

Description:

Doppelgänger IV - Symbiosis (2020) is a composed theatre¹ project exploring the concept of human-machine symbiosis. It's an immersive multimedia experience that consists of projection mappings, spatialized sound, interactive sculpture, and performance art. *Symbiosis* is part of the *Doppelgänger* research project by IMUU² that explores the human condition in a futuristic dystopia where machinery analysis and prediction of our mind become possible, data monetization becomes uncontrollable, and the discrepancy between machines and humans become blurred.

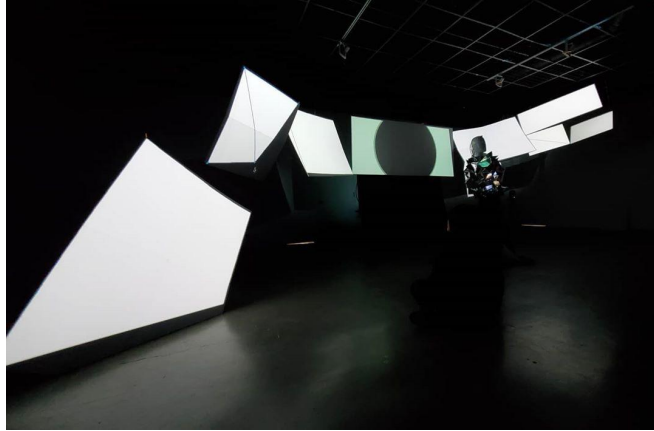
The *Doppelgänger series* started with a creative survey into the idea of surveillance in digital society and following an inquiry into self-exploration and consciousness as the mind is a multi-dimensional space. Earlier doppelgänger variations explored and examined the processes of extracting, analyzing, and reflecting between the amalgamation of humans and machines, digital, physical, and spiritual doppelgängers. *Doppelgänger IV - Symbiosis* continues with the previous inquiries and extends into a further discussion of human machine relationships, doppelgängers in between space dimensions.

Symbiosis delved into various facets of the evolving trends that machines become intelligent beings while humans embedded with digital and artificial minds. It constructed immersive narratives with new forms of intermedia dramaturgy and strategies through music, visuals, technology, objects, performance, time and space. With the question of what is the meaning of being alive, the artists wish to engage the audience through multimedia languages to explore parallels and intersections of breath, data, air, and digital, biological sensorium.

My artistic interest in the past two years primarily focused on studies and experiments of intermedia compositions with digital multi-modal systems from a social and sometimes political context. The *Doppelgänger* project is a manifesto as I navigate myself into various conceptual, creative and technical explorations. This project conceptualized in a dystopia where growing data and metadata nourished computational entities become unknown species.

¹ 'Composed Theatre' refers to the creative process and performance of pieces that are determined by compositional strategies, and in a broader sense, by compositional thinking. — Matthias Rebstock. *Composed Theatre: Aesthetics, Practices, Processes*.

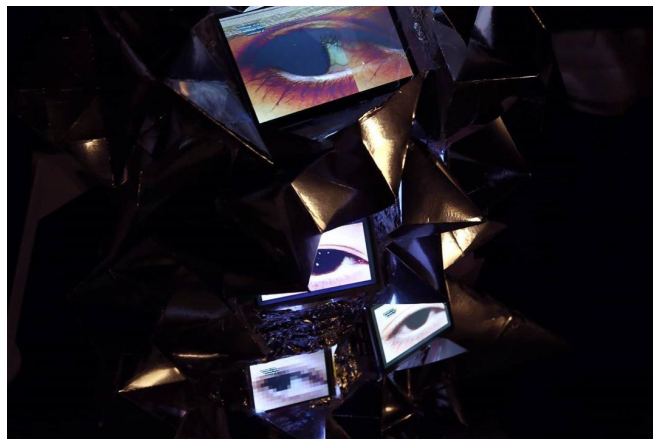
² IMUU is an artist collaboration between [Weilu Ge](#) and [Kelon Cen](#).



Video Projection: Custom shaped projection screens are hung throughout the gallery and are composed of cardboard material. Eight screens are placed in the center of the gallery and have been grouped into three main sections: left, center, and right.

Sound: The surrounding sound system consists of 6 channel speakers placed equally in the edge of the gallery space. Music scenes are collages of human and synthesized digital sounds that explore a cryptic and unknown intelligence autonomy.

Cyborg sculpture: A figurative sculpture, without arms or legs is placed in the center of the gallery is composed of plastic materials consisting of six raspberry pi computers and six video screens of various sizes (3.5", 5", 7"). These screens play random blinking animations and multiple short video clips of human body parts (eye, mouth, ear, hands, etc...) Each display can be controlled by various mobile devices and computers using OSC communication. The figure's head consists of various conductive materials and eight ultrasonic sensors, which can be used as inputs to trigger different visual content.



Performance: A dancer/performer enters the gallery space wearing face makeup that suggests a futuristic posthuman being. The dancer interacts with the sculpture blurring the boundary between the digital machine and the biological being.



Technology: A IoT computing system built with two laptop computers and six raspberry pis. It consists of: (1) A TouchDesigner-based server program that synchronizes and sequences all the media materials. (2) A control Max/Msp program that sends and receives data from raspberry pis, various sensors, and the server program. And a second Max/Msp program for surround sound distribution (3) An openFrameworks/C++ app runs on each raspberry pi for video content and sensors. (4) A mobile app for performer to send triggers and receive instructions.

