



"Yugen" is a Pas de Deux of a dancer with a VR avatar in a feedback loop on stage.

The avatar is projected back onto the dancer's body, who wears a motion capture (MC) suit that animates the avatar. In this looping transfer process we want to find the unique physical quality of an individual human character as a digitized self in VR.

A 2 month research period just concluded 13. Jan 2024 in Düsseldorf at TANZHAUS NRW and MIREVI XR LAB for the MODINA EU network <http://modina.eu> . Digital Artist Chris Ziegler and Choreographer Christine Bonansea developed a 40 - 50 min first version / showing of a physical dialogue of a digital avatar and a dancer using life motion capturing and custom developed body mapping techniques.

<https://tanzhaus-nrw.de/en/event/2024/01/christine-bonansea-chris-ziegler>

http://www.movingimages.de/?type=performing&txt_id=187&lng=eng

YUGEN synopsis

"Yugen" (Jap. "mystery and depth") is a pas de deux dance performance of the dancer Christine Bonansea with a digital representation of herself in a feedback loop.

The avatar is projected back onto the dancer's body, who wears a capture (MC) suit that also animates the avatar as it dances. Her movements are generating sounds by using motion wearables.

This looping transfer process is to find the original physical quality of an individual human character. "Yugen" develops a temporal space where the real and virtual space are completely congruent, that the dancers motion can physically 'morph' with the avatars motions.

Proposal of the MODINA residency Nov 2023 - Jan 2024

Experimenting with the MC suit in late 2021 with Chris Ziegler in a residency at DOCKdigital Berlin, choreographer Christine Bonansea discovered an essential reading of herself, a unique way of standing, moving and being in space. Digital Chris Ziegler joined the research, working on immersive stage technologies. He is interested in bringing digital technologies back into the physicality of theater.

Her movement quality was legible but also altered by the digital transfer process in the avatar.

Movement Research Topics

In order to heighten perceptions of what would be legible of her dance in VR, the choreography explores a series of repetitive and successive movements that reveal her very own relationship to gravity. The body axis forms the movement base, from which the dancer interacts with gravitational effects in space such as oscillation, shifting of weight in phasic deviate movements that influence the transformations.

We develop a temporal space (the body) where real space and virtual space are completely congruent. The avatar and the dancer should be able to move in a congruent frame, as a single being, which, according to our research, has not yet been attempted.

The use of MC technique during this process shows that her identity is a physical relationship of space and gravity. Expressing this subjective relationship in VR is the movement challenge in "**Yugen**" that needs to be explored.

Digital Research Topics

Usually avatars are projected through screens or holographic settings where the movement and the image of the real dancer are separated. In this production, we try to overlay the dancer's body and that of the digital avatar by projecting the image onto his body. In the feedback loop, the avatar's movements should "morph" - with the life dance captured by the motion tracking suit (ROKOKO). We are also thinking of interrupting and

manipulating the sensors to change the mirroring process and create a VR counterpart, which is more than a copy of the original.

Christine Bonansea's and Chris Ziegler's goal is to build an environment for various modes of realtime dialogues in VR on stage using common theater technologies (no VR glasses or Tablets)

CV

Christine Bonansea Saulut is a US-European dancer and choreographer with 20 years of international experience in conceiving, directing/choreographing and performing movement-based works. Artistic director of CBC, founded in 2010, she creates performances, installations, and films. Her work inhabits an experimental, interdisciplinary including new digital media such as VR/AR, and collaborative environment. Selected internationally in residencies and venues in USA, Japan, Korea, Canada and Europe, she is supported by the Zellerbach Family Foundation, Foundation for Contemporary Arts, Theater Bay Area, the NYC LMCC, DOCK art /Berlin, the JOINT ADVENTURES // NPN and the TakeHeart resumption funded by NEUSTART KULTUR, the program DIS-TANZEN of the Dachverband Tanz Deutschland, Perspektiv Kultur with DOCK Digital Lab residency. <http://cbcdance.com>

Chris Ziegler is a director, performer and artist in the performing and digital arts. After teaching interactive media at Arizona State University (USA) from 2013 - 2021, he returned to Europe to work again on digital theater productions. But before he returned, he was practice chair of MOCO 2019 at ASU Tempe. 2022 he became member of DOCKdigital Berlin and also he was working on "ANA", an AI theater production funded by the VW Foundation. His creative and artistic career began in 1994 at the Center for Art and Media ZKM Karlsruhe with multimedia productions for the Frankfurt Ballet, ICK Amsterdam (Emio Greco | PC) among others. Since 1999 he has been producing his own award-winning dance productions on stage, which tour internationally. <http://movingimages.de>

Hugo Paquete is a sound artist and researcher from Portugal. With a Ph.D. in Digital Media Art, his expertise lies in the field of composition and performance of experimental electronic music. Influenced by post-minimalist aesthetics, he explores experimentation in the fields of rhythm, noise and sound spatialization in a post-digital context. His creative path transcends the boundaries of music, investigating the synergies between various scientific, artistic, visual and sonic domains. He was a resident at the ZKM/Hertz Lab, developing research in sound spatialization between 2011 and 2020.

Selection of festivals and presentations of works: Ars Electronica Festival in 2022 in Austria. In-Sonora Festival in 2016 at La Casa Encendida, Madrid, Spain. "Sweet Thunder Festival" in 2014 at the Fort Mason Center, San Francisco, USA. And others a national and international level.

<https://hugopaquete.tumblr.com>

Impressions from TANZHAUS NRW "Temps d'Image" Festival Showing (Jan 13th, 2024)



Video Trailer (2min)



