



poetics of performative space

art research

sha xin wei, ph.d.
sponge & topological media lab concordia & hexagram
harvestworks • february 2006



life world

ethico-aesthetic play

[representation of] lifeworld

Wovon man nicht sprechen kann,
darüber muß man schweigen.
Die Ethik nicht aussprechen lasst. ...
(Die Ethik und Ästhetik sind Eins.)

Wittgenstein

Il n'y a pas de hors-texte.

Derrida:

[representation of] lifeworld

Wovon man nicht sprechen kann,
darüber muß man schweigen.
Die Ethik nicht aussprechen lasst. ...
(Die Ethik und Ästhetik sind Eins.)

Wittgenstein

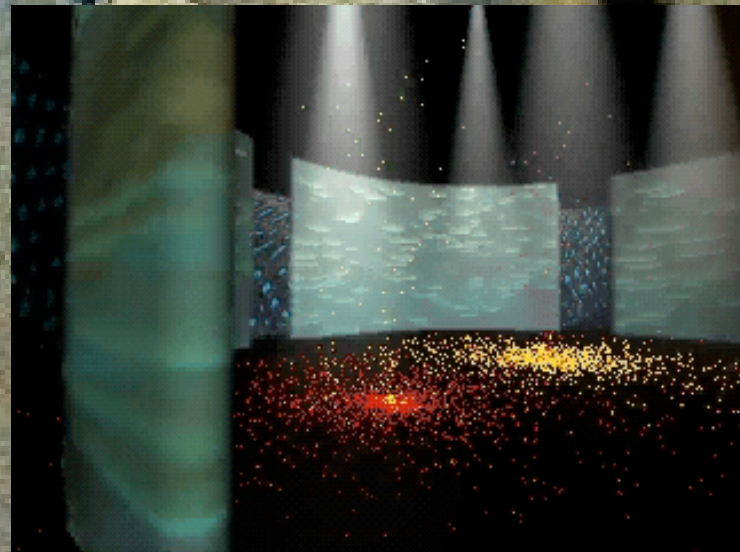
Il n'y a pas de hors-texte.

Derrida



_1 public responsive playspaces

1999-2005



a t garden dreamed 1999

tgarden spaces



sponge + FoAM

tgarden responsive spaces



ars electronica linz

v2 rotterdam



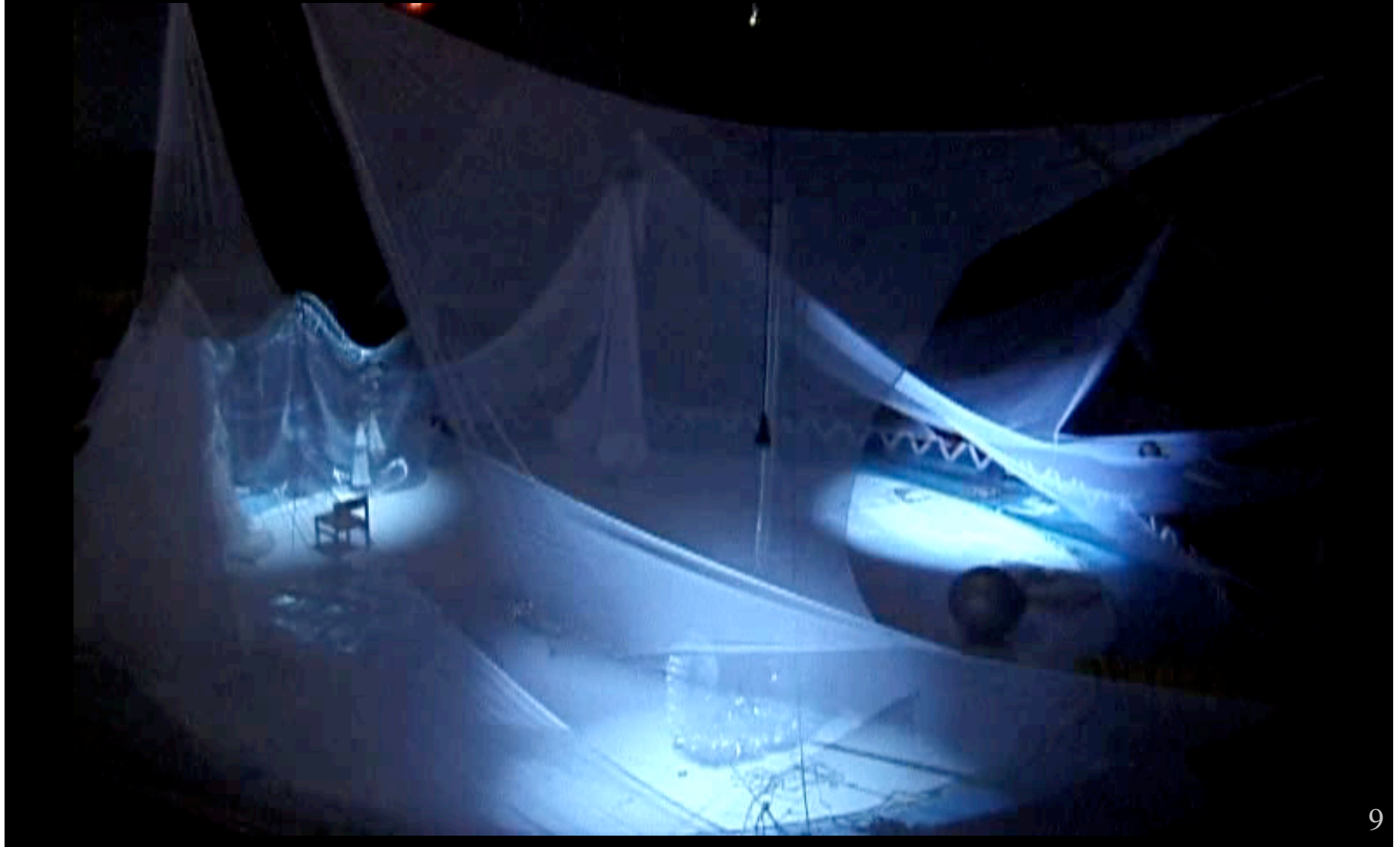
sponge + FoAM

tg2001 responsive space

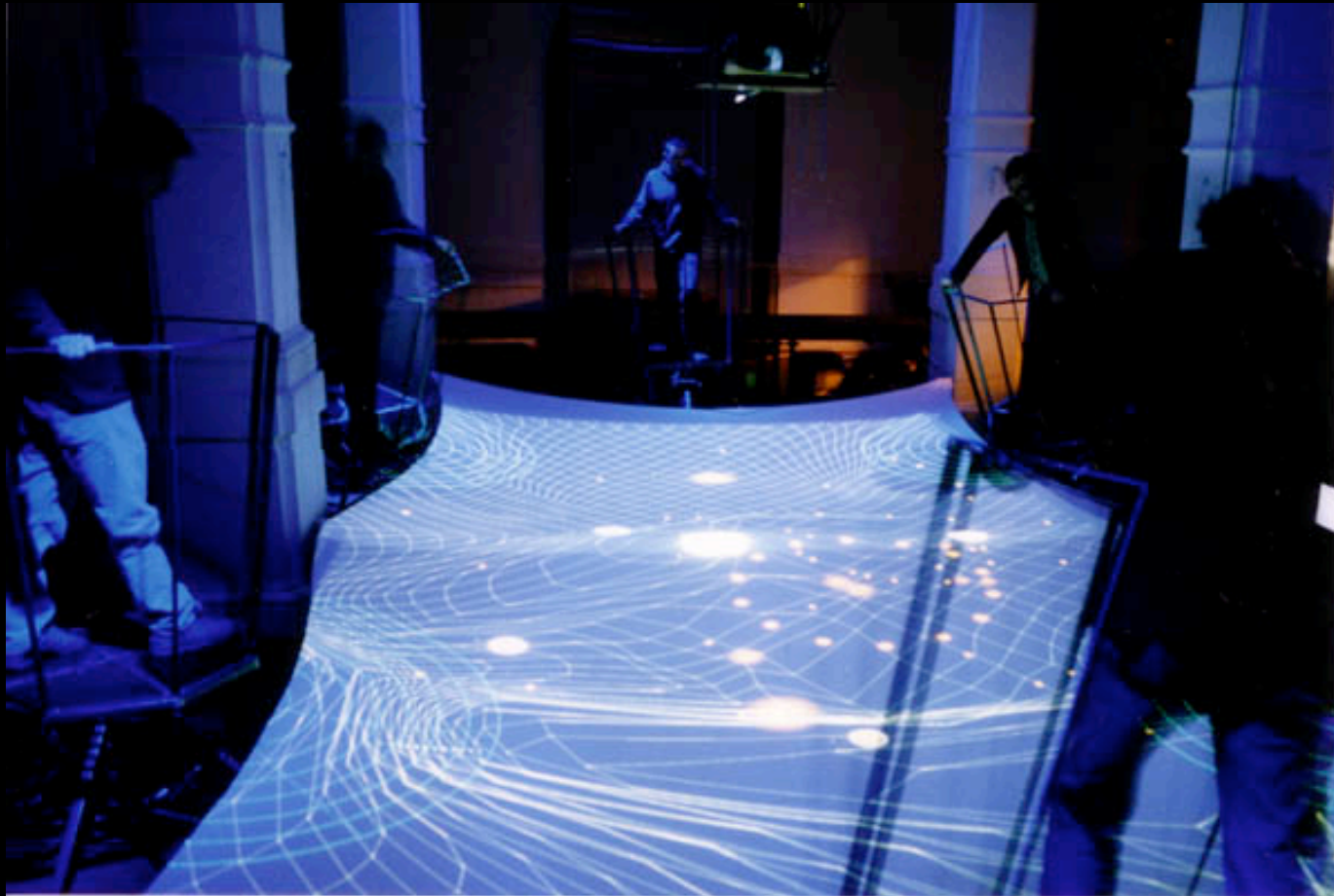


sponge + FoAM

txOom FoAM

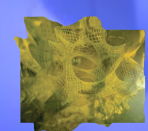


A Balanced Act Times Up





foAM



<http://fo.am/trg>

An abstract painting with a textured surface. The background is a mix of light blue and grey. There are several prominent orange and brownish-red shapes, some of which are elongated and curved. Dark, almost black, lines and shapes are scattered throughout, some resembling veins or cracks. The overall effect is one of organic, somewhat chaotic patterns.

_2 responsive media research

**ART RESEARCH:
NOT ART, BUT RESEARCH MOTIVATED FROM AND
VALIDATED BY ART**
topological media lab

Visual Instruments
Apple G4 Powermac
Max/Jitter

Sound Instruments
Apple G4 Powermac
Max/MSP

Media Choreography and
Show Control (DMX512)
Apple G4 Powermac
Max



tmlg4graphics #1



tmlG4sound



tmlG4oz



tmlg4graphics #2



co-structuration



tmlserver

Linux on PC i686
NSF Fileserver (Common Code Share)

199.77.199.229 tmlserver (#1)
199.77.128.180 tmlG4graphics

materiality, palpability

tg2001 sponge foam

materiality, palpability: field models



Erik Conrad, Y. Serita, Jehan Moghazy ++ TML 2002

calligraphic video



fire, smoke / Yoichiro Serita et al. TML 2003

wearables: gestural sound



gestural sound: tml @ ubicomp 2003

softwear

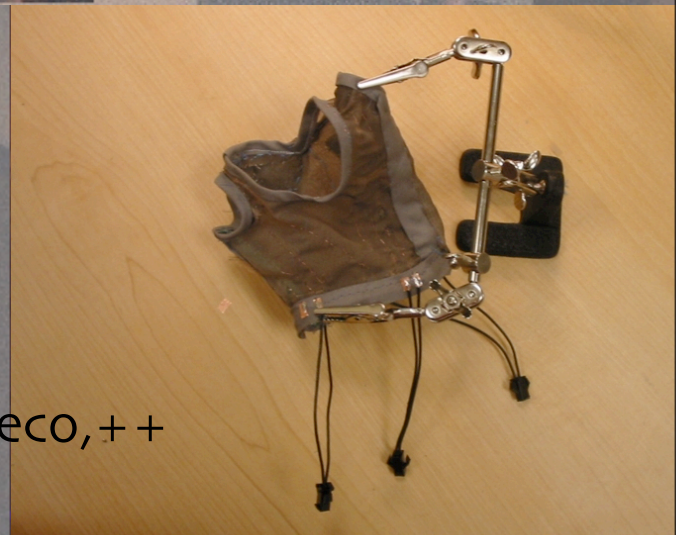


Hexagram: Berzowska et al.

TML 2002-2004:

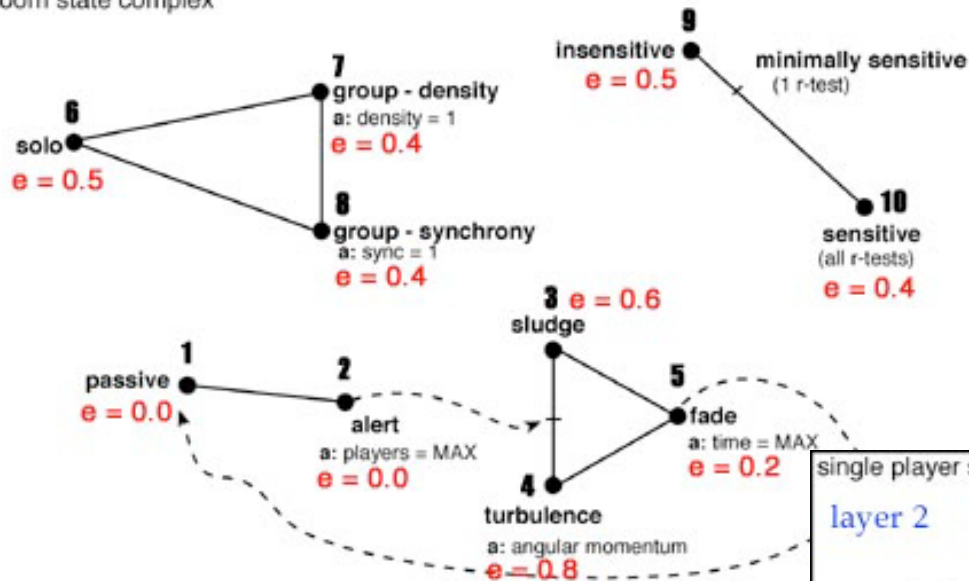
Jill Fantauzza, Sungmee Park,

Yvonne Caravia, Seungyon Lee, Gabriela Semeco,++



media choreography

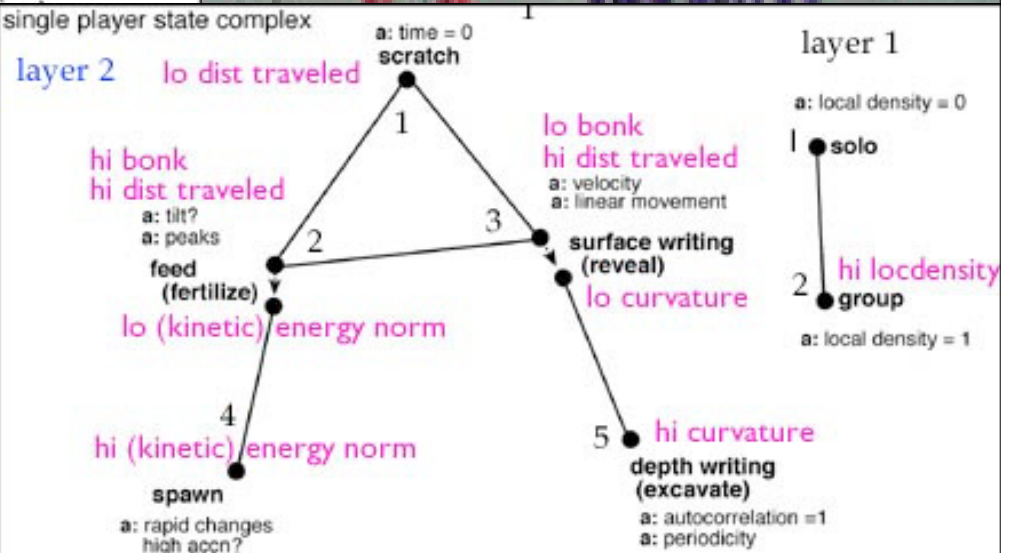
room state complex



continuous state topologies for room and each person

metaphorical labels superposed states continuous evolution

single player state complex



dynamics on manifolds

Total manifold = Metaphorical State \times Observable

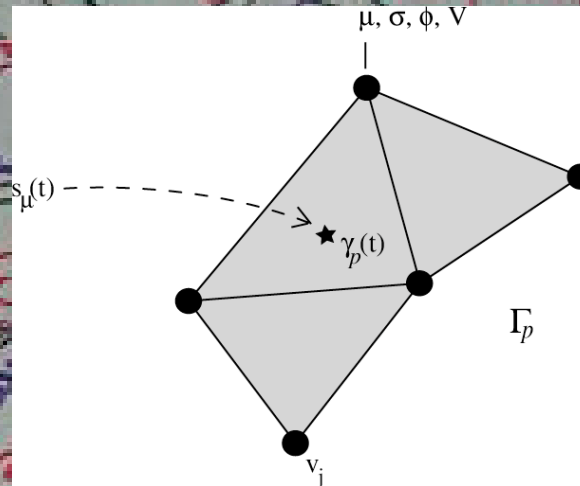
$$M = \prod_{p=0}^{N_p} M_p = \prod_{p=0}^{N_p} \Gamma_p \times S_p.$$

State is a convex combination of elementary state

$$\gamma_p(t) = \sum_{j=1}^N \lambda_j(t) v_j$$

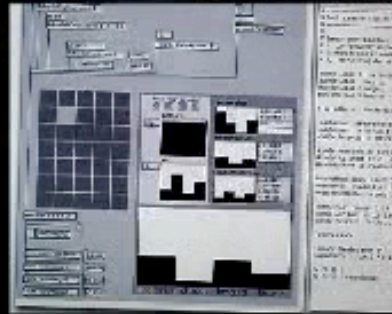
$$\sum_{j=1}^N \lambda_j(t) \equiv 1.$$

dynamical system on simplicial complex



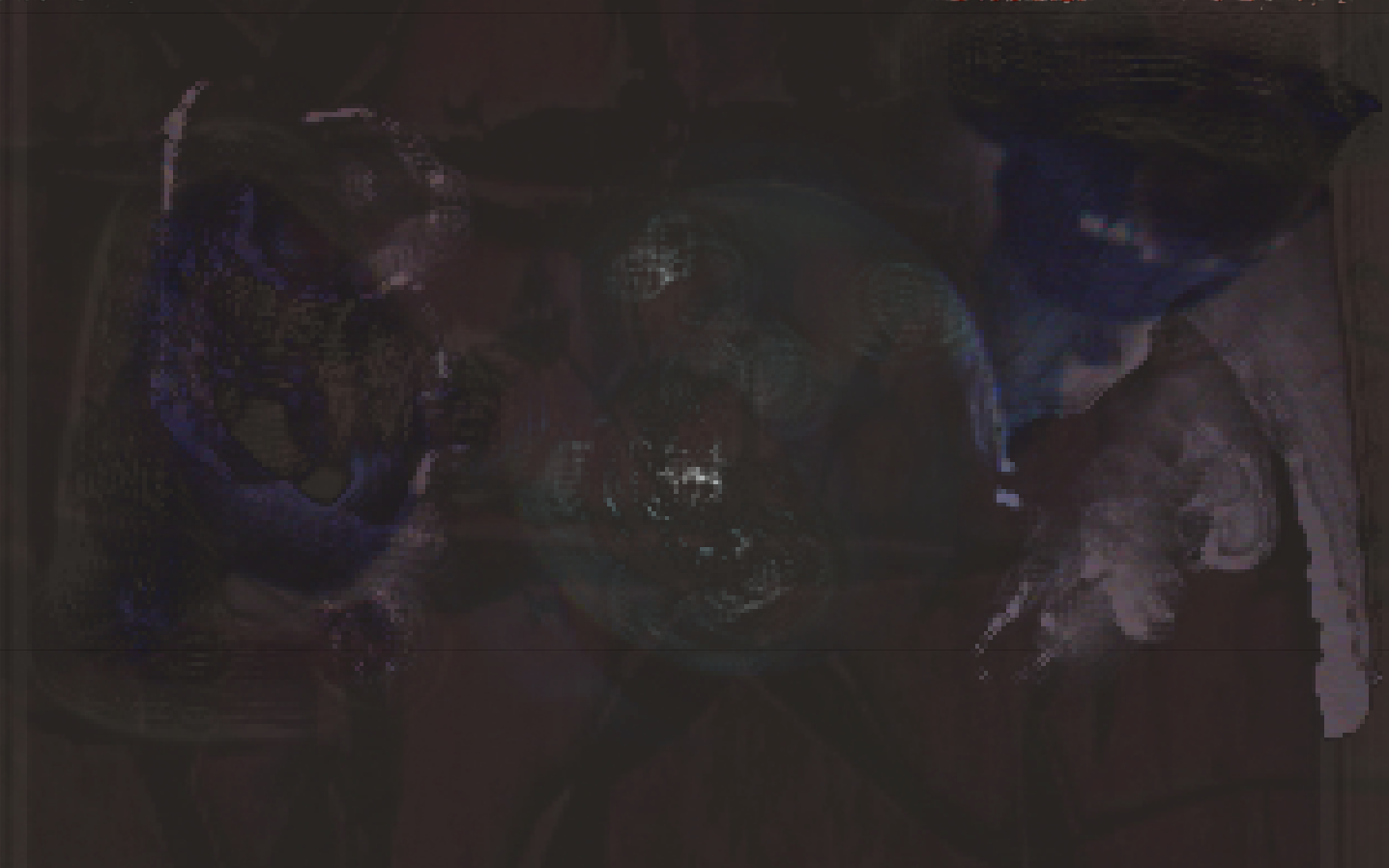
Metaphor space: meaningful experience, manifold
State: (convex) combination of pure states
Potential energy $U = E(\text{sensor}) + E(\text{static})$
Kinetics: $F = -\text{Grad}[U] / \text{mass}$

e pur sí muove



Continuous state evolution in four dimensions. Yon Visell (physics), Harry Smoak + Kevin Stamper (construction and physical computing), Chris Salter + Matthew Warne (sound instruments) TML 2004

Thick/N media choreography



phase change induced by speech and movement energy
Harry Smoak, Matthew Warne, Kevin Stamper TML 2004

learning, virtuosity



tg2001 sponge+foam



learning

CTIA Fashion Show, Atlanta TML 2004

An abstract painting with a textured surface. The background is a mix of light blue and grey. There are several prominent orange and reddish-brown shapes, some of which are elongated and curved. Dark, almost black, lines and shapes are scattered throughout, some resembling cracks or veins. The overall effect is one of organic, perhaps geological or biological, complexity.

_3 what's at stake?

MATERIAL PHENOMENOLOGY OF PERFORMANCE
CRITICAL STUDIES OF MEDIA
TOPOLOGICAL DYNAMICS

what's at stake?

Ethico-aesthetic Play?

Event?

Gesture?

Tissue and Molecular Politics?

blackboxes

“interaction” “program”

“information” “bit” “sensor” “cpu”

“linguistics” “market” “design” “industry”

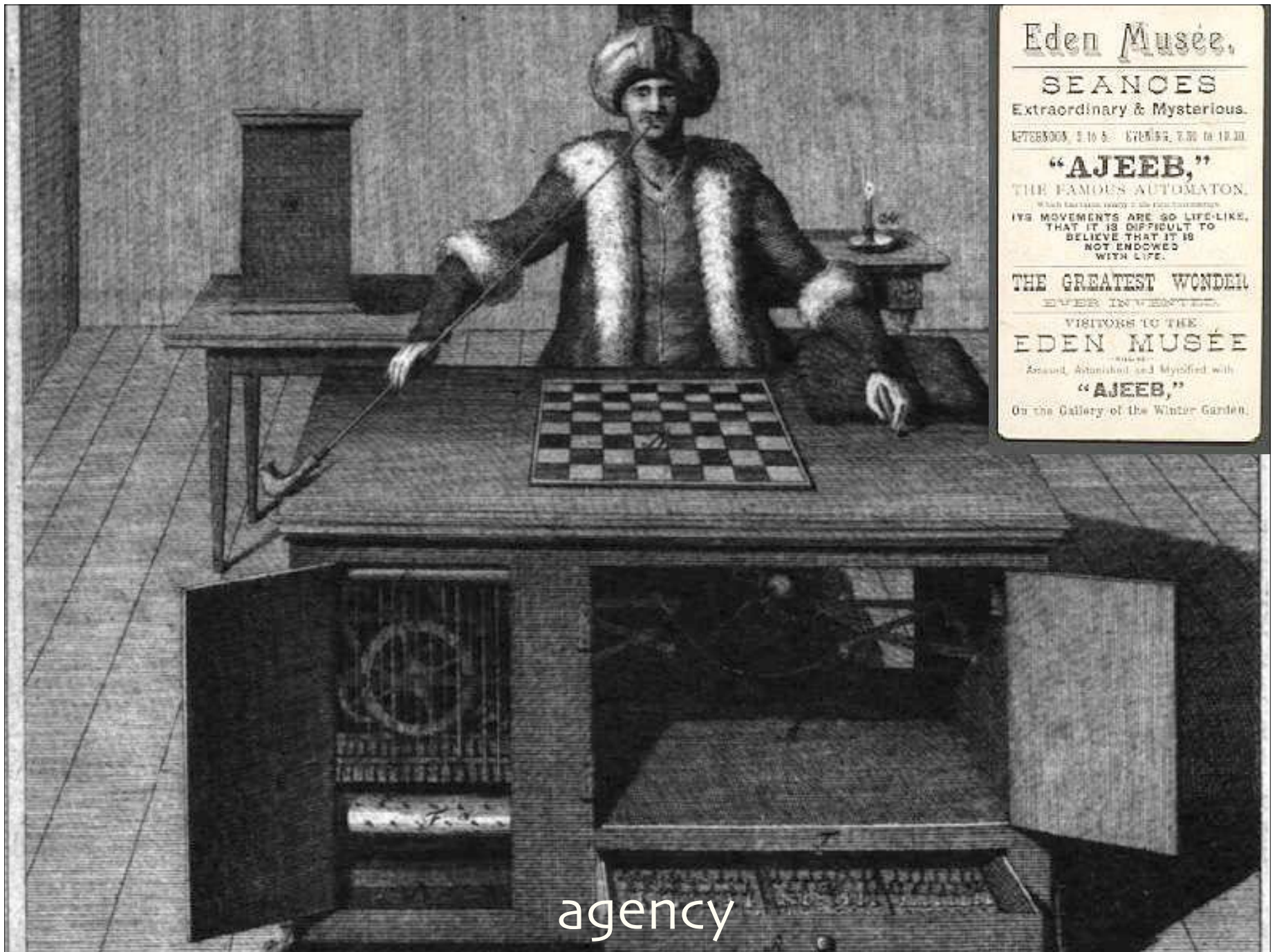
“body” “ego” “citizen” “class”

“machine” “human”

...

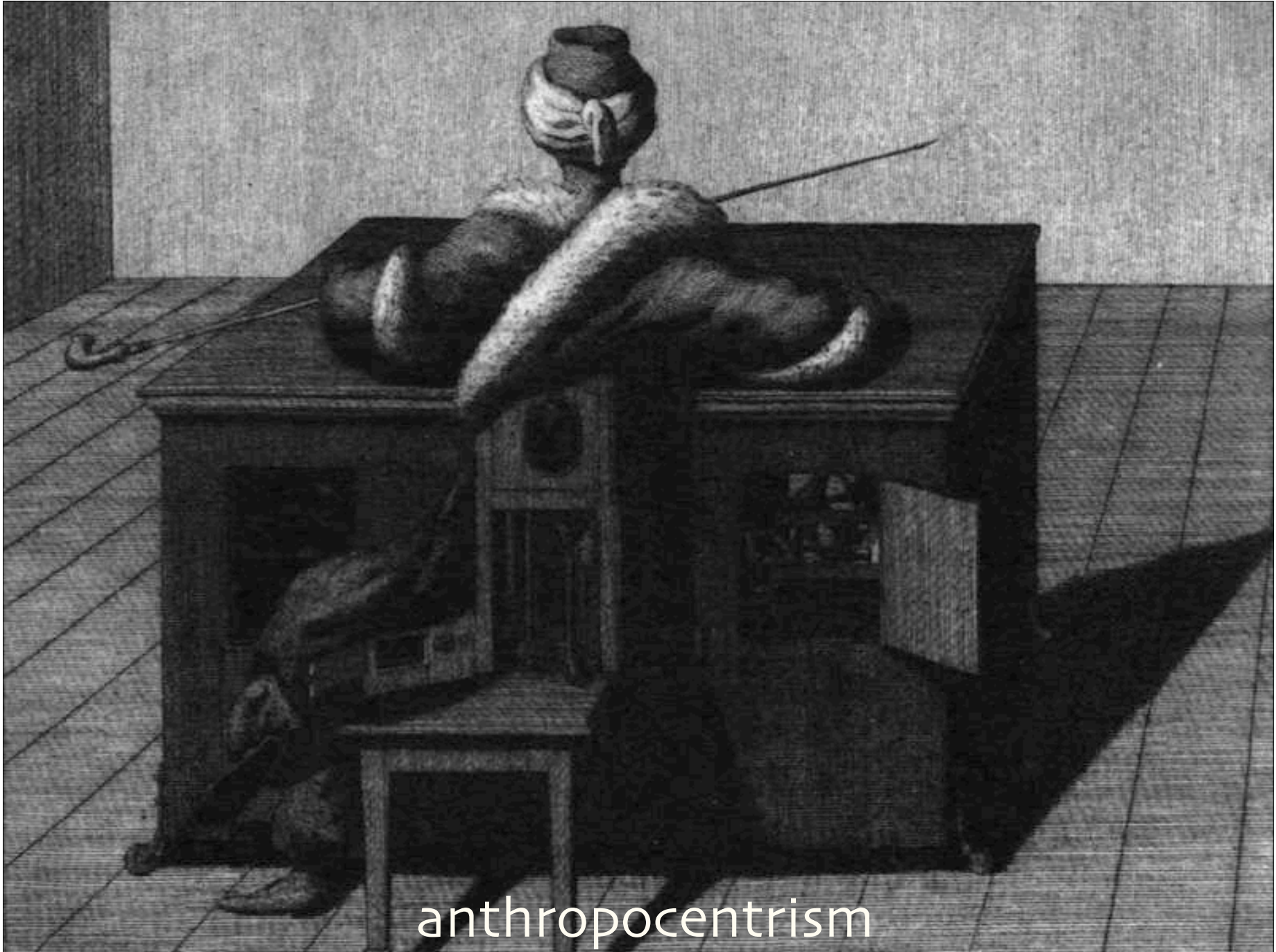


embodied experiential space



Eden Musée,
SEANCES
Extraordinary & Mysterious.
WEDNESDAY, 2.10.8. FRIDAY, 2.10.10.10.10.
"AJEEB,"
THE FAMOUS AUTOMATON.
WHICH EXHIBITS TRICKS OF THE HIGHEST ORDER.
ITS MOVEMENTS ARE SO LIFE-LIKE,
THAT IT IS DIFFICULT TO
BELIEVE THAT IT IS
NOT ENDOWED
WITH LIFE.
THE GREATEST WONDER
EVER INVENTED.
VISITORS TO THE
EDEN MUSÉE
"AJEEB,"
On the Gallery of the Winter Garden.

agency

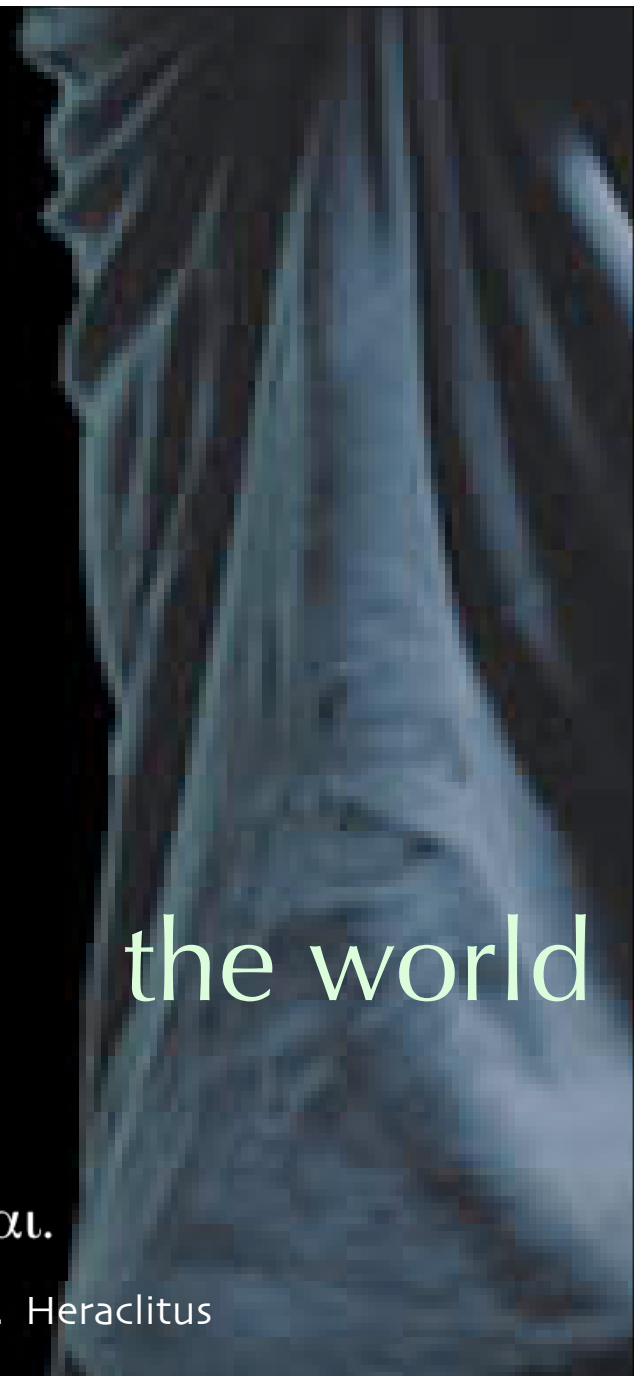
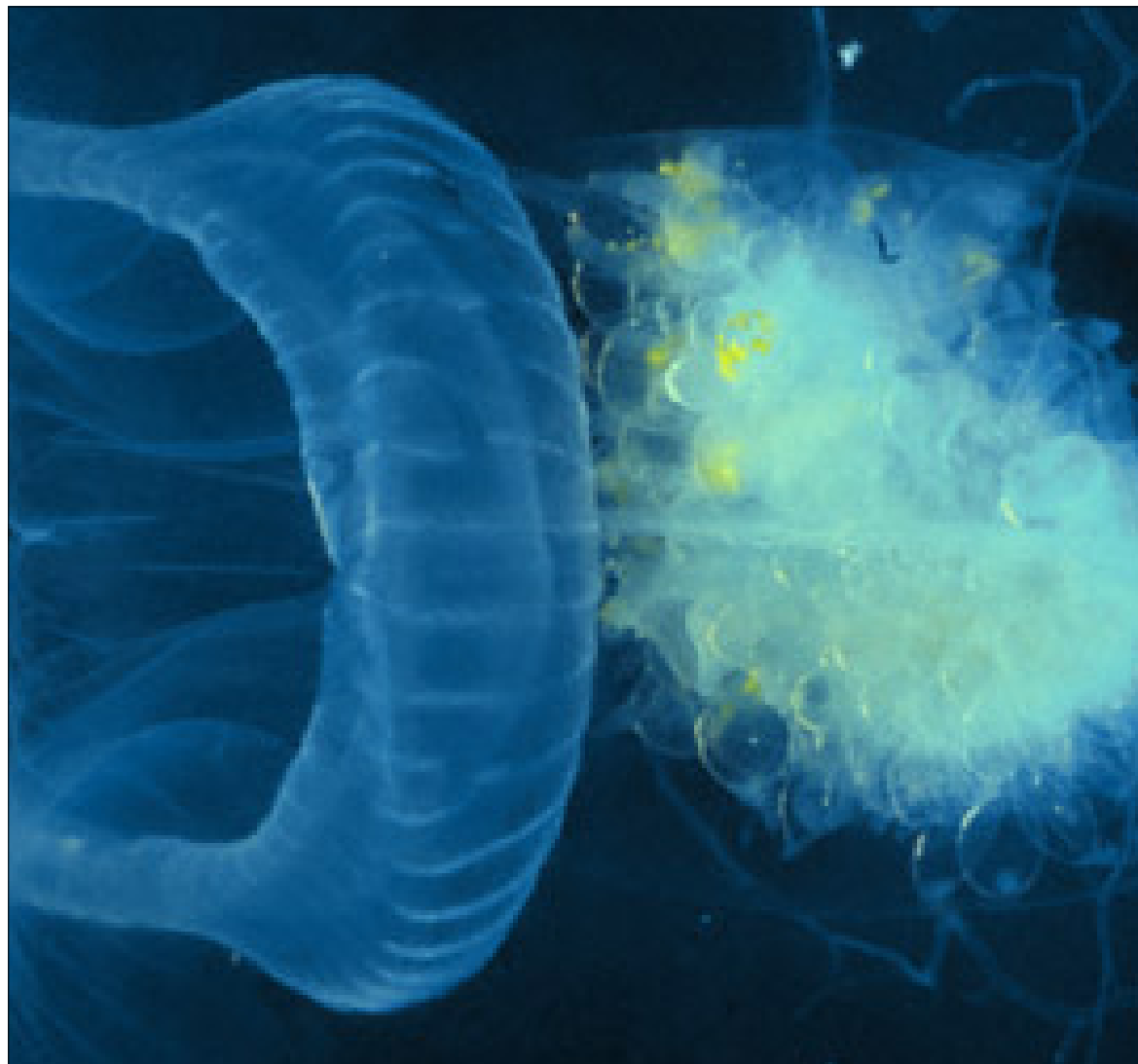


anthropocentrism

Bill Viola, The Passions



To whom do you owe allegiance: Homo Sapiens Rex, or ...



the world

Θαλασσα διαχεεται και μετρεεται εξ τον
αυτον λογον οκοιοζ προσθεν ην η γενεσθαι.

The earth melts into the sea as the sea sinks into the earth. Heraclitus

An abstract painting with a textured surface. The background is a mix of light blue and grey. Overlaid on this are several large, irregular shapes in shades of orange, red, and brown. There are also some dark, almost black, branching or vein-like structures scattered across the composition.

what happens to our
blackboxes?

“interaction” “program”
“information” “bit” “sensor” “cpu”
“linguistics” “market” “design” “industry”
“body” “ego” “citizen” “class”
“machine” “human”

...

An abstract painting with a textured surface. The background is a mix of light blue and grey. There are several prominent orange and reddish-brown shapes, some of which are elongated and curved. Black, wavy lines are scattered across the composition, some resembling cracks or veins. The overall effect is one of organic, layered forms.

_4 new work, tml@montréal

AFFILIATE ARTISTS & RESEARCHERS
+ TML RESEARCH

TML: Calligraphic Video

Realtime synthesis

Physics-based models (2D)

Parametrized by

gesture,

movement,

state

Rich, palpable response

Y. Serita; D. Nain, K. Quennesson; F. Abtan, Y. Asogba,

TML: Gestural Sound

(Gesture-mapping)

Gestural instruments

Topological Instruments, Sha (Langlois Foundation)

CHAKU: H. Desmoules

WYSIWYG (Hexagram)

Prof. Marcelo Wanderley (McGill); M. Warne (Brown);
F. Abtan, D. van Oort

Synthesis models

Prof. Chris Salter; Joel Ryan (STEIM); D. Grigsby,...

TML: Media Choreography

Marshaling rich media, and behavior evolving according composed dynamics and contingent activity.

H. Smoak, E. Conrad, F. Abtan, ...

TML: Gesture & Intention

Traces of Intentionality

Y. Visell (McGill, Cooperstock, Levitin, McAdams)

Gesture-tracking

J. Fistre, D. Gaultier

Related to Gestural Sound

e.g. Gesture Mapping problem

TML: Soft Architecture

Architectural Bodies /

Gins Arakawa; O. Faleh, K. Franinovic, E. Conrad, A.

Palpable Spaces, Latent circuits

E. Conrad; TML Ubicomp team 2003; J. Latek

Symbolically Charged Spaces

Profs. Chris Salter, Michael Montanaro

Excitable Sites: Profs. Joey Berzowska, Barbara Layne, Salter, Sha, M. Coelho, S. Kwok-Choon, E. Conrad

TML: Notnot Puppets

Non-mimetic animation, and animism
Distributed Agency
Toy Theater workshops w. Prof. Mark
Sussman

TML: Phenomenology of Performance

Philosophical implications of topological dynamics.

Non-dualistic ontology and felt meaning.
(Damiris et al.)

Movement and affect (Massumi, Manning, N. Asswad, ...)

Other doctoral research

Magda Wesolkowska (U. de Montreal)

Architectural prosthetics, meaning-making in long-term care facilities.

Harry Smoak - Media choreography, critical studies

Matthew Warne (Brown) - Gesture and music

Kevin Quennesson (GaTech) - Time and mimesis

Valerie Lamontagne - Relational performance

Ayesha Hameed - "Outer Space"

Affiliate Researchers...

Dr. Niklas Damiris (Stanford; SBC)

Eco-economics, alternative modes of production

Dr. Helga Wild (Water Cooler Logic)

Organizational practices, built-space, knowledge production

Dr. Satinder Gill (Cambridge UK)

Tacit knowledge; gesture, coordination, & musicality in social interaction.

Prof. Stefano Franchi (U. Auckland, NZ)

Play and philosophy; Passivity (Wild + Damiris)



Affiliate Artists...

Joel Ryan (STEIM), Evan Parker (March)

Chris Salter, Schwelle (Threshold)

Livia Daza-Paris: *Map of Memories*

Memories in the body

Collective memory and movement

Emotional archeology and community history

Affiliate Organization: SenseLab

Prof. Erin Manning

Prof. Brian Massumi, U. de Montreal

Dancing the Virtual, May 13-16, SAT

Movement of thought, relational
movement

(Technologies of Lived Abstraction)

<http://thesenselab.com>

Affiliate Organization: Zero-th

Space-time architecture
public space
multisensory dynamical systems.

Karmen Franinovic (Concordia),
Yon Visell (McGill)

KONTAKT (with
boutiquevizique)

Human touch for activating
social spaces.

Latent circuits in built space

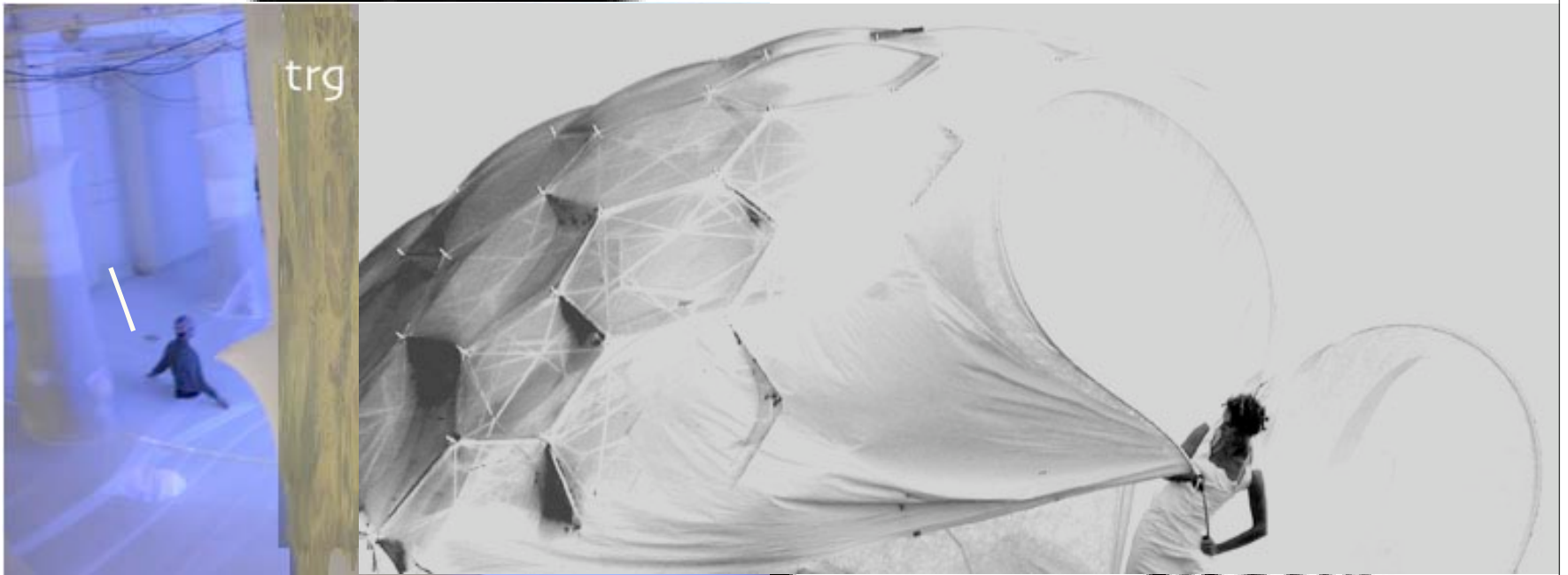
<http://www.zero-th.org/>



F O A M M

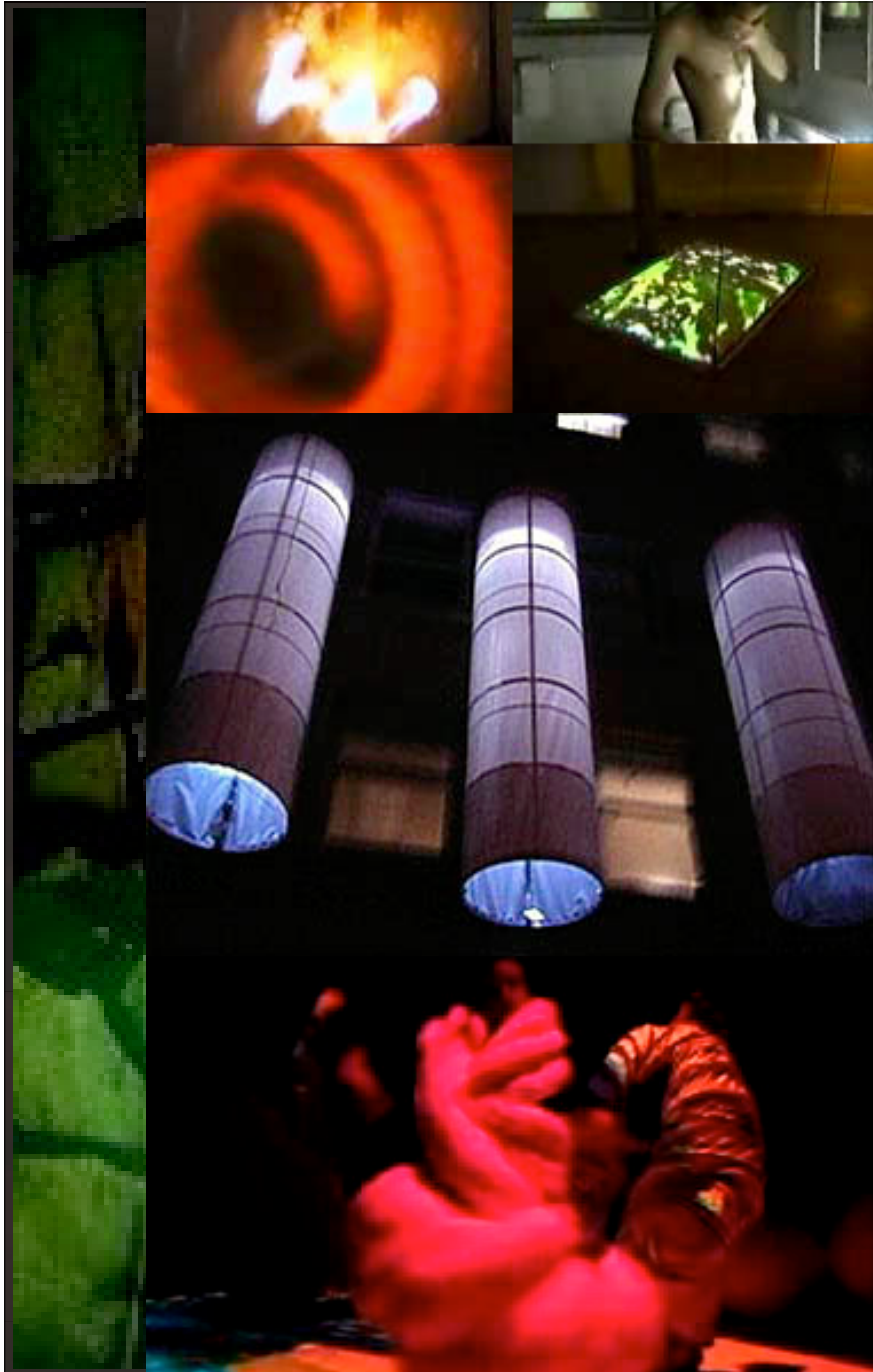
Affiliate Organization: FoAM

mixed realities / play spaces / groworlds



Maja Kuzmanovic, Nik Galiney, Lina Kusaite, Cocky Lek ...

<http://f0.am>



Affiliate Organization: Sponge

Laura Farabough

Sha Xin Wei

Chris Salter

+


J. Ryan, Y. Serita, H.

Smoak, Y. Visell, D.

Robert, ...



_5 the *potential*



The force that through the green fuse drives the flower
Drives my green age; that blasts the roots of trees
Is my destroyer.
And I am dumb to tell the crooked rose
My youth is bent by the same wintry fever.

The force that drives the water through the rocks
Drives my red blood; that dries the mouthing streams
Turns mine to wax.
And I am dumb to mouth unto my veins
How at the mountain spring the same mouth sucks.

The hand that whirls the water in the pool
Stirs the quicksand; that ropes the blowing wind
Hauls my shroud sail.
And I am dumb to tell the hanging man
How of my clay is made the hangman's lime....

Dylan Thomas

The force that through the green fuse drives the flower
Drives my green age; that blasts the roots of trees
Is my destroyer.
And I am dumb to tell the crooked rose
My youth is bent by the same wintry fever.

The force that drives the water through the rocks
Drives my red blood; that dries the mouthing streams
Turns mine to wax.
And I am dumb to mouth unto my veins
How at the mountain spring the same mouth sucks.

The hand that whirls the water in the pool
Stirs the quicksand; that ropes the blowing wind
Hauls my shroud sail.
And I am dumb to tell the hanging man
How of my clay is made the hangman's lime....

Dylan Thomas

Παντα το πυρ επελθον κρινει και καταλεπσεται.

serita navier -stokes test (thanks to nain)



Fire of all things is the ravisher. Heraclitus

xinwei@sponge.org