

# Artists Talk

## Dr Josh Harle

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### Abstract

In this artists talk, digital media artist, educator, and researcher Dr Josh Harle will introduce his practice, research, collaborative VR artists studio projects, and current work-in-progress.

### Keywords

emerging technologies, virtual reality, demystifying technology, technology as cultural practice, collaboration, Experimentation, critical engagement, education, practice-based research, antisciplinary, STEAM,

### Introduction

I'm a media artist, researcher, and educator, identifying as neurodivergent and non-visibly disabled. My doctoral thesis investigated digital virtual space through an Australian Research Council Linkage grant with the NSW Emergency Information Coordination Unit, developing new approaches to spatial representation in crisis contexts. This included the use of videogame engines as research tools in the investigation of existing and speculative architecture, for which I received the 2011 Young CAADRIA (Computer-Aided Architectural Design Research in Asia) Award.

My practice is informed by degrees in Computer Science & Cybernetics, Philosophy, and Fine Art, and a doctorate across Architecture & Design. It investigates diverse approaches to 'sense-making', technology as cultural practice, and the expressive potential of subverting digital capture tools through hacking, play, and improvisation.

My solo work takes established and emerging digital capture technologies (e.g. laser scanning, photogrammetry, drone image-capture) and re-appropriates them as expressive mediums, altering their outcomes to introduce an affective element normally absent. The resulting works embrace rather than hide their performative origins, and reflect the contingency of the creative process.

In 2018, I co-edited (with Angie Abdulla and Andrew Newman) an open access journal 'technology as cultural practice' of critical essays and creative case studies of Indigenous Australian virtual reality projects. Since 2017 through Tactical Space Lab, my practice has been almost exclusively collaborative; hosting an experimental VR

studio program working with emerging and established artists to explore the use of VR in their practices. Outcomes include Joan Ross's 2019 and Tully Arnot's 2020 ACMI/Mordant VR commissions, and studio outcomes have been used as case-studies for creating engaging workshops for groups from 5 years old to post-grad.

### Tactical Space Lab

Tactical Space Lab is a research initiative focussing on encouraging innovation, accessibility, and diversity at the intersection of art and technology. It's goal is to host, nourish, and nurture artistic practices and projects that critically explore emerging technology – particularly through the development in virtual reality. We engage in collaborative practice-based research through experimentation, improvised creation, and prototyping / proof of concepts.

Tactical Space Lab's unique studio model is the result of years of development and refinement, and supports innovative creative experimentation and practice-based research. We continue to run the experimental virtual reality lab program, and have so far hosted artists Jessica Ekomane, Joan Ross, Alex Seton, Jason Wing, Bianca Willoughby, Tarik Ahlip, Cigdem Aydemir, Kylie Banyard, Nic Cassey, John Gillies, Grace Kingston, Claudia Nicholson, Jason Phu, Louise Zhang, Abdul Abdullah, Matt Chun, and Katy B Plummer.



Jason Phu's VR Studio outcomes 2020. © Jason Phu & Josh Harle / Tactical Space Lab.

In a two-week intensive workshop format, each artist is introduced to a range of current VR and immersive technologies, and provided with the tools to explore them through a process of collaborative development, responding to possible forms of integration in their practice.

The lab focuses on developing new tools, new thinking, and new ways of using VR, by providing a context for technology- and concept-driven experimentation. Outcomes and knowledge gained will be shared widely through exhibitions, artists' talks, adult and youth workshops, video documentation, and the online development blog.



VR kids workshop documentation (physical and reconstructed in VR) 2019. © Josh Harle / Tactical Space Lab.



Louise Zhang's VR Studio outcomes 2020. ©Louise Zhang & Josh Harle / Tactical Space Lab.

These studios form part of our focus on 'demystifying' technology as an art-making tool, and their outcomes and discussions in the development process give us case-studies for teaching art-technology workshops across all ages.

## ACMI commissions

I will briefly introduce the experimental process used for creating the two ACMI / Mordant virtual reality commissions, and give insight into the novel multi-sensory elements integrated into them, and how they explored the allowances of virtual reality including the audience's expectations of the medium at the time.



*Did you ask the river?* 2018. © Joan Ross & Tactical Space Lab

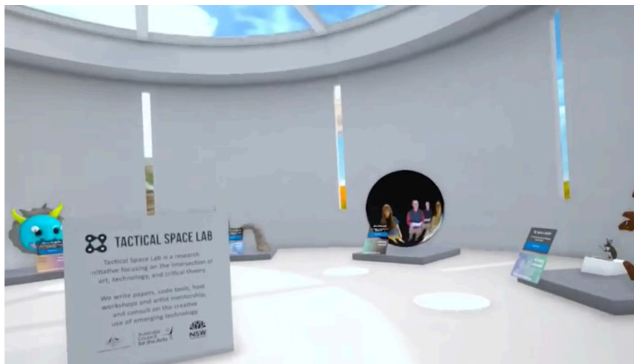


*Epiphytes?* 2022. © Tully Arnot & Tactical Space Lab

## Traveling Landscapes

Travelling Landscapes showcases eight ground-breaking VR works from Tactical Space Lab's experimental, collaborative VR artists studio program. Working with established Australian non-digital artists from diverse cultural and creative backgrounds, the project explored the use of emerging technologies such as virtual reality in their practice. Travelling Landscapes collects outcomes together as an 'exhibition-in-a-box' for hassle-free touring at small galleries, and available online as a free collection of interactive experiences, accompanied by artists' talks, interviews, educational resource kits, and process documentation providing insight into the experimental development process behind each studio. The project is focussed on sharing knowledge and demystifying VR as an artmaking tool.

The collection is designed for broad accessibility, with multilingual captions, and features to aid in easy touring of the works at small galleries on a Meta Quest headset. The project is supported by the Australian Council for the Arts International Engagement Fund.



*Travelling landscapes* (VR collection) 2023. © Josh Harle /Tactical Space Lab

## The Accident

*The Accident* is a performance lecture woven into an interactive simulation of the Mars Perseverance Rover and a Fukushima reactor cleanup robot; a journey across human endeavors through the lens of the "Integral Accident", Paul Vilios's term suggesting the moment of a technology's invention is also when its negative consequences are brought into reality:

"When you invent the ship, you also invent the shipwreck; when you invent the plane you also invent the plane crash; and when you invent electricity, you invent electrocution...Every technology carries its own negativity, which is invented at the same time as technical progress."

The work explores the resonant connections between the Fukushima nuclear accident and the Mars Rover's

successful deployment: one the apex of human scientific accomplishment, and the other a tragic misfortune; their shared material realities via Perseverance's radioisotope power system, and shared aesthetic embodiment of scientific knowledge achieved through 'observation at a distance', outside of the system being examined.

The work explores our tendency to embrace positives and externalize negatives of technology, the physical offshoring of these externalities to the global south, and connects to the historical context of British nuclear testing at Emu Plains (e.g. as told in Lynette Wallworth & Tyson Marowin's 360 VR work *Collisions*). It is informed by the artist's personal family history, previous research on 'technology as cultural practice', and exploration, with Indigenous technology theorist Angie Abdilla, of First Nations-informed technology governance models, speaking to timely concerns about the rapid, hasty adoption of machine learning tools across many applications.



*The Accident* (screenshot from interactive work) 2024. © Josh Harle

## Current Research and Work-in-Progress

Current work-in-progress explores the use of 3 networked Quest 2 headsets, presenting a mixed reality co-present theatrical experiences within a virtual (and real) Mazda 121. The work explores the themes of climate catastrophe and our individual versus collective agency, through the performance of a roadtrip of the "four door sedan-men of the Apocalypse" of which participants play three parts.

With this project and further research and experiments, I'm fascinated by the concept of a fictocritical virtual reality experience; one that reveals the contingency of its own creation. The work explores fertile space in expanded theater and immersive, interactive experience, making use of a number of novel technical allowances of the Meta Quest 3 headsets while critically engaging with the medium of virtual reality and tensions around artifice, to create a unique experience.