

INTERFACE

ENVIRONMENT + PROCESS FOR INTERACTION

ENVIRONMENT

MATERIAL, FORMAL COMPONENTS

+

BIOLOGICAL, ERGONOMICAL ASPECTS

PROCESS

SET OF PROCEDURES

+

PROCEDURAL RULES (PROTOCOLS)

TYPES

DIRECT MANIPULATION

KEYBOARD, MOUSE, LIGHTPEN/TABLET, TOUCHSCREEN...

OPTOMECHANICAL DETECTION

PRESENCE, MOVEMENT (DIRECTION, SPEED, DISTANCE),

HAPTICS (TOUCH), SOUND

BIOMETRIC DETECTION/RECOGNITION

BODY TEMP, SKIN CONDUCTIVITY, SKIN STATIC EL.,

PULSE, ECG, MYOELECTRIC, MYOTENSION,

SMELLS,

EL. FUNCTIONS OF BRAIN AND NERVES

BIOMETRIC RECOGNITION

**FACE/BODY PARTS, FACIAL EXPRESSIONS/EMOTIONS, BODY POSES,
SPEECH**

BIHAVIORAL DETECTION AND INFERENCE

BEHAVIOR AND PREFERENCE PATTERNS

ONLINE, SOCIAL NETWORKS/MEDIA, ETC.

OLD PRACTICE BY ORGS WORKING WITH LARGE # OF CLIENTS:

BANKS, TRADING, CORPORATIONS, INSURANCE

EMPOWERED BY NETWORKING,

IMPROVED COMPUTATION ALGORITHMS AND SPEED

**MANY COMPUTER/DIGITAL
INTERFACES ARE
OLD**

SOME FROM LATE 19 CENTURY: KEYBOARD

OTHERS FROM 50'S TO 80'S IN 20 CENTURY:

MOUSE, SCREEN, LIGHTPEN, TABLET, TOUCHSCREEN, HUD, VR

TECHNOLOGICAL CONCEPTS AND TECHNIQUES

OOP, GUI, WYSIWYG, NETWORKING, P2P

CHANGE SLOWLY

FACTORS

TECHNOLOGICAL

NEW SOLUTIONS DIFFICULT TO INVENT, TEST AND IMPLEMENT

ECONOMIC

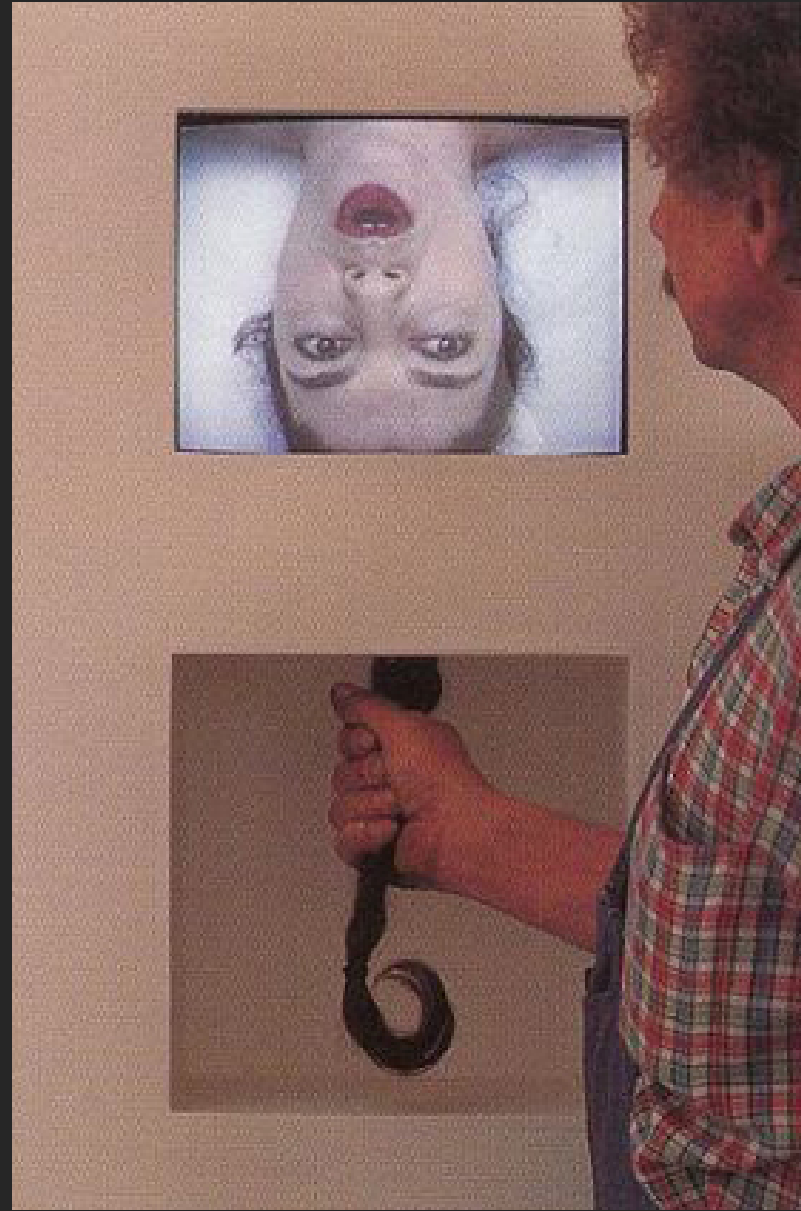
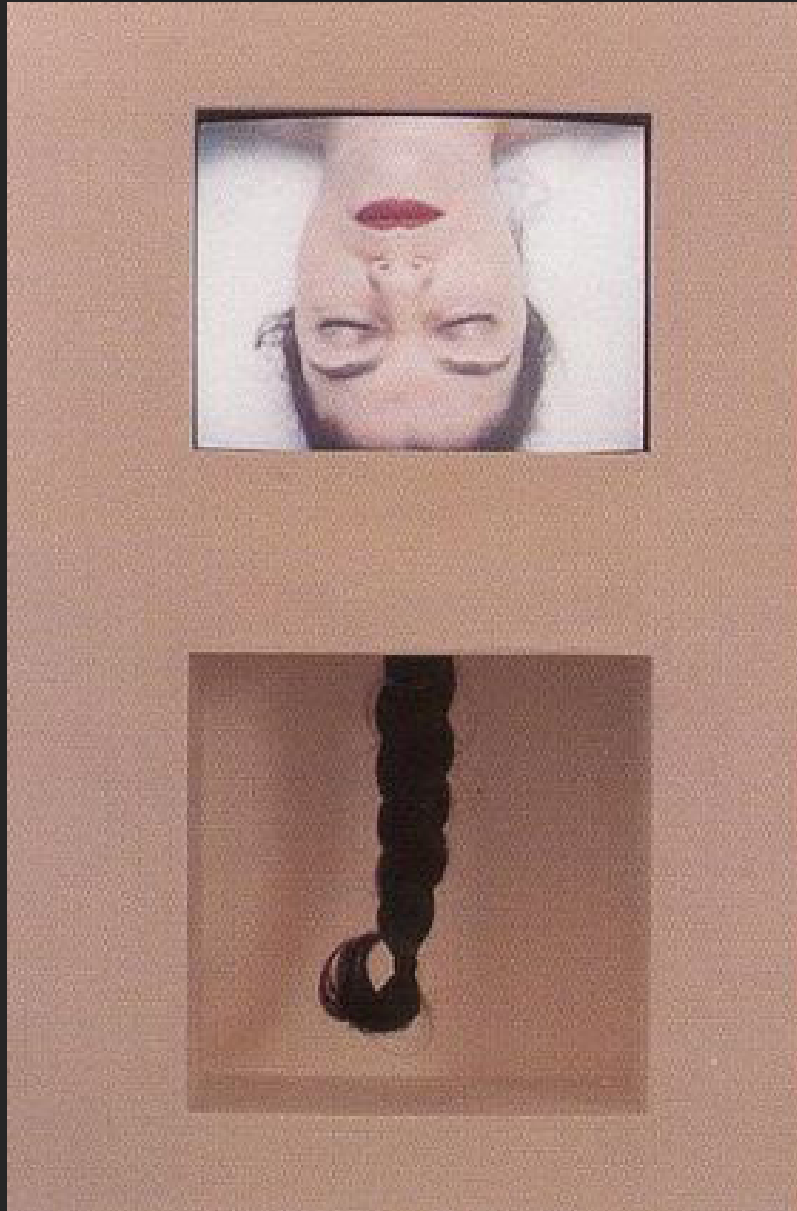
INVESTMENT AND PROFIT INTERESTS INFLUENCE THE PACE OF CHANGE

ERGONIMIC

LIMITED REPERTOIRE OF COMFORTABLE SOLUTIONS

DUE TO OUR EVOLVED ADAPTATIONS AND NEEDS

**SURPRISING/UNCONVENTIONAL INTERFACES
POINT TO THE CONCEPTS AND ASPECTS
OF THE INTERFACE DESIGN**



Mona Hatoum - 1995 – Pull

The trick points to the mediatized representation in IM.



Blind Self Portrait
Kyle McDonald and Matt Mets

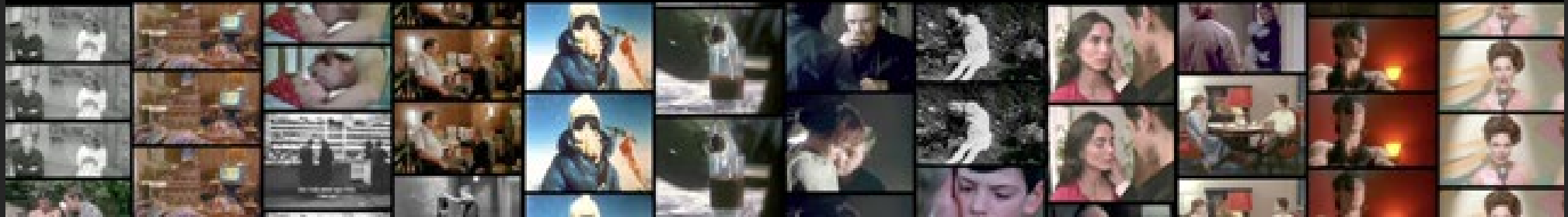
Kyle McDonald & Matt Mets - 2012 - Blind Self Portrait

Passive participation, trust.



Julian Palacz

algorithmic search for love



Julian Palacz - 2010 - Algorithmic Search for Love

Visitor as a creative director. Playfulness.



Daniel Rozin - 1999 - Wooden Mirror-Motoristic Reflective Sculpture

Classic IM setup, unconventional visualization/representation.

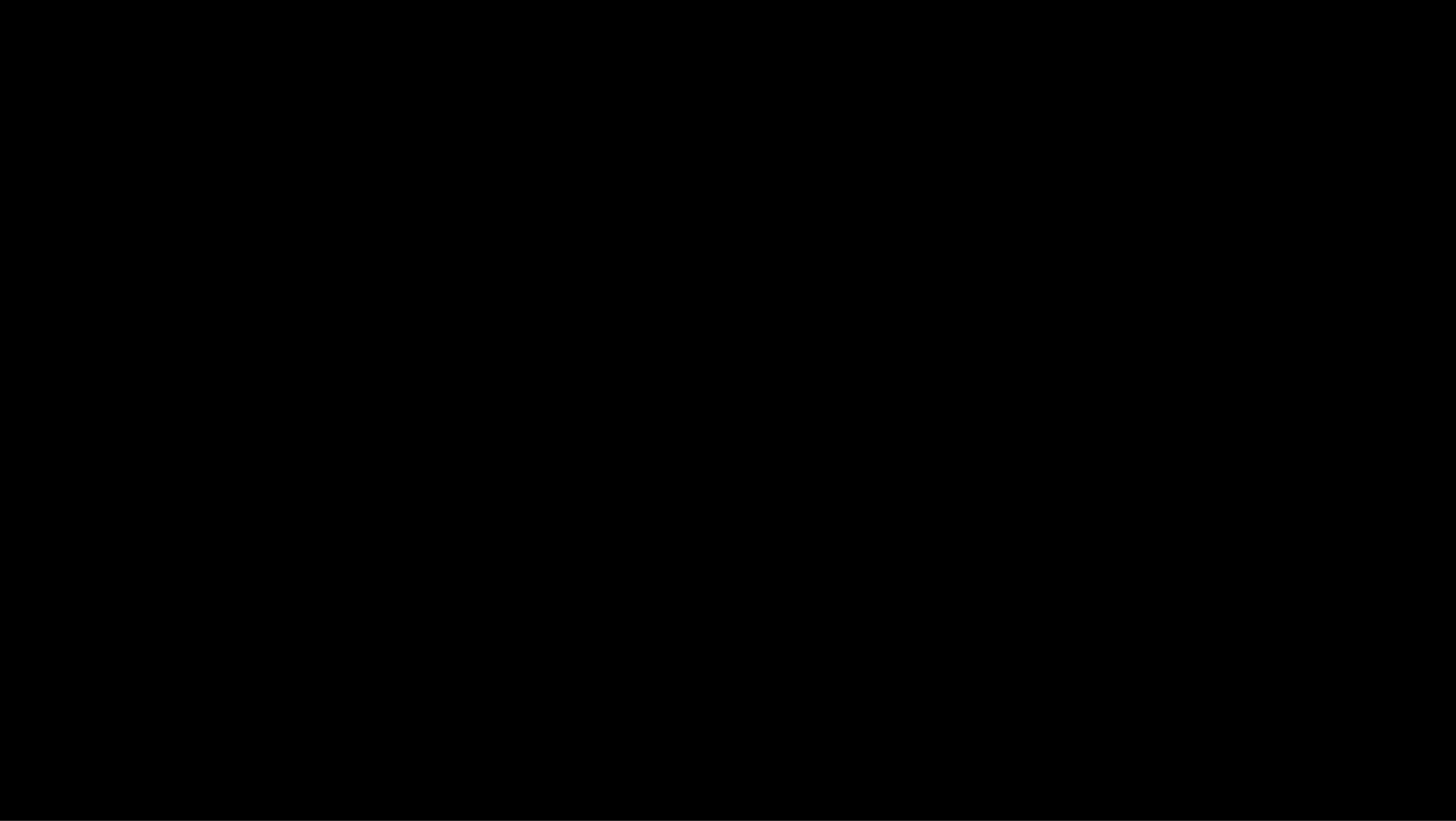


Portrait on the Fly
Live

©2015, Laurent Mignonneau
& Christa Sommerer

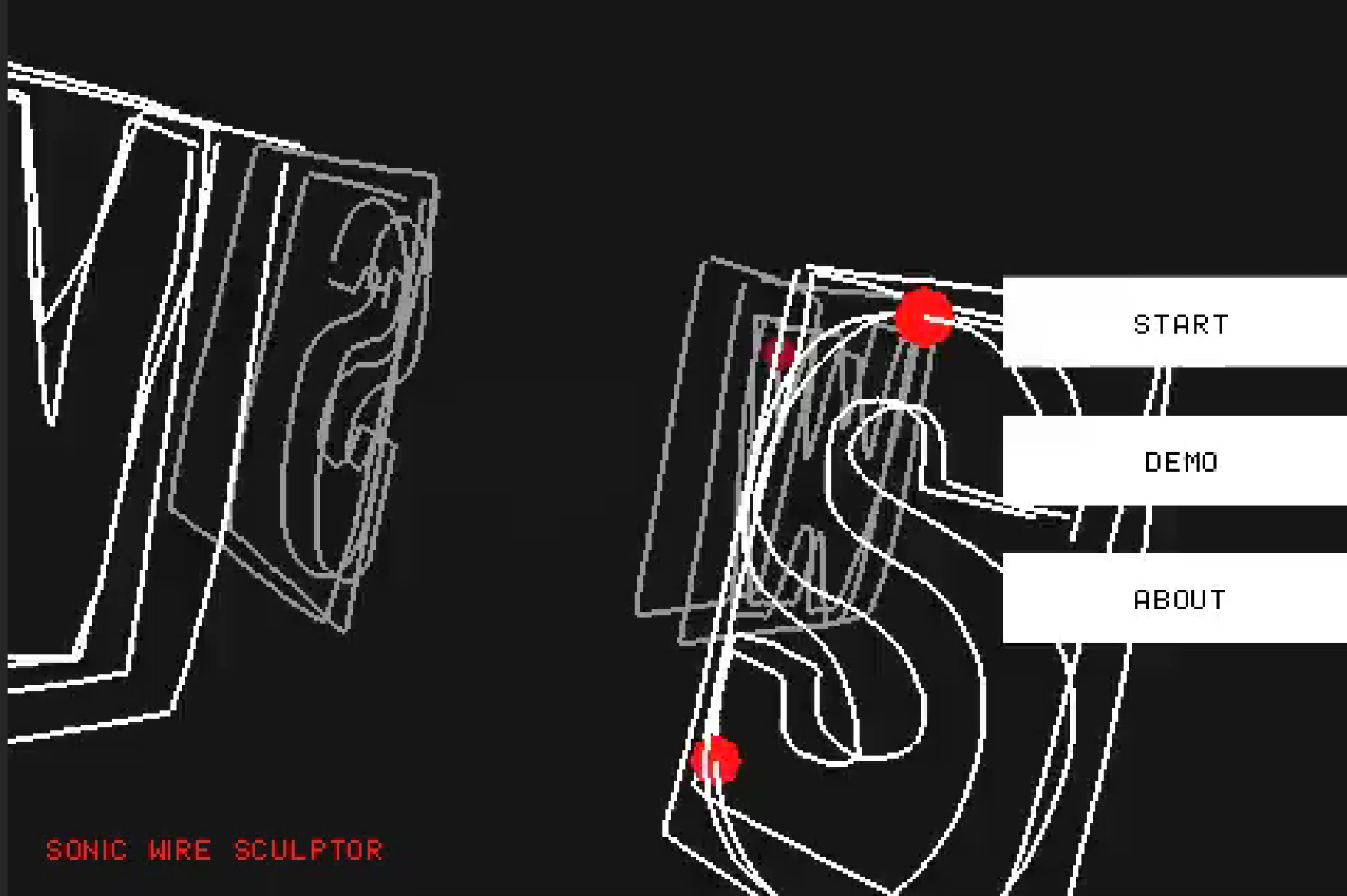
Christa Sommerer & Laurent Mignonneau - 2015 - Portrait on the Fly

Classic IM setup, unconventional visualization/representation.



Jasper van Loenen - 2011 - Test Screen

Reveals the complexity of the interface control system - 93 parameters.



Amit Pitaru et al. - 2010 - Sonic Wire Sculptor

Visual intuition in making sound.

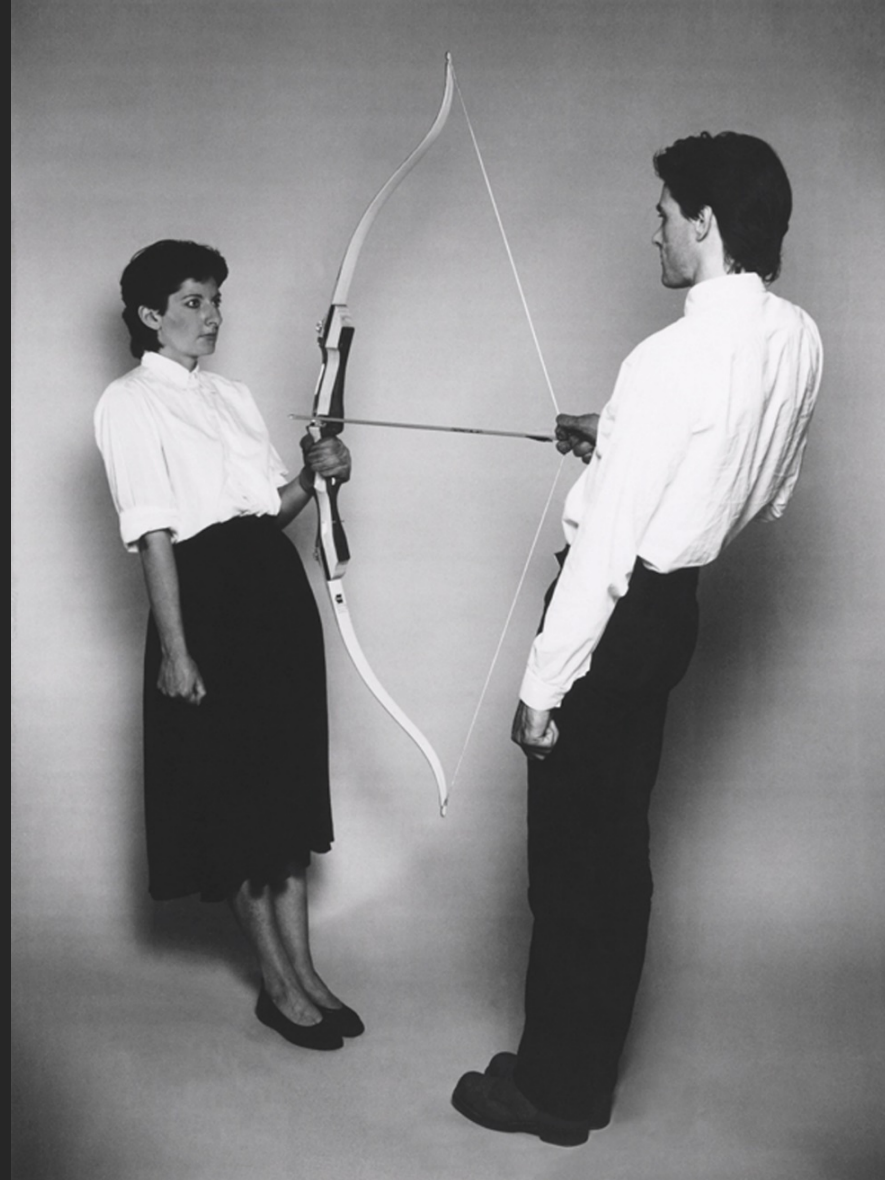
**REFACE:
Portrait Sequencer
Tmema / 2007**

Golan Levin & Zachary Lieberman - 2007-2010 - Reface (Portrait Sequencer)

Blinking and facial expressions.



Daito Manabe - 2009 - Face Visualizer - Face Instrument
Facialization via myoelectric sensors and actuators.



Marina Abramović & Ulay - 1980 - Rest-Energy

Dual interface: compound bow + real arrow (perf. props) + the gallery.



Kenichi Okada - 2010 - Peeping Hole

The participant's and the audience's interfaces work together.



**Shinseungback Kimyonghun - 2013 - Nonfacial Mirror
Self-restrictive interface.**

TAKEAWAYS

IN INTERACTIVE ART AND DESIGN

INTERFACE IS

INSTRUMENTAL FOR FACILITATING

SITUATION, EVENT, USAGE AND EXPERIENCE

SUPPORTS/REVEALS THE CONCEPT AND

OVERALL INTENTION

**CREATING INTERACTIVE INTERFACE INCLUDES
DESIGNING AND COMBINING
FORMAL COMPONENTS AND PROCEDURES
PERCEIVABLE DIRECTLY OR EFFECTIVELY BY THE PARTICIPANT
INTERFACE TYPES AND DESIGNS CHANGE RELATIVELY SLOWLY
THEIR FUNCTIONALITY CAN CHANGE RAPIDLY**

IN THE CLASS NOTES

MORE EXAMPLES

A SELECTED BIBLIOGRAPHY OF THE INTERFACE

THANK YOU!