

Engaging Transdisciplinary Inquiry in Artistic Research

Rethinking the Digital Turn & More-than-human Agencies

ARS22 Gathering | Kiasma | EMMA | October 12, 2022

Nitin Sawhney, Ph.D.
Visiting Researcher

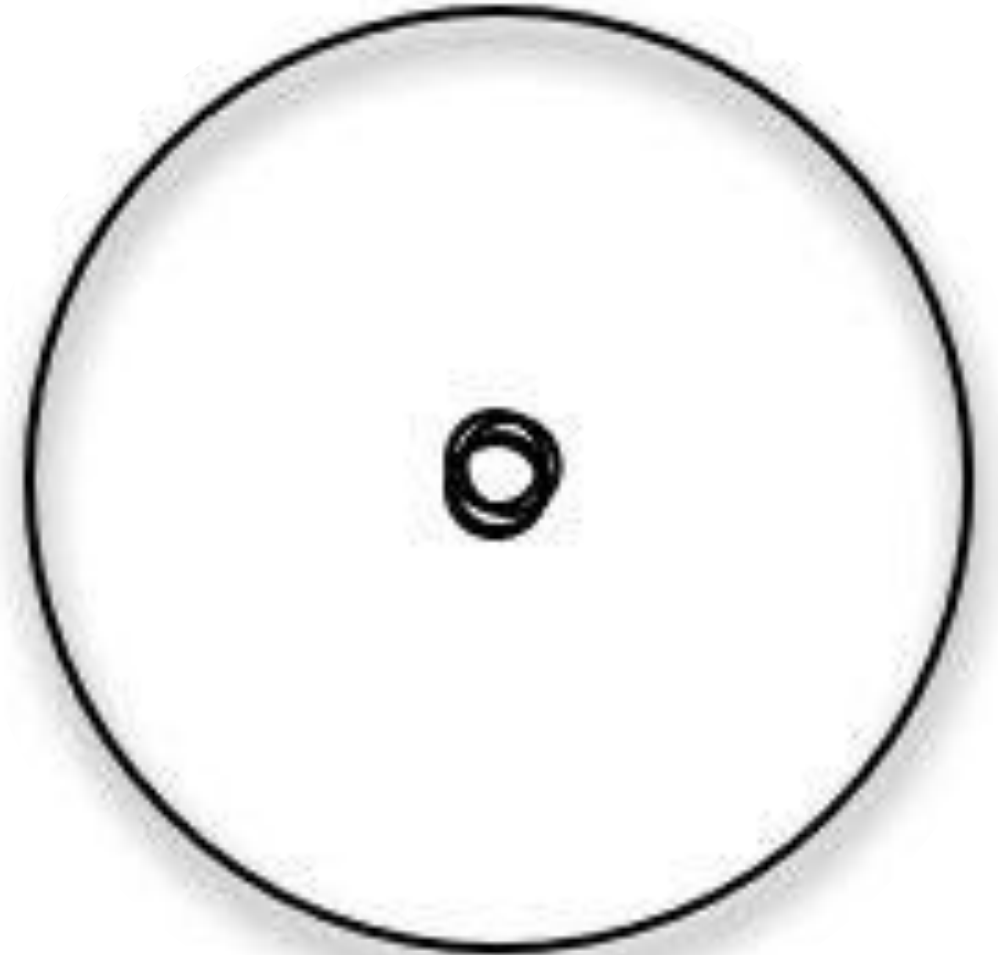
University of the Arts
Research Institute

October 10, 2025



Transdisciplinary Inquiry in Artistic Research?

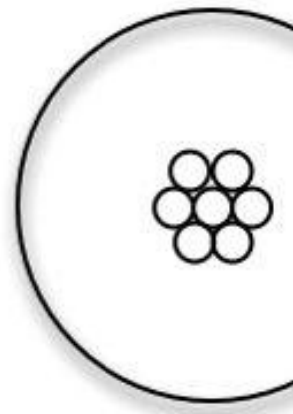
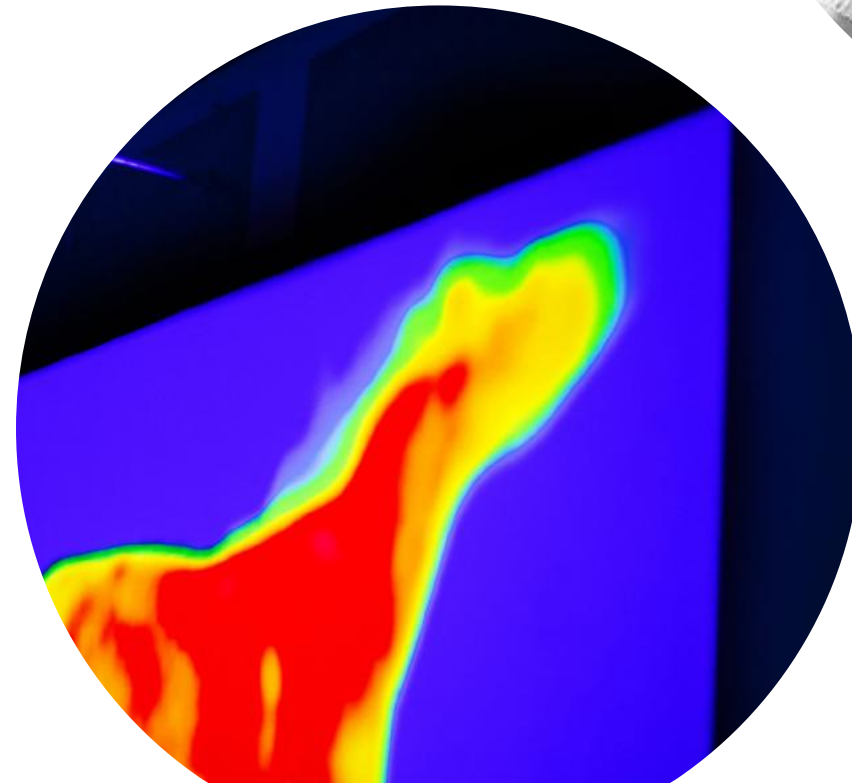
1. How should we make sense of transdisciplinary inquiry? How does it relate to artistic research?
2. What are the limitations, barriers and challenges we must confront?
3. Why develop an *orientation* towards Transdisciplinarity?
4. Whose agency does it foster? How do we facilitate inclusive inquiry?



Transdisciplinary Inquiry in Artistic Research?

Proposed Session Plan:

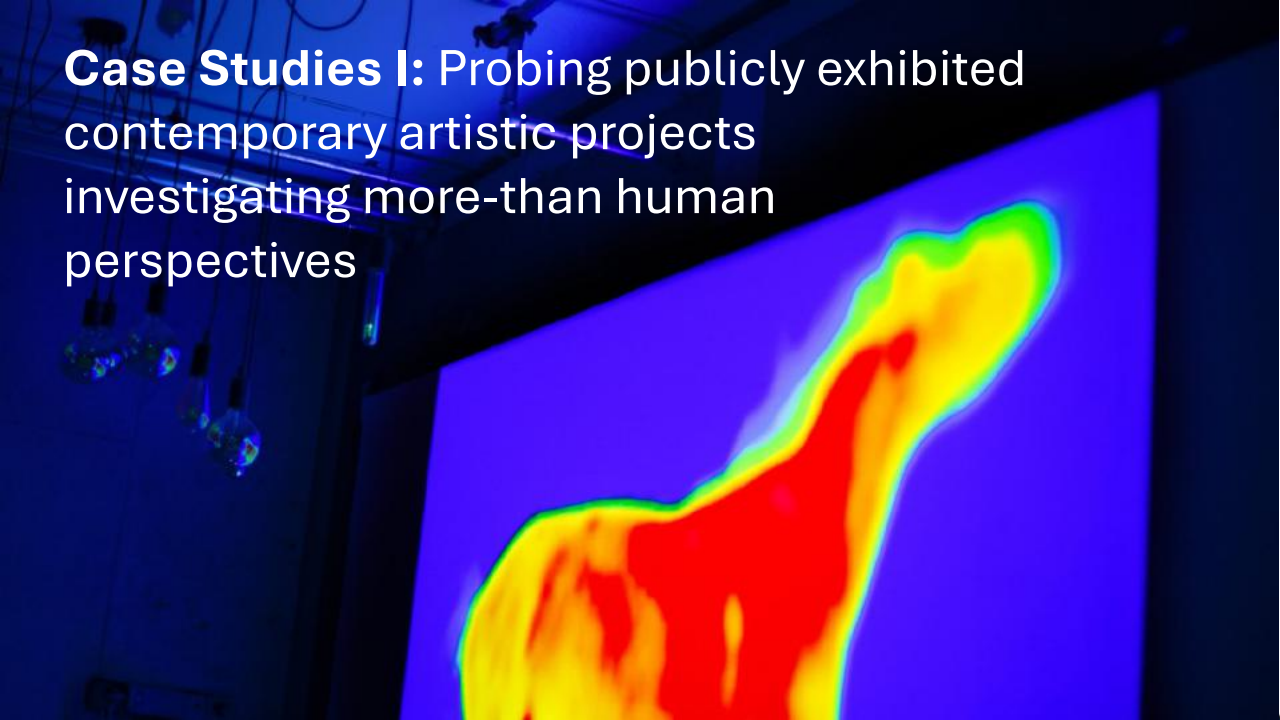
1. **Case Studies I:** Probing publicly exhibited contemporary artistic works investigating more-than human perspectives
2. **Theories & Practices:** Conceptually examining the origins and pathways to Transdisciplinarity as an “orientation” in artistic research + examine notable artists engaging in TransD orientations
3. **Case Studies II:** Exploratory artistic research in contested spaces as Curatorial, Participatory or Performative modes facilitating TransD Inquiry?
4. **Thresholds of Transdisciplinarity today?** Investigative Aesthetics and Forensic Practices engaged in human rights and social justice



→ Crossdiscipli

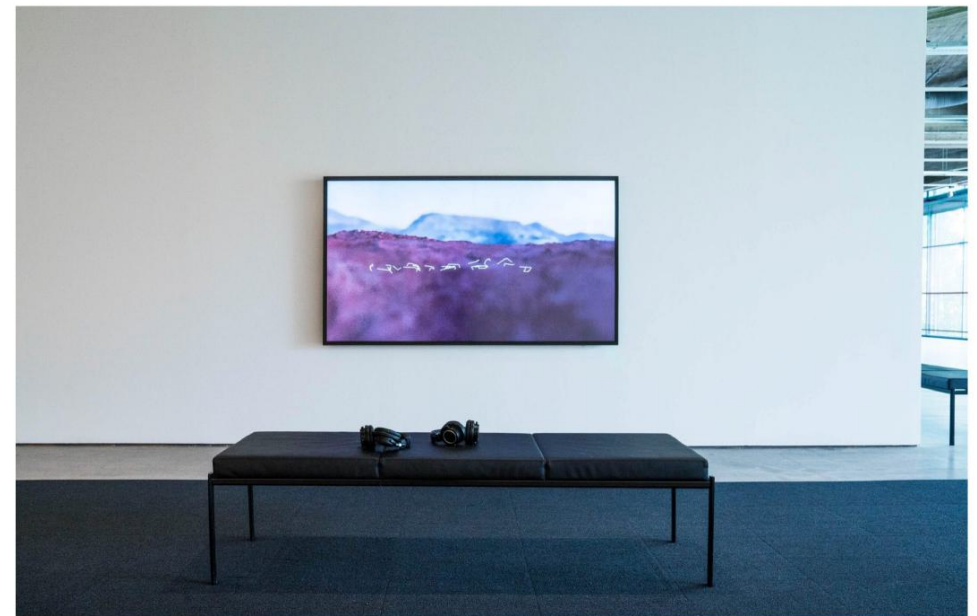


Case Studies I: Probing publicly exhibited contemporary artistic projects investigating more-than human perspectives



EMMA

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JENNA SUTELA: NIMIÄ CÉTIĪ, 2018. THE SAASTAMOINEN FOUNDATION ART COLLECTION. © PAULA VIRTÄ / EMMA - ESPOO MUSEUM OF MODERN



JENNA SUTELA: NIMIÄ CÉTIĪ, 2018. THE SAASTAMOINEN FOUNDATION ART COLLECTION. © PAULA VIRTÄ / EMMA – ESPOO MUSEUM OF MODERN



Jenna Sutela. Excerpts from “nimiia cétii” (2018)

Early Mars habitability and global cooling by H₂-based methanogens

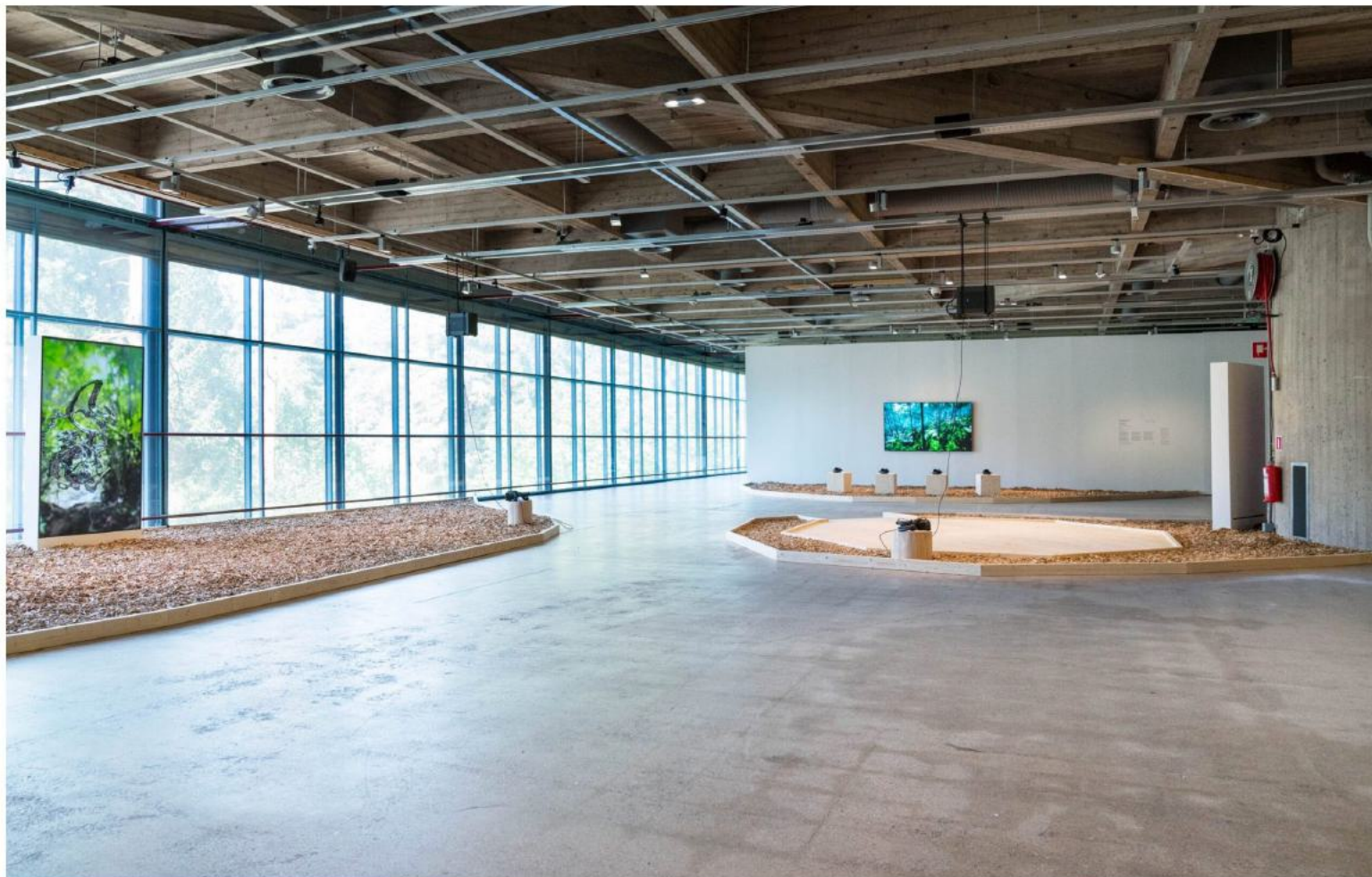
Received: 9 December 2021

Accepted: 16 August 2022

Published online: 10 October 2022

Boris Sauterey^{1,2}✉, Benjamin Charnay³, Antonin Affholder^{2,4},
Stéphane Mazevet^{5,7} and Régis Ferrière^{1,2,6,7}

During the Noachian, Mars' crust may have provided a favourable environment for microbial life^{1,2}. The porous brine-saturated regolith^{3–5} would have created a physical space sheltered from ultraviolet and cosmic radiation and provided a solvent, whereas the below-ground temperature² and diffusion^{6,7} of a dense, reduced atmosphere^{8,9} may have supported simple microbial organisms that consumed H₂ and CO₂ as energy and carbon sources and produced methane as a waste. On Earth, hydrogenotrophic methanogenesis was among the earliest metabolisms^{10,11}, but its viability on early Mars has never been quantitatively evaluated. Here we present a probabilistic assessment of Mars' Noachian habitability to H₂-based methanogens and quantify their biological feedback on Mars' atmosphere and climate. We find that subsurface habitability was very likely, and limited mainly by the extent of surface ice coverage. Biomass productivity could have been as high as in the early Earth's ocean. However, the predicted atmospheric composition shift caused by methanogenesis would have triggered a global cooling event, ending potential early warm conditions, compromising surface habitability and forcing the biosphere deep into the Martian crust. Spatial projections of our predictions point to lowland sites at low-to-medium latitudes as good candidates to uncover traces of this early life at or near the surface.



JAKOB KUDSK STEENSEN: RE-ANIMATED, 2018–19. © PAULA VIRTÄ / EMMA – ESPOO MUSEUM OF MODERN ART.



Robert J. Shallenberger,
Cornell Lab of Ornithology

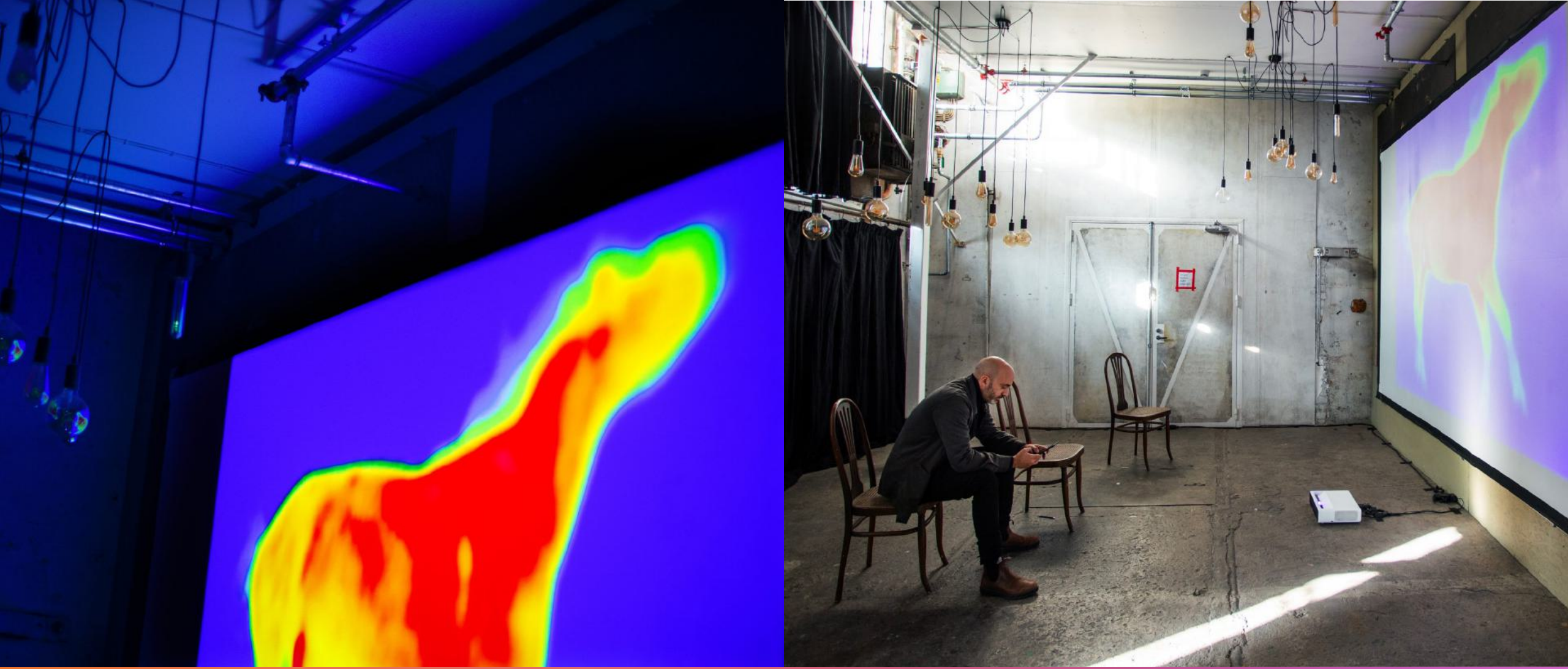
Waiting Room

Terike Haapoja & Laura Gustafsson (2019)



305

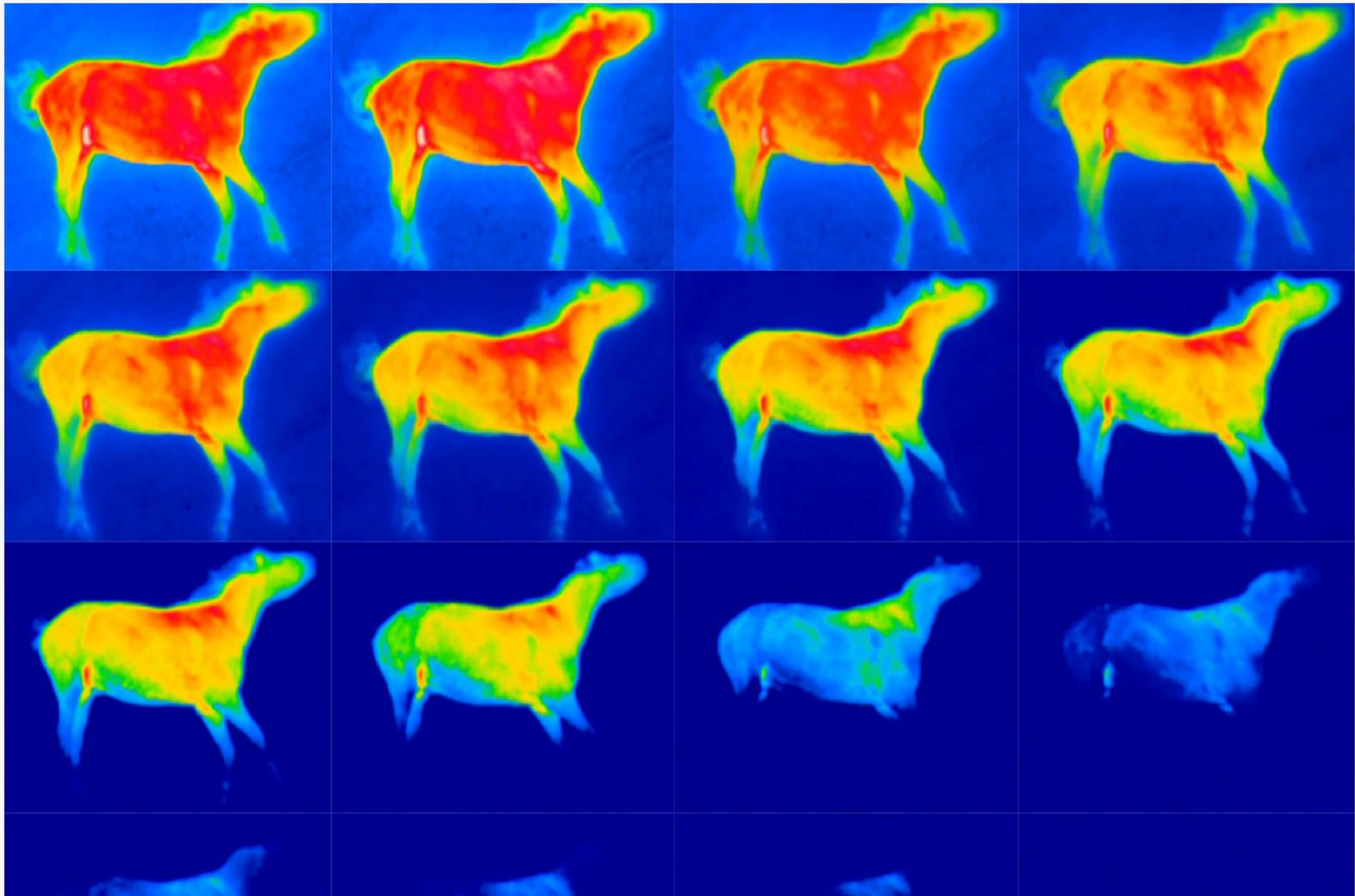




Entropy

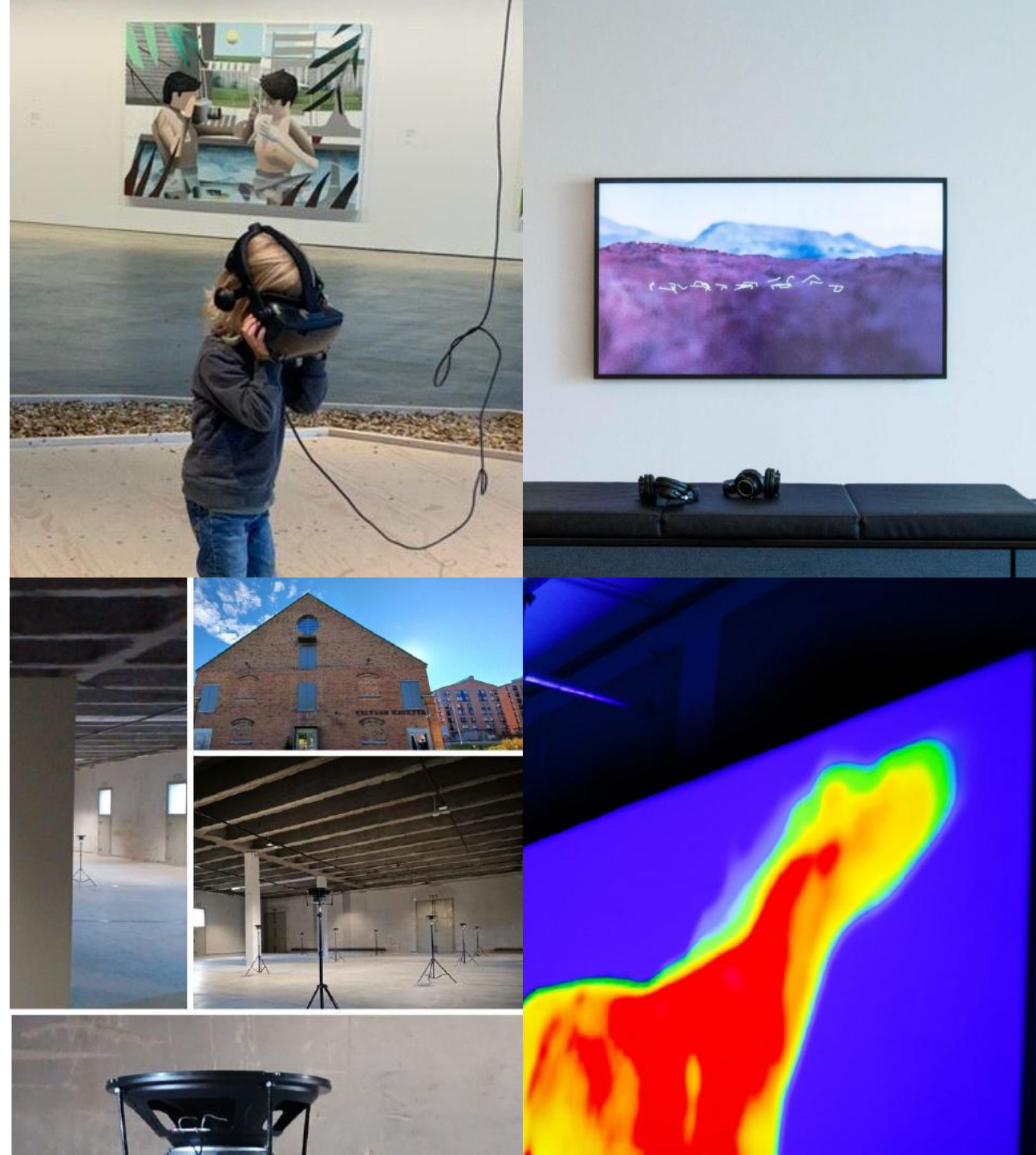
Terike Haapoja (2004)

Contestations.AI Symposium
Konepaja, October 23, 2024
Photo: Jenni Holma

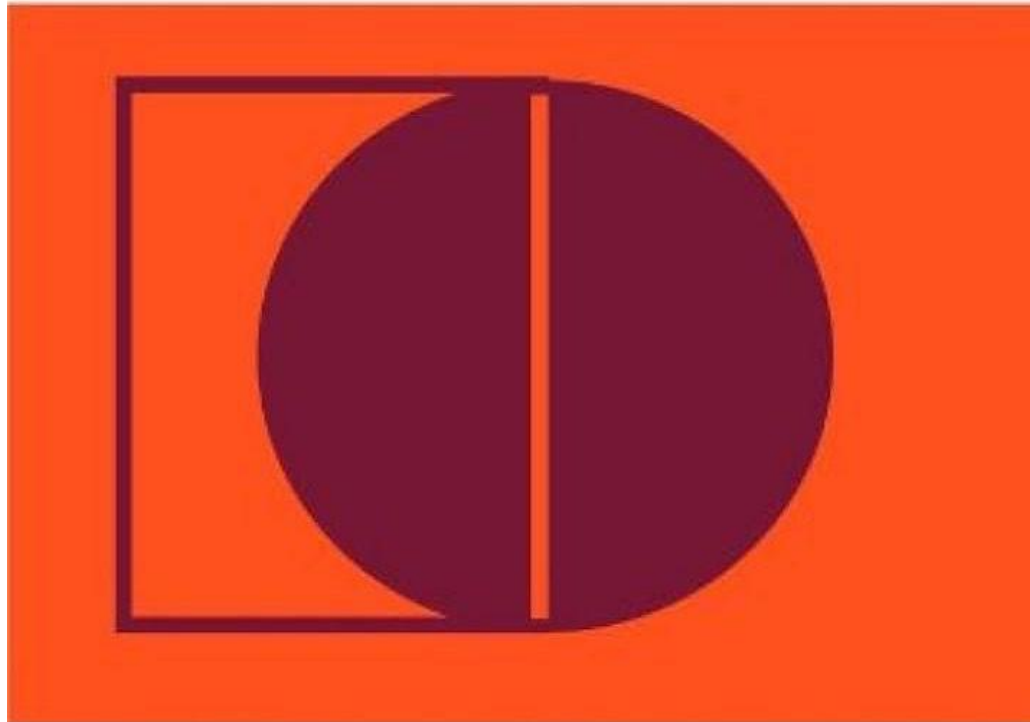


Case Studies I: Questions & Reflections

- What do these examples reveal about the role of artistic research in relation to scientific and societal concerns in more-than-human realms?
- Were their methods and modalities effective in investigating or interrogating these concerns and why?
- Whose agency do the works seek to foster and how does it shift or challenge our understanding or empathy for “others”?
- What disciplinary orientation(s) do the works engage to offer critical new insights?



MANIFESTO of TRANSDISCIPLINARITY



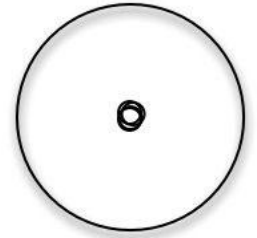
BASARAB NICOLESCU (2002)
TRANSLATED by KAREN-CLAIRE VOSS

Critiques and Challenges of Transdisciplinarity



1. Lack of a coherent conceptual framework and terminology
2. Risk of superficial understanding with limited depth of disciplinary expertise engaged
3. Complexity of integrating diverse knowledge systems and stakeholder perspectives within and beyond academic domains
4. Negotiating and managing process of co-learning across disciplinary boundaries, methodological, and epistemic views
5. Difficulty of evaluating the societal impact and contributions to “scientific” knowledge
6. Institutional barriers to teaching/learning, rewarding, and fostering cultures and environments for Transdisciplinarity to emerge and thrive

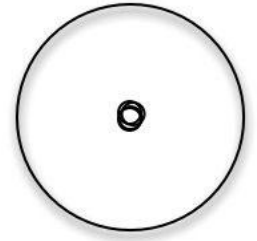
Origins of Transdisciplinarity



Swiss psychologist Jean Piaget, *The epistemology of interdisciplinary relationships* (essay, 1972):

“higher stage succeeding interdisciplinary relationships . . . which would not only cover interactions or reciprocities between specialised research projects, but would place these relationships within a total system without any firm boundaries between disciplines”.

Basarab Nicolescu, Theoretical Physicist
Manifesto of Transdisciplinarity (2002):



The objective of transdisciplinary is to understand the present world, in all its **complexities**, instead of focusing on one part of it.

Interdisciplinary research involving **scientific and non-scientific sources or practice**.

A new form of learning and problem-solving involving **cooperation among different parts of society**, including academia, in order to meet the complex challenges of society.



“Today there are hundreds of disciplines. **How can a theoretical particle physicist truly dialogue with a neurophysiologist**, a mathematician with a poet, a biologist with an economist, a politician with a computer programmer, beyond mouthing more or less trivial generalities?

Yet, **a true decision-maker must be able to dialogue with all of them at once**. Disciplinary language is an apparently insurmountable barrier for a neophyte, and each of us is a neophyte in some area. Is a modern tower of Babel inevitable?”

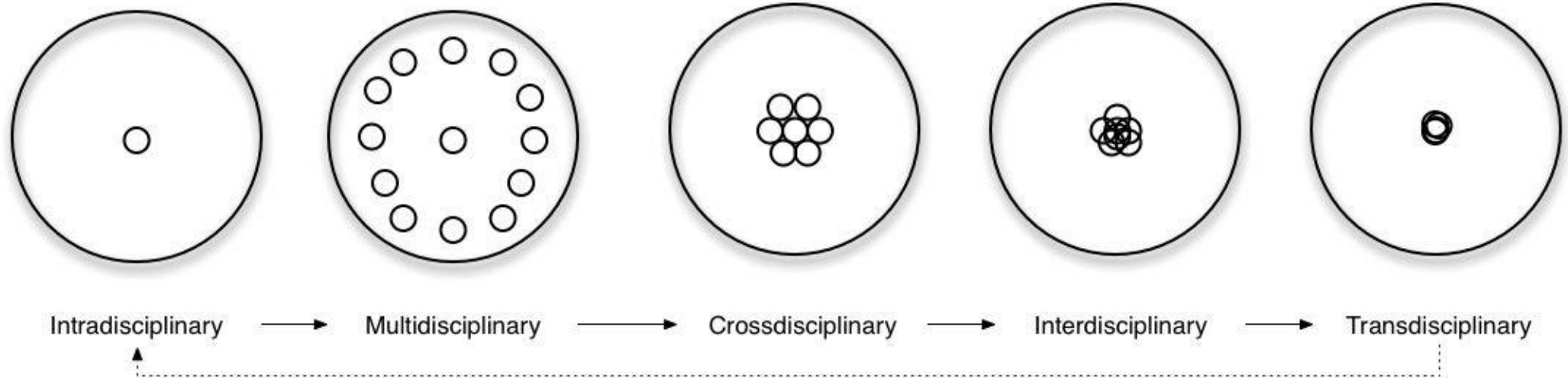
- Basarab Nicolescu, Manifesto of Transdisciplinarity (2002)



Giovanni Pico della Mirandola
Renaissance humanism
(1463 – 1494)

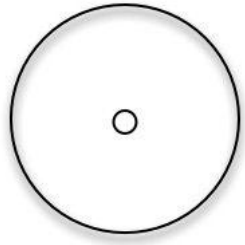
“Perhaps a Pico della Mirandola in our time could be conceivable if he took the form of a **supercomputer** into which one could load all the known data which has been generated by all existing disciplines. This supercomputer would be **capable of knowing everything while understanding nothing**. Its user would be no better off than the supercomputer itself. The user would have immediate access to any results from any discipline, but would be incapable of understanding their meanings, still less of making connections between the results of different disciplines.”

- Basarab Nicolescu, Manifesto of Transdisciplinarity (2002)



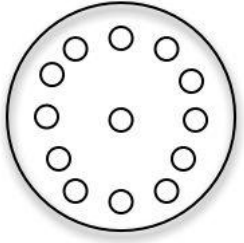
Pathways to Transdisciplinarity

Jensenius, A.R. (2012). Disciplinarity: intra, cross, multi, inter, trans
www.arj.no/.2012/03/12/disciplinarity-2



INTRADISCIPLINARY — WITHIN

Latin *intra*: “within, inside, on the inside” — **working within the frame of a single, recognized discipline.**

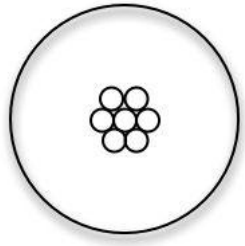


MULTIDISCIPLINARY — ADD, MULTIPLY

Latin *multus*: “much, many” — looking at one problem by adding **multiple perspectives and disciplines** to the mix.

In this process, a root discipline may involve other disciplines to solve a problem. Participants **exchange knowledge and compare results** but stop short of integrating them.

The **disciplines maintain their distinctiveness** and the results remain grounded in the framework of the root discipline.

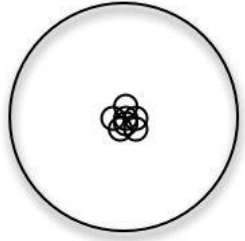


CROSSDISCIPLINARY — INTERSECT, TRANSFER

Latin *crux*: “intersecting, lying athwart each other” — **intersecting knowledge from two or more disciplines**, viewing one discipline from another perspective.

Researchers collaborate with the goal of **transferring knowledge from one discipline to another**.

Understanding the complex dynamics of environmental problems in a socioecological context is a typical cross-disciplinary approach.



INTERDISCIPLINARY — INTEGRATE, SYNTHESE

Latin *inter*: “among, between, betwixt, in the midst” — **integrating knowledge and methods** from different disciplines using a **synthesis of approaches**.

Interdisciplinary concerns **collaborations between contrasting academic disciplines** or research methods for new applications, new analyses, or the creation of entirely new disciplines.

For example, interdisciplinary research on information systems and biomedical research has given rise to the field of bioinformatics.

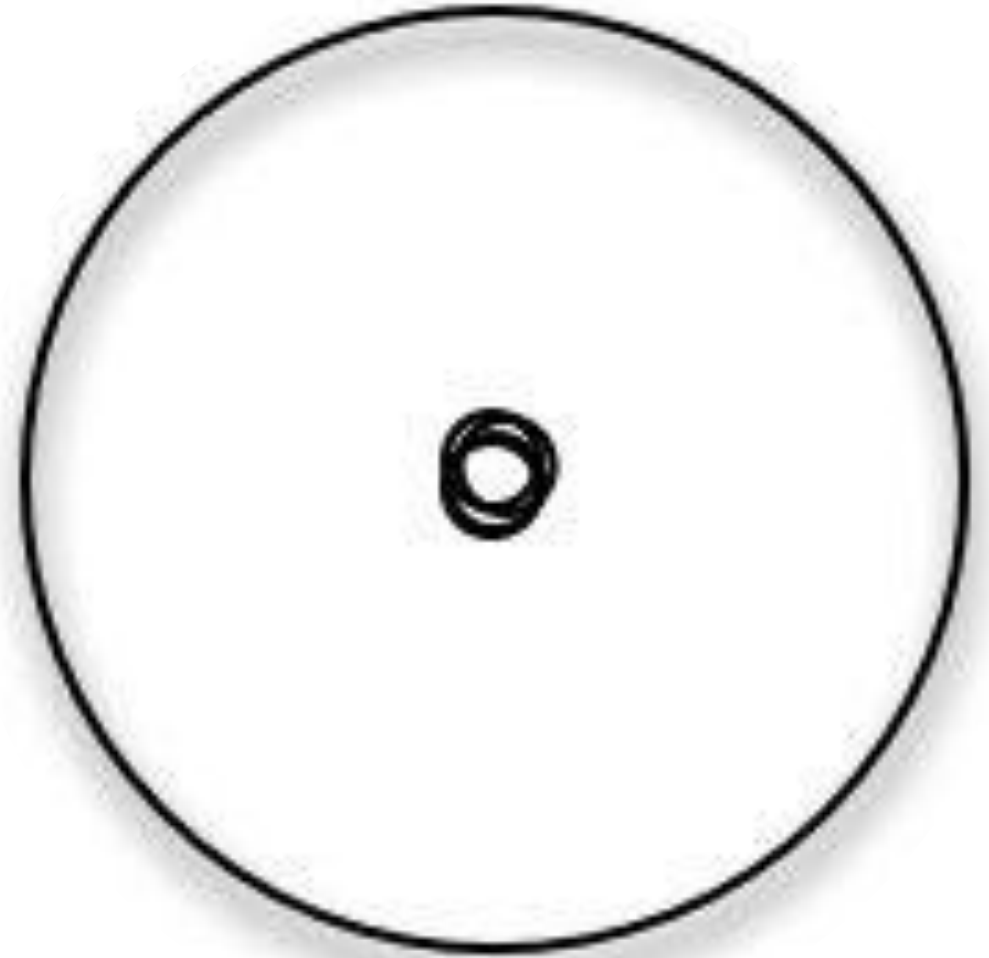
TRANSDISCIPLINARY — TRANSCEND, WHOLE

Latin *trans*: “across, over, beyond” —
emergence of a new discipline **transcending**
the boundaries of disciplinary perspective.

Transdisciplinarity combines interdisciplinarity
with a **participatory** approach.

The research paradigms involve **non-academic
participants** as (equal) participants in the
process for a common goal — towards a
transformational condition in society (*not
necessarily a solution*).

Culmination of interdisciplinary efforts, relating
all disciplines into a **coherent whole**.



PEACEBUILDING AND THE PROMISE OF TRANSDISCIPLINARITY

Richard Lappin

Ph.D. Candidate
Centre for Peace Research and Strategic Studies
Catholic University of Leuven
Belgium

Richard Lappin is a Ph.D. candidate at the Centre for Peace Research and Strategic Studies at the Catholic University of Leuven in Belgium under the supervision of Prof. Dr. Luc Reyckler. Richard has participated in several post-conflict peacebuilding missions with a variety of organizations.

A transdisciplinary approach to peacebuilding is compelling. Undeniably there is a semantic appeal to its claims of rising above disciplinary limitations and forging new ways of thinking. But what do we really understand by this concept? What are its possibilities and limitations? And, moreover, how can we harness its promise of creative and sustainable solutions in the service of peacebuilding?

THE CHALLENGE OF PEACE-BUILDING

Peacebuilding is a wide-ranging process which depends upon several interdependent approaches. From the establishment of peace agreements and new institutions of government to the promotion of economic reconstruction and social reconciliation, peacebuilding is a highly complex, and often daunting, task. It is also a long-term and multi-faceted process and, if a lasting and sustainable peace is to emerge, peacebuilding has to address not only the symptoms of a conflict—manifest, physical violence—but also the broader, underlying causes of the conflict. As such, peacebuilding not only involves addressing multiple problems, but also multiple interpretations of the origins of these problems and the reasons why

Theory, Culture & Society
Volume 32, Issue 5-6, September-November 2015, Pages 159-182
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<https://doi.org/10.1177/0263276415594238>



Article - II. Transdisciplines



Contradiction of Terms: Feminist Theory, Philosophy and Transdisciplinarity

Stella Sandford

Abstract

This article addresses the question of the relation between disciplines and transdisciplinary practices and concepts through a discussion of the relationship between philosophy and the emblematically transdisciplinary practice of feminist theory, via a discussion of interdisciplinarity and related terms in gender studies. It argues that the tendency of philosophy to reject feminist theory, as alien to it as a discipline, is in a sense correct, to the extent that the two defining features of feminist theory – its constitutive tie to a political agenda for social change and the transdisciplinary character of many of its central concepts – are indeed at odds with, and pose a threat to, the traditional insularity of the discipline of philosophy. If feminist philosophy incorporates feminist theory, its transdisciplinary aspects thus open it up to an unavoidable contradiction. Nonetheless, I will argue, this is a contradiction that can and must be endured and made productive.

Keywords

critical theory, feminism, gender, philosophy, transdisciplinarity

Kingston University London

Corresponding author(s):

Stella Sandford. Email: S.Sandford@kingston.ac.uk

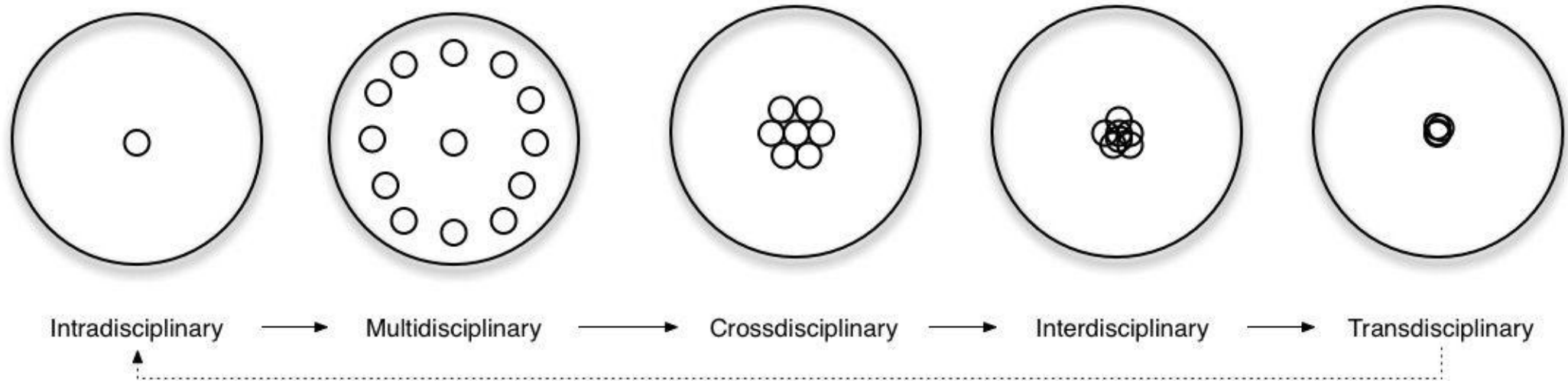
What happens when well-defined disciplines meet or are confronted with transdisciplinary discourses

“transdisciplinarity concerns that which is at once between the disciplines, across the different disciplines, and beyond all discipline. Its goal is the understanding of the present world , of which one of the imperatives is the unity of knowledge.” ...

“Disciplinarity, multidisciplinary, interdisciplinarity and transdisciplinarity are like **four arrows shot from but a single bow: knowledge .**

As in the case of disciplinarity, **transdisciplinary research is not antagonistic but complementary** to multidisciplinary and interdisciplinarity research.”

- Basarab Nicolescu, Manifesto of Transdisciplinarity (2002)



**Knowledge inquiry on the spectrum of disciplinarity:
*Towards a Transdisciplinary orientation...***



**ANTIDISCIPLINARY
— WITHOUT**

Questions & Reflections:

1. Examine any existing field and consider where it lies on the spectrum of disciplinarity and why?
2. Choose notable person(s) and consider how they developed a Transdisciplinary orientation or practice in their work?
3. How did their work shape new forms of Transdisciplinary understanding? What compelling societal outcomes emerged?

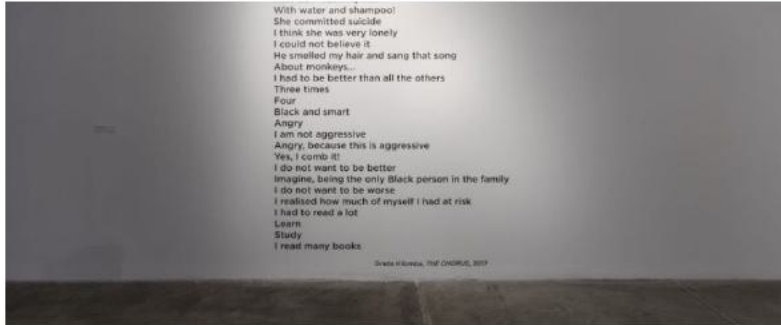
A close-up portrait of Grada Kilomba, a Black woman with her hair in braids, resting her chin on her hand. The background is a plain wall with a small framed portrait of a man and some papers pinned to it.

**Transdisciplinary artist Grada Kilomba reminds
us of the severity of social oppression**

Berlin

Grada Kilomba

ARTWORKS ABOUT EXHIBITIONS NEWS PRESS



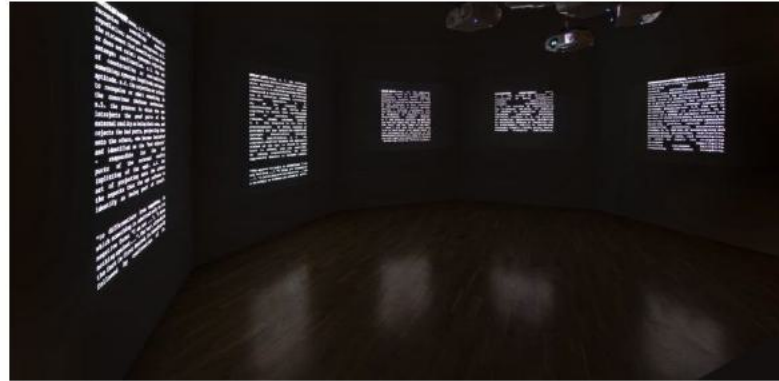
The Chorus

2017

Wall Installation, a poem printed in vinyl on the wall.

Available on Request

[Add to My Selection](#)



The Dictionary

2019

Five-channel black and white video installation, HD, black and white, sound, 10', looped.

Available on Request

[Add to My Selection](#)



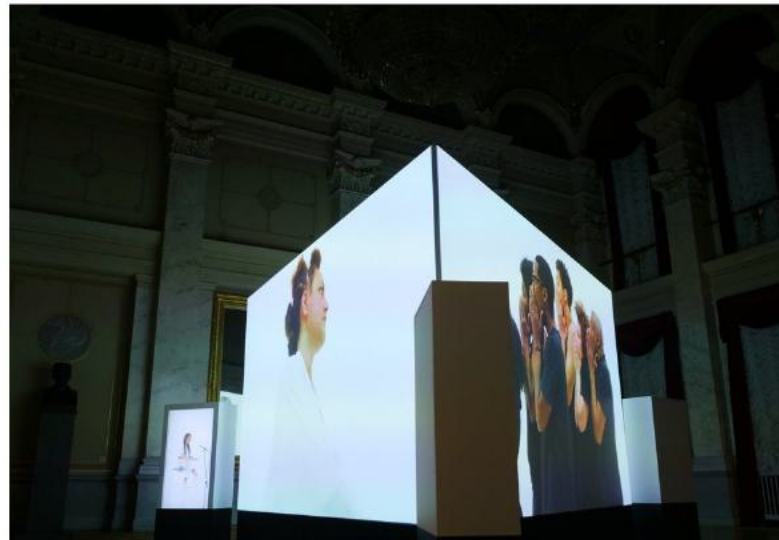
Illusions Vol. I, Narcissus and Echo

2017

Two-channel video installation, HD, colour, sound.

Available on Request

[Add to My Selection](#)







Krzysztof Wodiczko

Personal Instrument (1969)

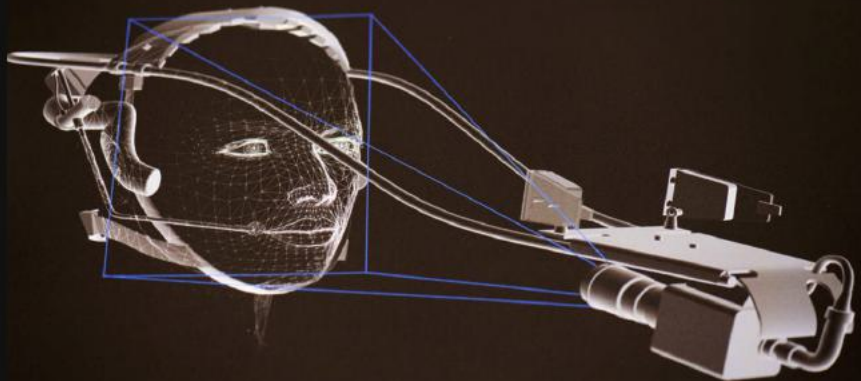
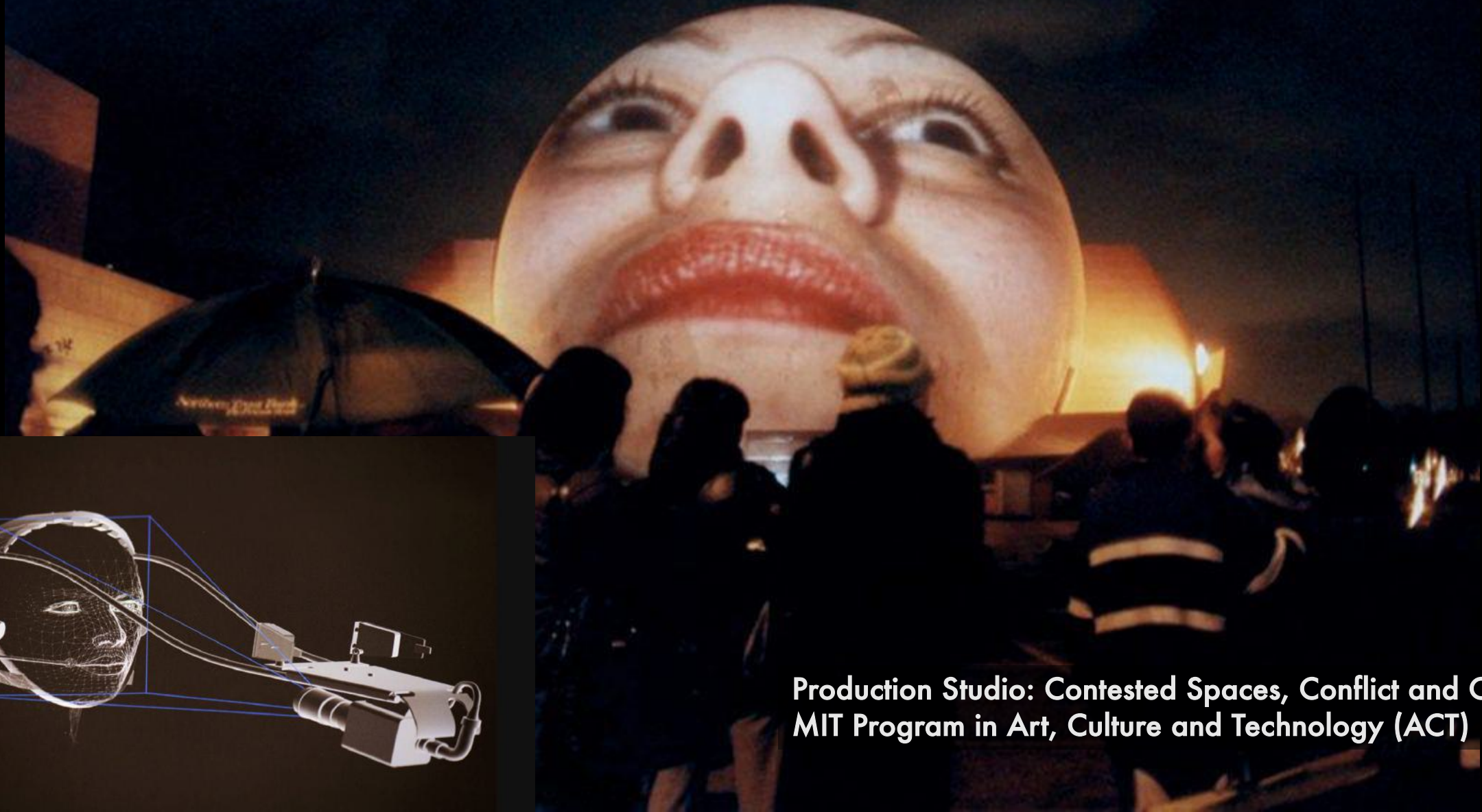


Pojazd (1971)

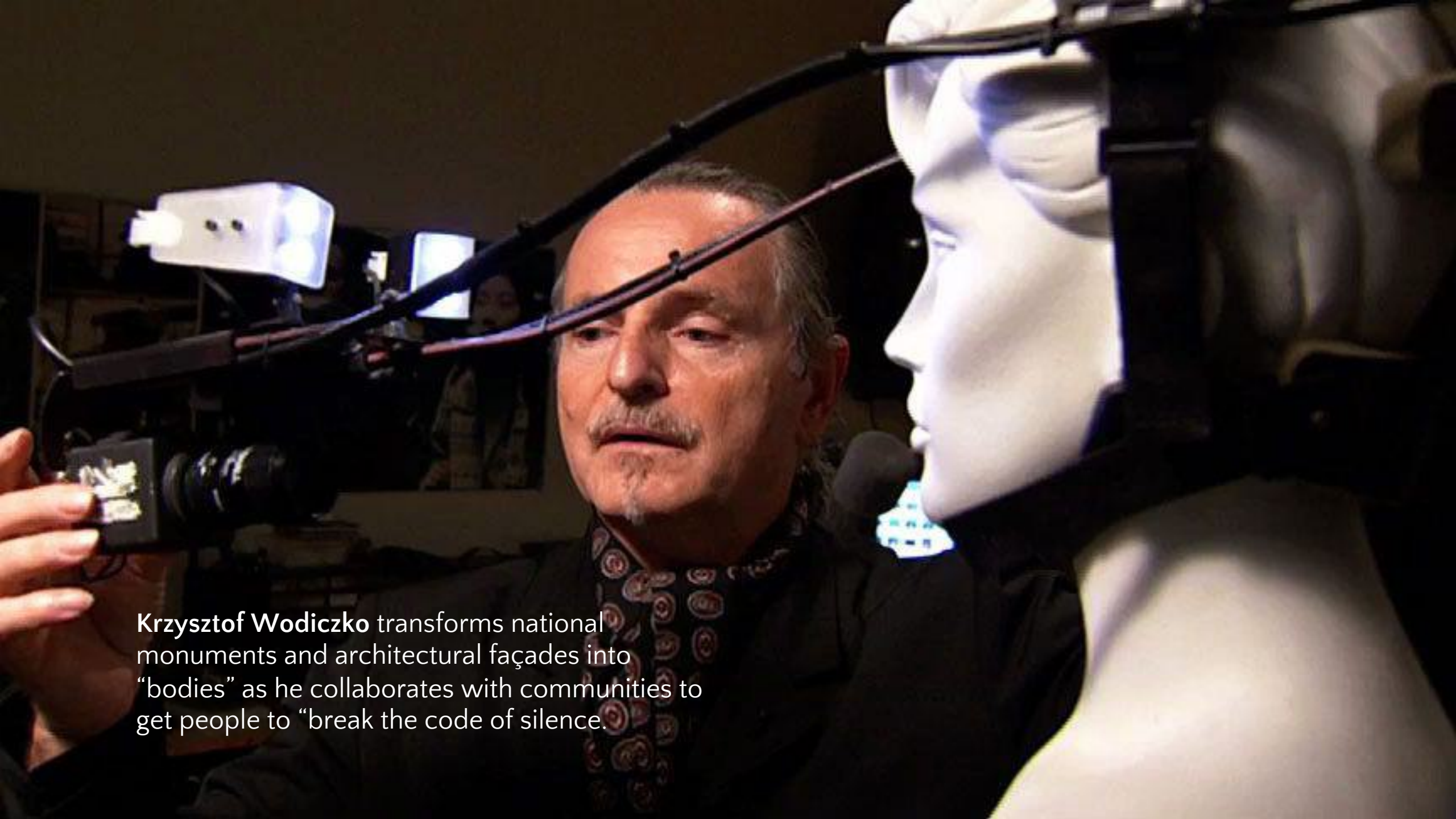


Poliscar Variant 2 (1991)

Tijuana Projection
Krzysztof Wodiczko
El Centro Cultura
Tijuana, Mexico (2001)



Production Studio: Contested Spaces, Conflict and Crisis
MIT Program in Art, Culture and Technology (ACT)



Krzysztof Wodiczko transforms national monuments and architectural façades into “bodies” as he collaborates with communities to get people to “break the code of silence.”



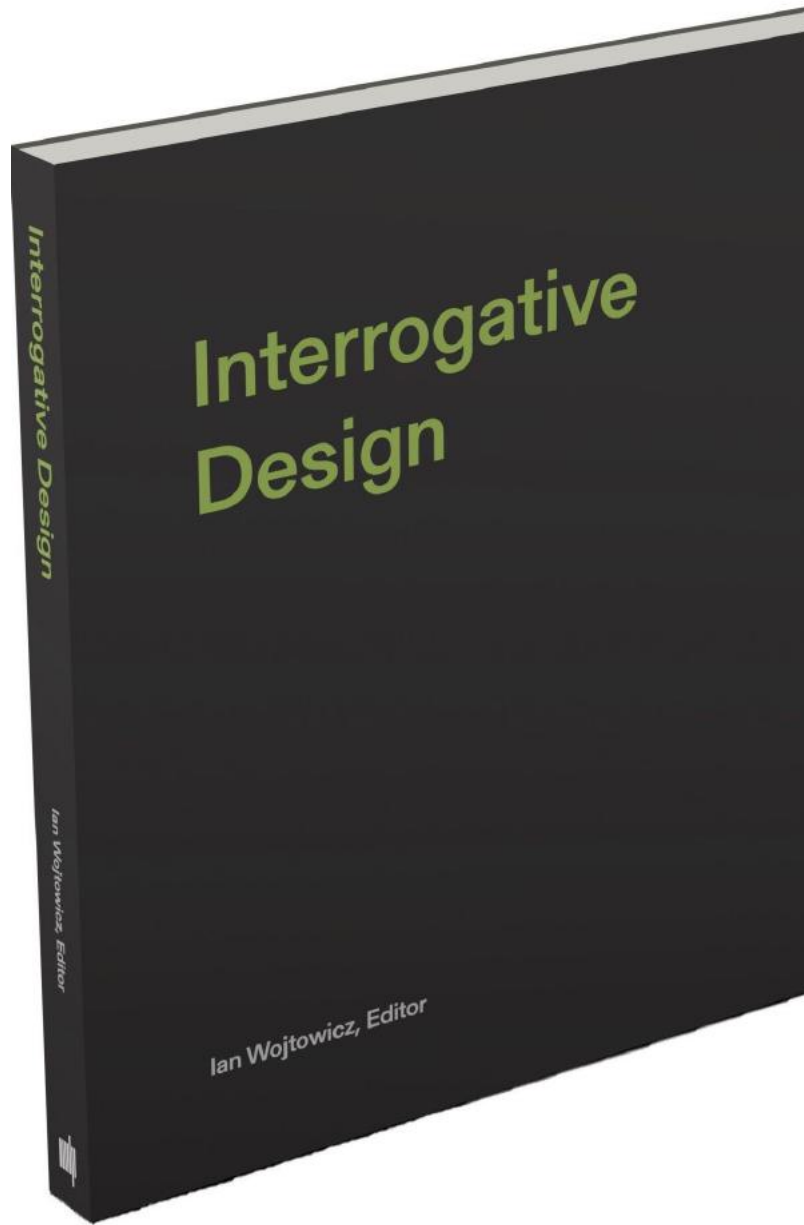
Illuminating Student Debt

WHAT DOES
MEAN TO YOU?
ENSLAVING
WHO ARE KI
TO MAKE A

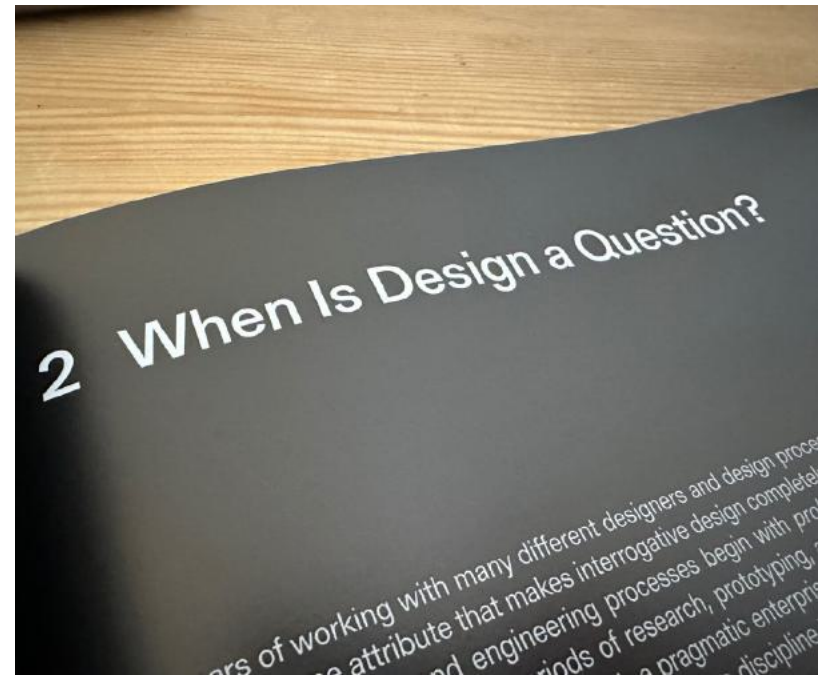
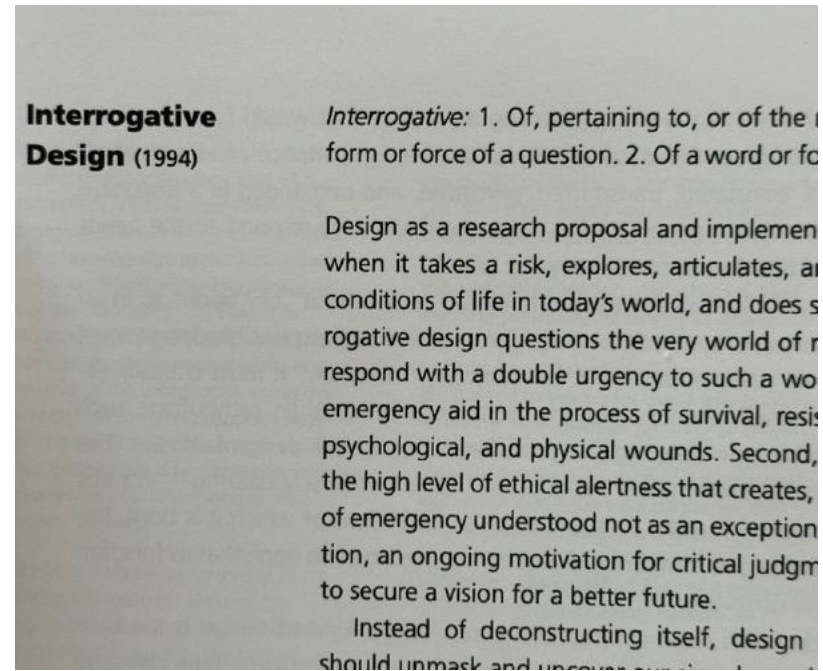
STUDENT DEBT
(202)999-3273
THE PEOPLE
KNOWLEDGEABLE
DIFFERENCE...

Production Studio: *Civic Media and Tactical Design in
Contested Spaces (The New School)*

Chris Rogy, New York City (2012)

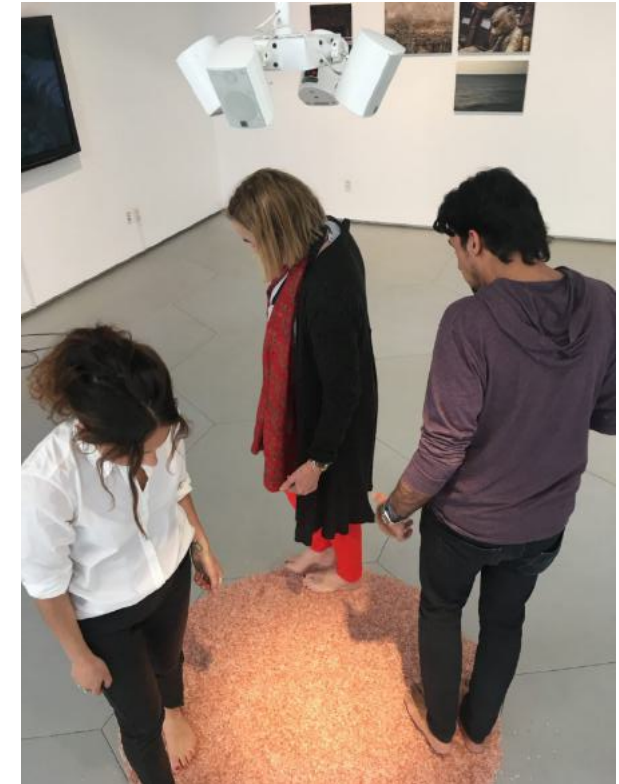


Interrogative Design, Ed. Ian Wojtowicz
MIT Press, December 2024



Transdisciplinary Orientation to Artistic Research & Practices in Contested Spaces

Curatorial | Participatory | Performative





Seminar: Art, Media and Conflict
Guatemala Post-Genocide (The New School)



Participatory Curatorial Research: Artistic Practices of Historical Memory and Genocide in Guatemala (2014 - 2017)



GUATEMALA
**DES
 PUÉS**
 APRIL 9 - 29 2015
 THE NEW SCHOOL Ciudad de la Imaginación



"COLLOQUIA," AN ARTISTS SPACE INITIATED BY ARTISTS, CURATORS, AND GALLERISTS; OPENS ITS DOORS. COLLOQUIA BROUGHT GUATEMALAN WORK TO THE INTERNATIONAL CONTEMPORARY ART WORLD.

"CLARIFICATION", A PHOTOGRAPH BY DANIEL HERNANDEZ SALAZAR, BECOMES A SYMBOL ASSOCIATED WITH MONSIGNOR JUAN GERADI'S ASSASSINATION.

REGINA JOSÉ GALINDO'S FIRST PERFORMANCE "LO VOY A GRITAR AL VIENTO" (I WILL SHOUT IT TO THE WIND).



1991

1992

1993

1994

1995

1996

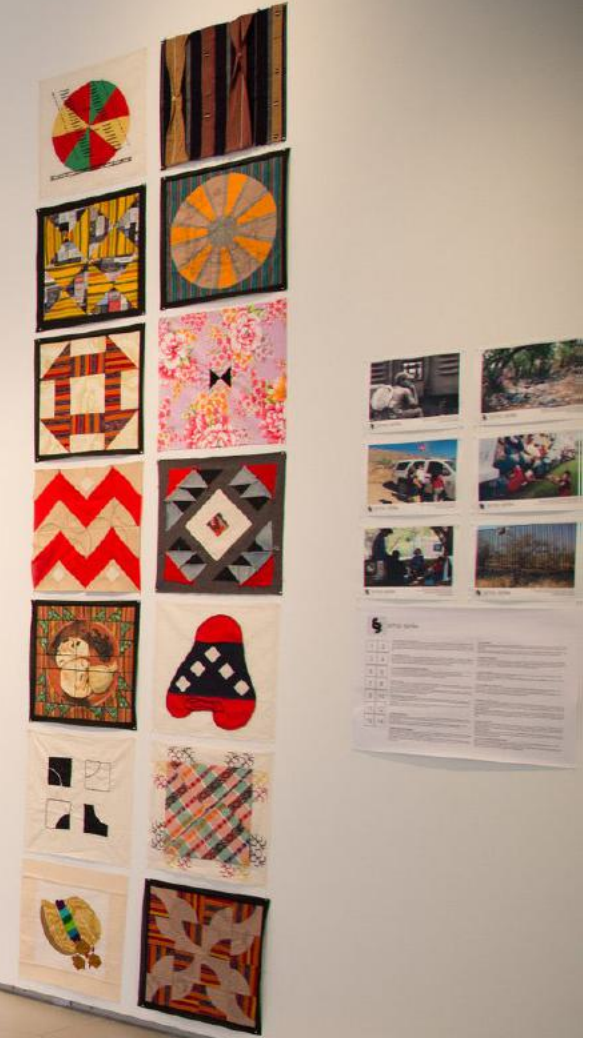
1997

1998

1999

Production Studio: *Curatorial Design and Media Practices*
 Guatemala Después (The New School)

**Guatemala Después: Curatorial Research
and International Exhibitions (2014 – 2017)**



**Co-curated with Anabella Acevedo & Pablo José
Ramírez, showcasing works by over 40 Guatemalan
artists, scholars and indigenous practitioners**

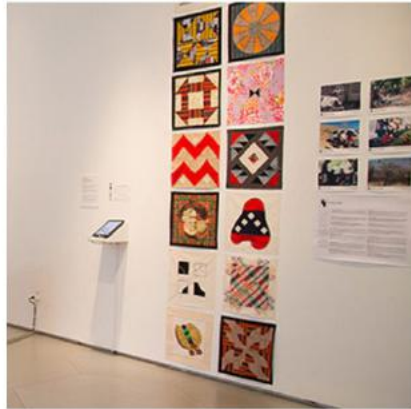
The New School, New York | Ciudad de la Imaginación, Quetzaltenango | Spanish Cultural Center, Guatemala City



Acevedo, A., Ramirez, J. P., and Sawhney, N. 2015. Guatemala Después: Rethinking the Past, Reimagining the Future. Printed exhibition catalogue with artist/curator statements (in English and Spanish). Ciudad de la Imaginación, Quetzaltenango, Guatemala, ISBN: 978-9929-668-03-4.

ARTWORKS / OBRAS

Sitio-Seña



Can you hear me? / ¿Me escuchas? (Atol con el dedo)



Going back to the starting point / Volviendo a la punta de partida

K'ai K'atun



I will never harm a woman, I owe my life to one / Nunca lastimaré a una mujer, a una debo mi vida



Who Can Erase the Traces? / ¿Quién puede borrar las huellas?





MUCHO ASÍ NO
SALIR SINTE
LIBRE

RUIDOS

RECONSTRUCCIÓN
CENTRO
CARRERA VIVA

COLECCIÓN

TIRABO

MIEDO

AMNÉSIA
HISTÓRICA
SELECTIVA

CANGAJO

MIEDO

Ideas
Poder
Realizadas

CAMBIO

Zona Intervenida, proyecto de

colectivo
andén

ZONA
INTERVENIDA
interacciones artísticas

Participatory research on historical memory and genocide, Quetzaltenango, Guatemala



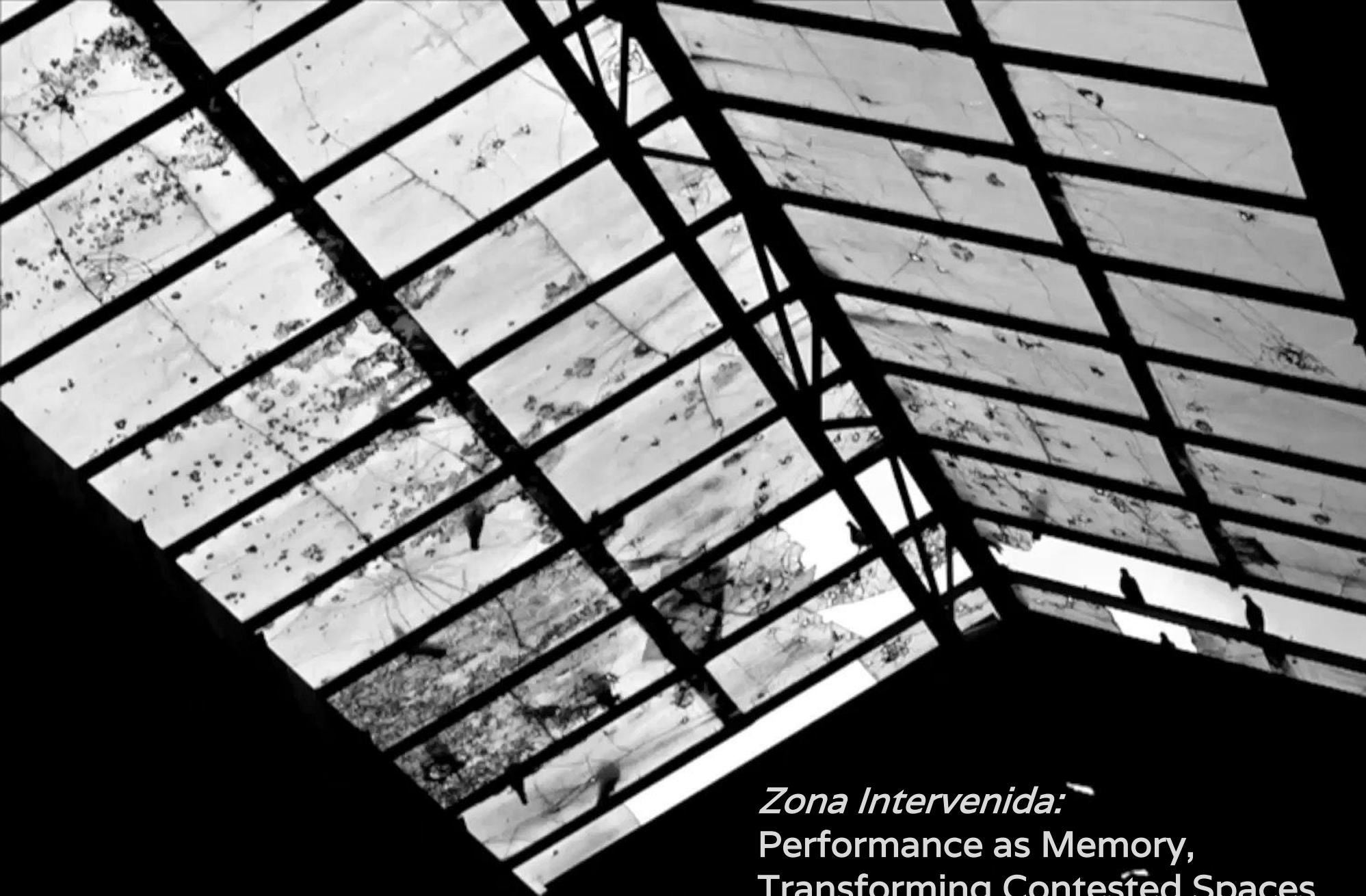
Interrogating a former military base and train complex in Quetzaltenango, Guatemala



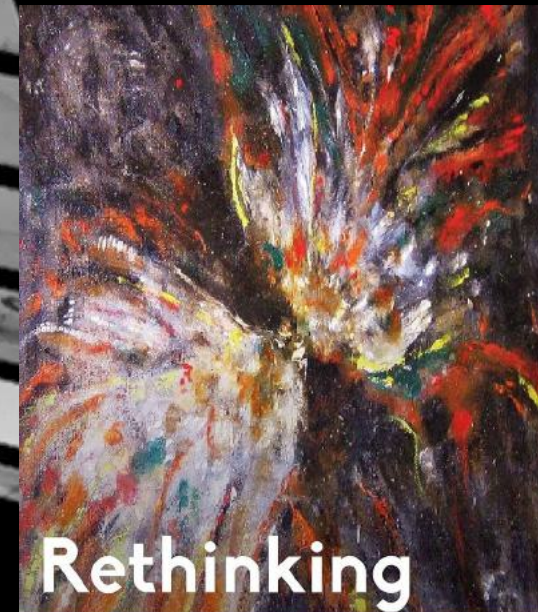


Doc film: Zona Intervenida
Guatemala (2014 - 2017)





Zona Intervenida:
Performance as Memory,
Transforming Contested Spaces
Quetzaltenango, Guatemala (2019)



Rethinking Peace

DISCOURSE, MEMORY, TRANSLATION,
AND DIALOGUE

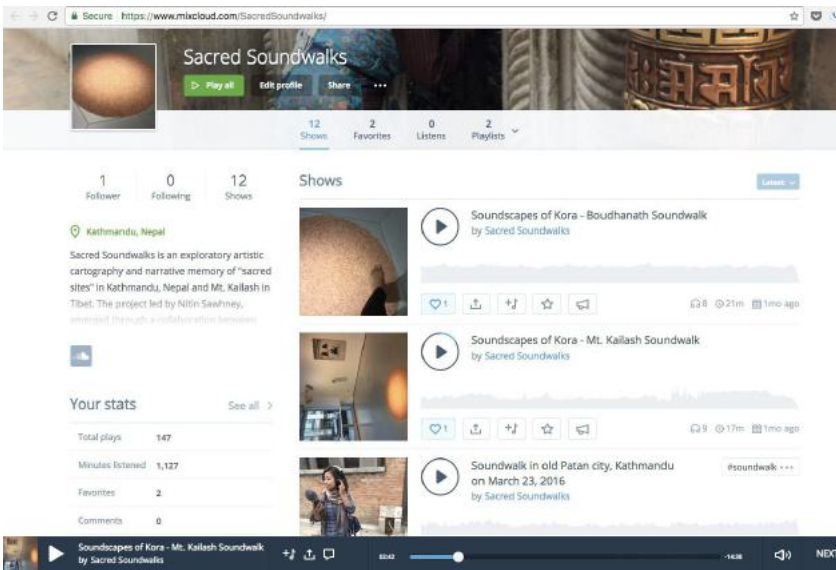
EDITED BY ALEXANDER LABAN HINTON,
GIORGIO SHANI AND JEREMIAH ALBERG

Walking through Sacred Landscapes: Encountering Soundscapes in Mt. Kailash (Nepal/Tibet 2015-2017)







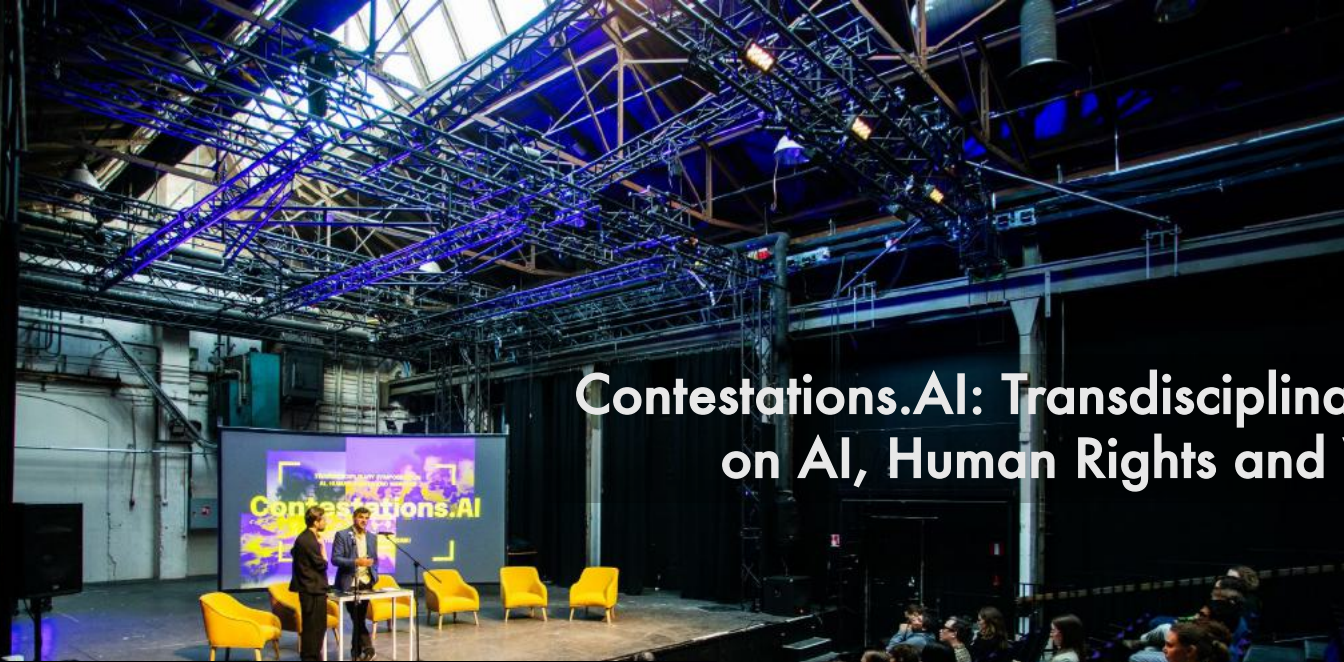


Soundscapes of Kora | Kailash Cartographies | March - April 2017 | The New School, New York

RELEVANT PUBLICATIONS

1. Bernstein, J. H. (2015). **Transdisciplinarity: A Review of Its Origins, Development, and Current Issues.** *Journal of Research Practice*, 11, Article No. R1.
2. Jensenius, A.R. (2012). **Disciplinarity: intra, cross, multi, inter, trans.** www.arj.no/.2012/03/12/disciplinarity-2
3. Lappin, R. (2009). **Peacebuilding and the Promise of Transdisciplinarity.** *International Journal on World Peace* 26, no. 3: 69–76.
4. Nicolescu, B. (2002). **Manifesto of Transdisciplinarity.** Albany: State University of New York Press.
5. Sandford, S. (2015). **Contradiction of Terms: Feminist Theory, Philosophy and Transdisciplinarity.** *Theory, Culture & Society*, 32.
6. Acevedo, A., Ramirez, J. P. & Sawhney, N. (2015). **Guatemala Después: Rethinking the Past, Reimagining the Future.** Printed exhibition catalogue with artist/curator statements (in English and Spanish). Ciudad de la Imaginación, Quetzaltenango, Guatemala, ISBN: 978-9929-668-03-4.
7. Sawhney, N. (2019). **Zona Intervenida: Performance as Memory, Transforming Contested Spaces.** *In Rethinking Peace: Discourse, Memory, Translation, and Dialogue*, Edited by Jeremiah Alberg, Alex Hinton and Giorgio Shani, Rowman & Littlefield International.
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Contestations.AI: Transdisciplinary Symposium on AI, Human Rights and Warfare



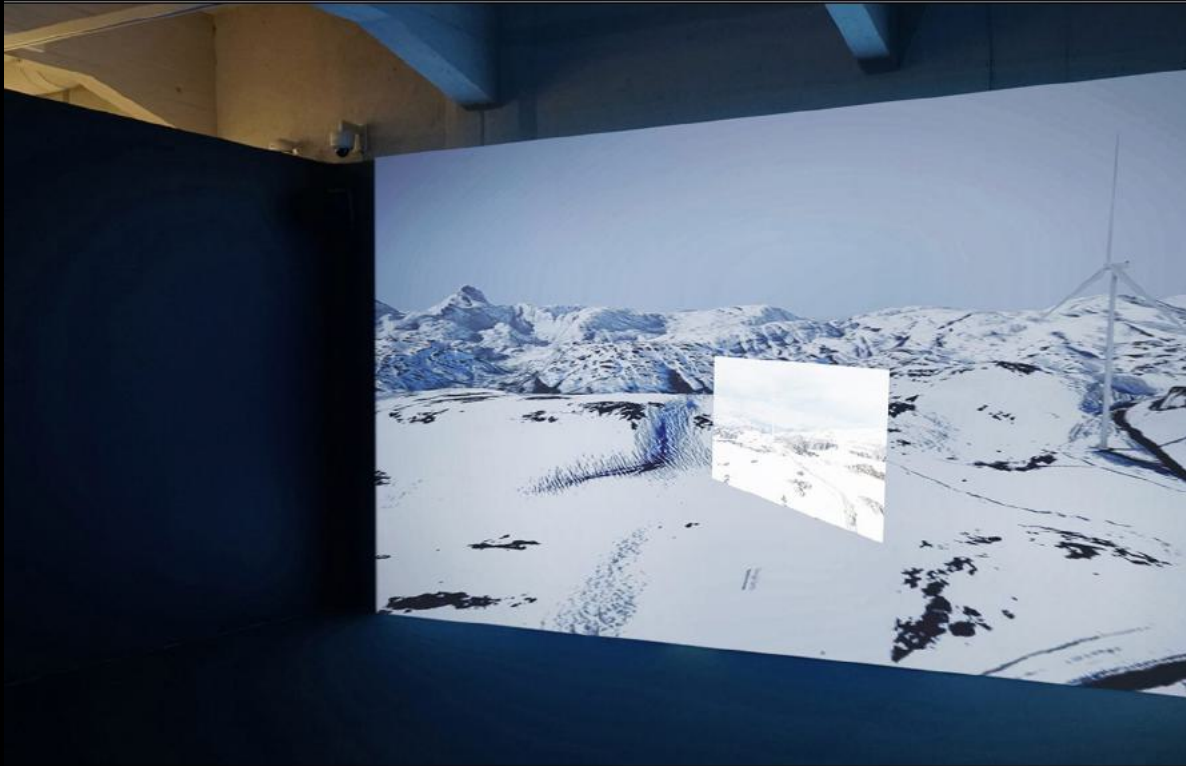
Engaging Investigative Aesthetics for Social Justice

INTERPRT

PROJECTS

ECOCIDE STUDIES

ABOUT



COLONIAL PRESENT: COUNTER-MAPPING THE TRUTH AND RECONCILIATION COMMISSIONS IN SÁPMI

Helsinki Biennial 2023

INTERPRT

OCTOBER 23, 2024
THE TRAIN FACTORY, HELSINKI
& LIVESTREAMED



You struggle with it the whole year.

Treacherous Journey: Modelling Jillen-Njaarke's ways of knowing against Øyfjellet wind

INTERPRT/Climate Rights

DESCRIPTION

Commissioned by HAM/Helsinki Biennial 2023, Treacherous Journey is an account of Sami ways of reindeer herding. The film features interviews with Jillen-Njaarke herders, contextual information of the Øyfjellet wind farm development, and was developed in collaboration with Sami herder, Ole Henrik Kappfjell, who operated and shot aerial footage, the film represents a detailed case study into green colonialism in Norway.

Co-investigators: Nabil Ahmed and Olga Lucko

Architectural research: Tiago Patatas

Research: Esther Breslin

3D development and game engine: Gwil Hughes and Mingxin Li

Satellite imagery analysis: Paulo J. Murillo-Sandoval

Video editing: Prerna Bishnoi

Motion graphics: Filip Wesolowski

Collaboration:

Jillen Njaarjke reindeer herding community, Dalan Advokatfirma, Protect Sapmi, Oskar Johanson



WATCH



Interrogating Contestations: Transdisciplinary Inquiry & Investigative Aesthetics

- Two-part course with research seminar and site-specific project
- Examining and writing critical essays and media works for conceptual, philosophical and artistic research in thematic domains
- Engaging with a site or space of contestation (placed-based or online)
- Interdisciplinary inquiry using film, digital media, machine learning, sound, testimonies, spatial analysis, and information visualization
- Work closely with a societal research partner to frame, offer expertise, and sustain the impact of the inquiry
- Conduct participatory action research with concerned communities
- Co-create interrogative media artifacts that ask critical questions and reveal emerging contingencies
- Engage diverse public(s) and decision-makers in informed action
- Exhibit or publish outcomes with critical reflection and learnings



The Beirut Port Explosion
Forensic Architecture, 2020 - 2023



Nécrose: Experimental Doc Film
François Yazbeck, 2024

Engaging Transdisciplinary Inquiry in Artistic Research



Nitin Sawhney, Ph.D.
Visiting Researcher

University of the Arts
Research Institute

October 10, 2025