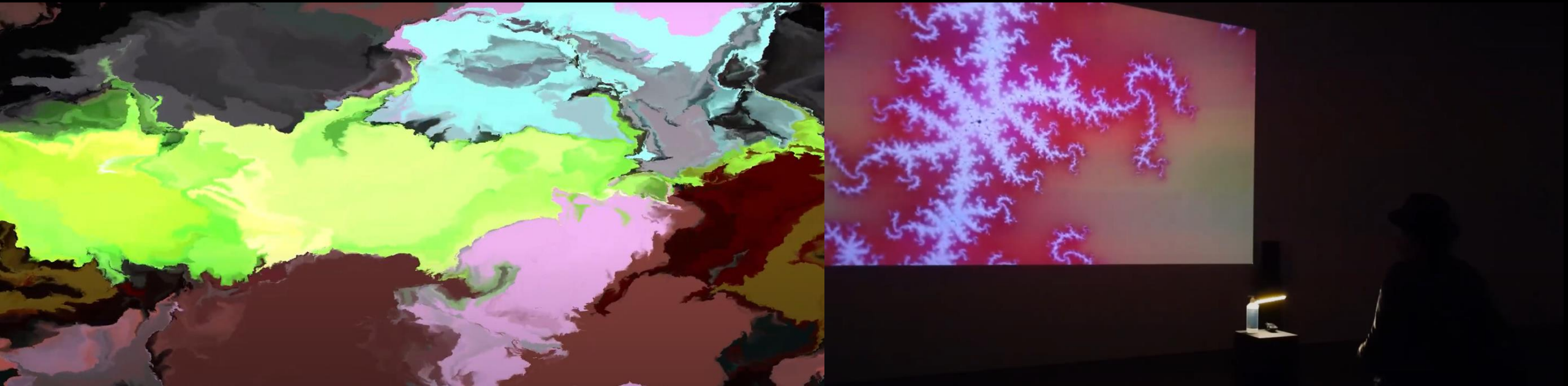
**#Augmented Performance
 My Avatar & Me**



PIANO
 PHASE
 WITH
 VIRTUAL
 PIANIST

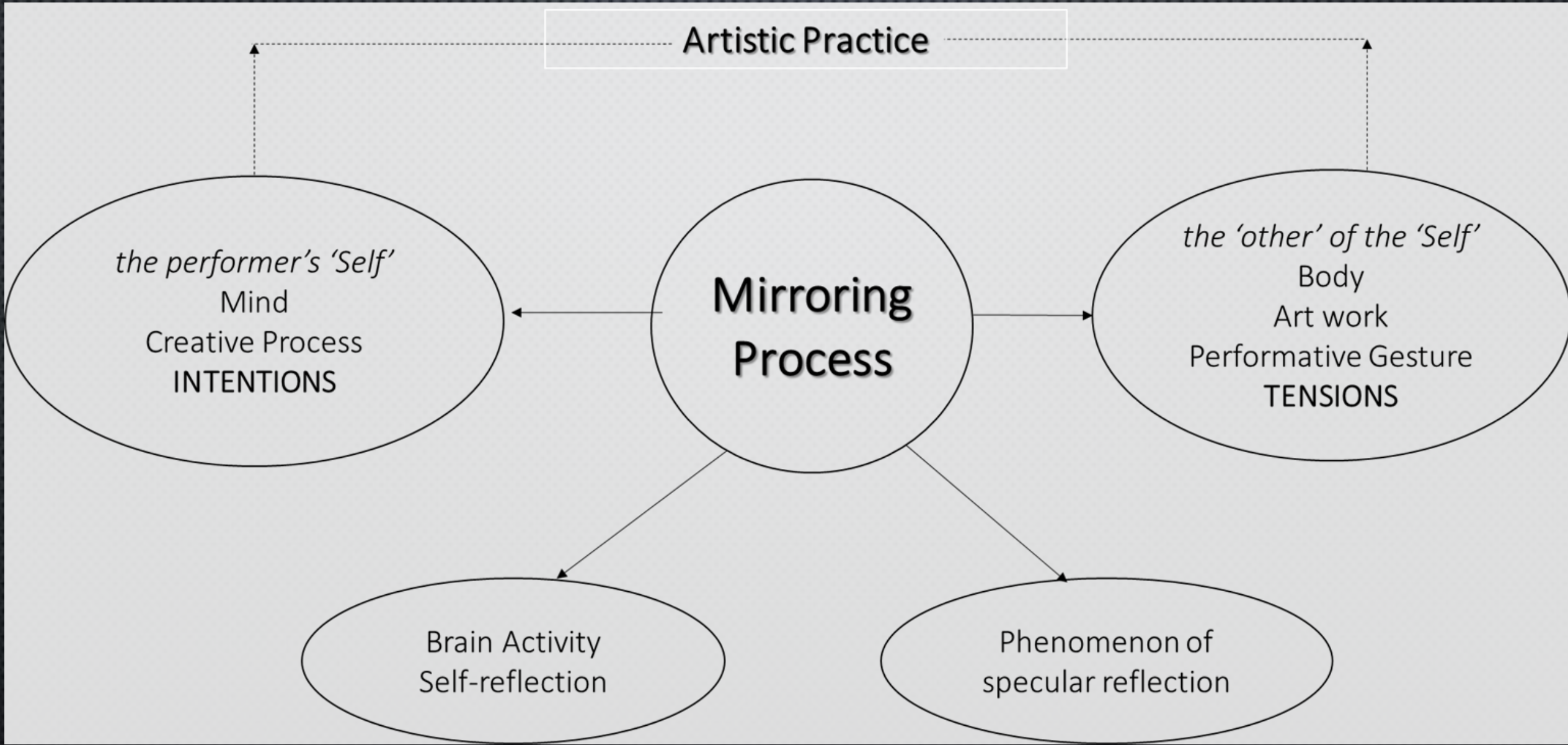


Hearing Glass: Synaesthetic Correspondences in The Contemporary Musical Practice



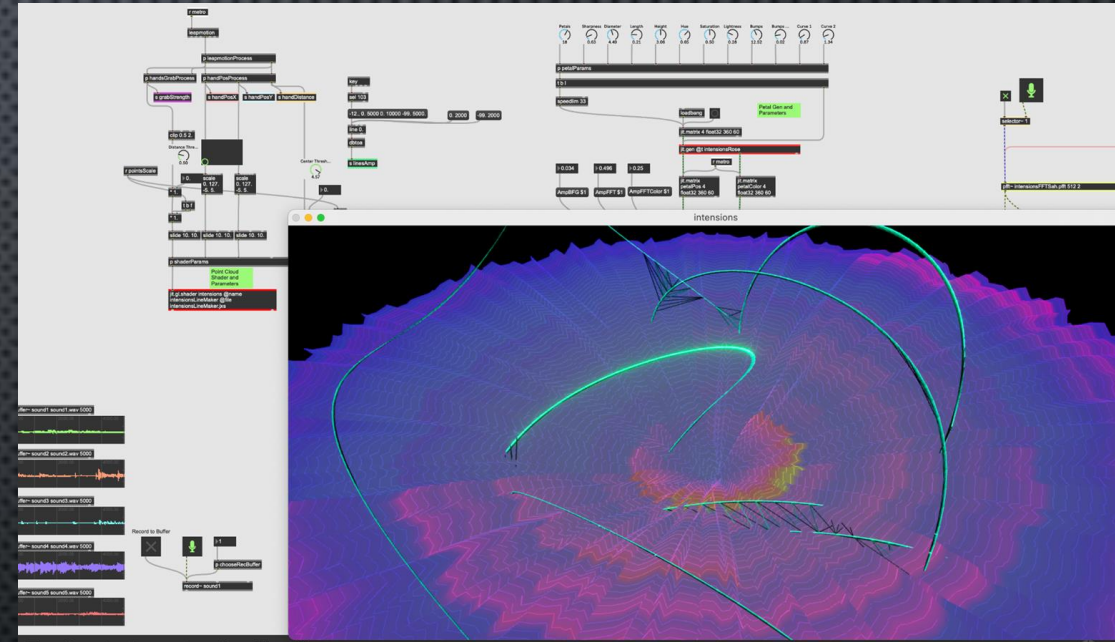
Investigation of the phenomenon of synaesthesia as an audiovisual tool of contemporary musical analysis, creation and performance through:

- Historical perspectives on the scientific and artistic practice of synaesthesia
- Development of tools and techniques for more integrated multisensory performances
- Application of visual cross-modal metaphors into the performance practice



Myogram bracelets

[Tanaka 2010, 2017]



AUGMENTED PERFORMANCE

sound+visuals

Research Questions

What is the role of gestural interaction technology to enhance today's music expressivity?

In which ways can the categorization of gestures be implemented as a systematic vocabulary of multimodal performances?

How can we contribute as artist-researchers to its development in the perspective of interactive performance?

METHOD:

A Generative & Co-creative Process

1. Workshop with students - Nextdoors February 2022



- Creation of a multisensory gestural vocabulary: Body position, movement, muscle tension, hand gestures, timbral input
- Cognitive sonification of data: Using the data to drive the musical parameters & visualisation in real time

2. Workshop - Royal Conservatoire Antwerp, March 2022

- Creation of cognitive generative multisensory systems as creative building blocks
- Multisensory translation between visual & sonic data
- Exploration of “in-between” patterns through interpolation

Visual Ideas

I

- Point cloud as an analogue for granular synthesis, controlled by the acoustic input and hand movements
- Spectral analysis in the form of color waves, which is manipulated through the bodily gestures of the performer
- Application of color harmony and synaesthetic correspondences into sound-color mappings

Output

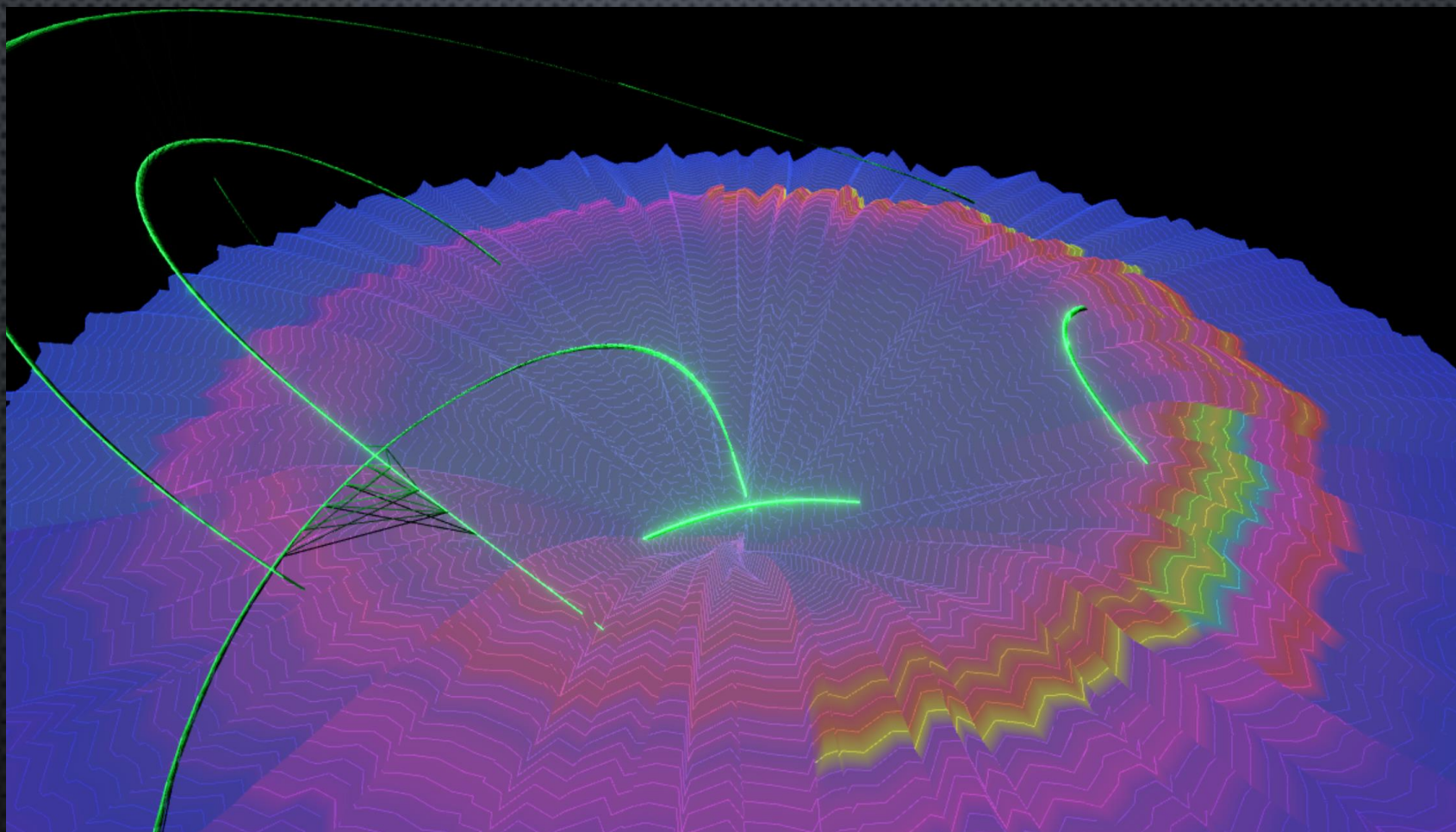
- Using arm orientation & movement to drive audiovisual parameters
- Implementation of granular synthesis and spectral freeze techniques in the visual domain
- Extending both the instrument and the performer on the multisensory level via non-invasive methods

Outlooks & Future Perspectives

- Further interactivity through audience gestures & data
- Adding artists belonging to multiple disciplines in the creation and performance process
- Solidification of the gestural vocabulary for further pedagogical use
- Expansion of multisensory translation techniques to incorporate flexible approaches of different artists

IN-TENTIONS

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