

# 2

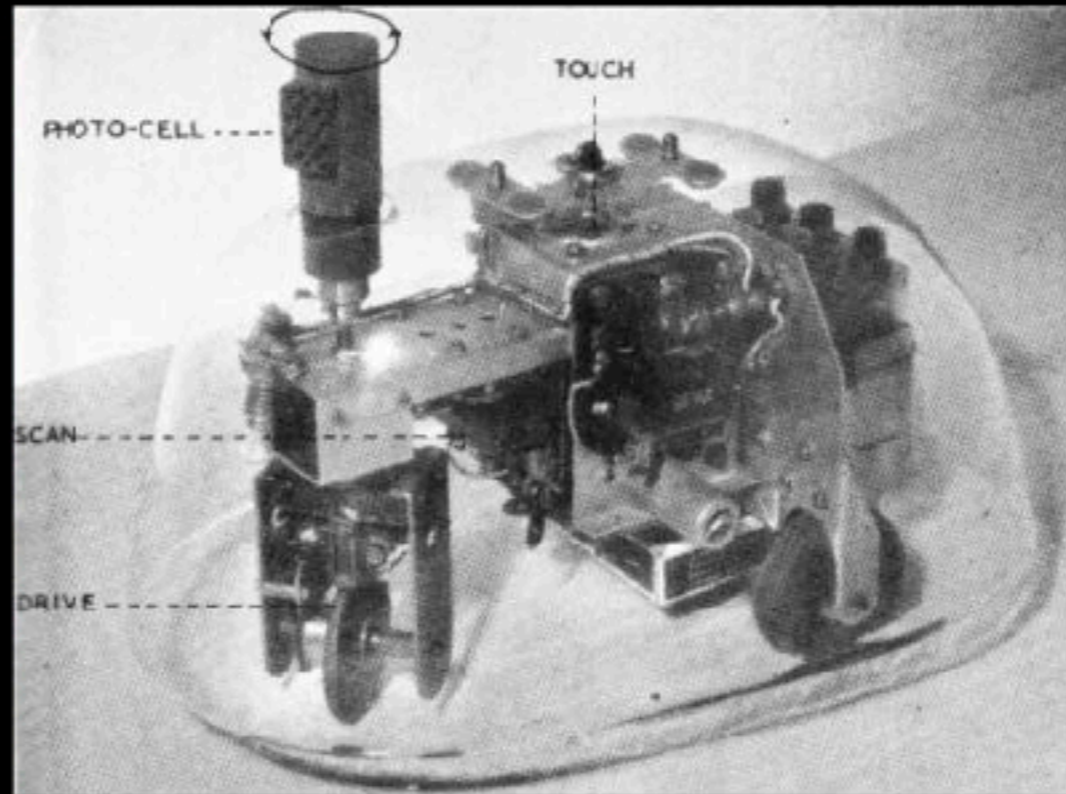
## **NonhumanPerformances**

early interactive artifacts  
and their reception in art  
Prof. Ursula Damm

# Grey Walter: *Tortoises*

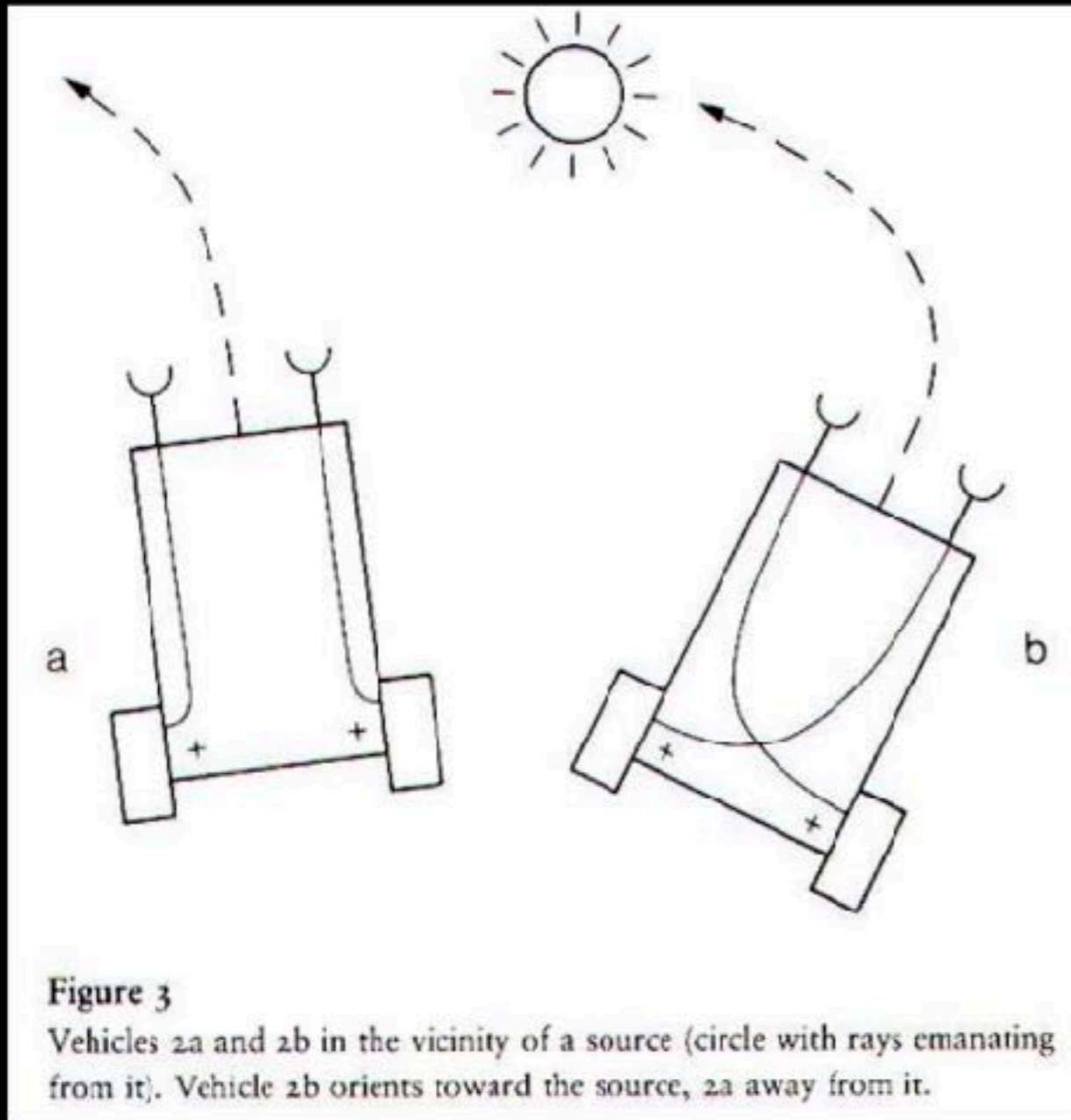


Figure 1 - W. Grey Walter and one of his robots



[video from devices explanations](#)

## Valentino Braitenberg: vehicles



<https://vimeo.com/52150443> from 3:54 min - 9:00 min

<https://de.scribd.com/doc/138206614/Vehicles-Experiments-in-synthetic-psychology-Valentino-Braitenberg>

<http://golancourses.net/2012spring/03/01/varvaratoulkeridou-generate-with-braitenberg-vehicles/>

## Ulrike Gabriel: *Tortoises*

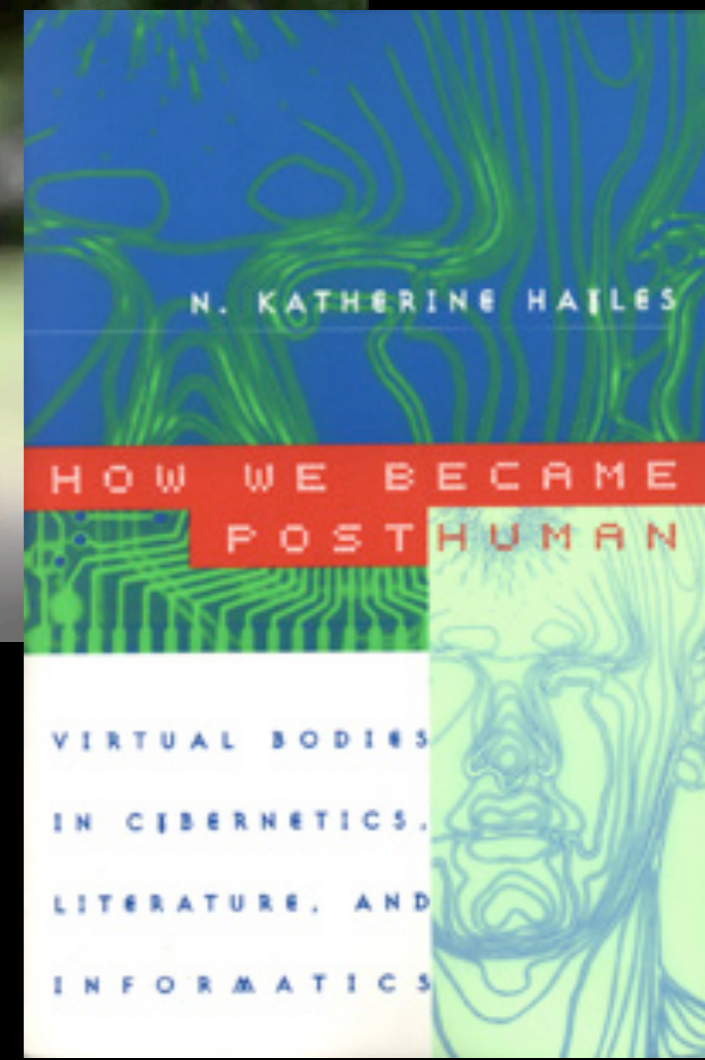


<https://vimeo.com/7723230>

<https://vimeo.com/52840915>

<http://www.medienkunstnetz.de/works/terrain/>

# Katherine Hayles

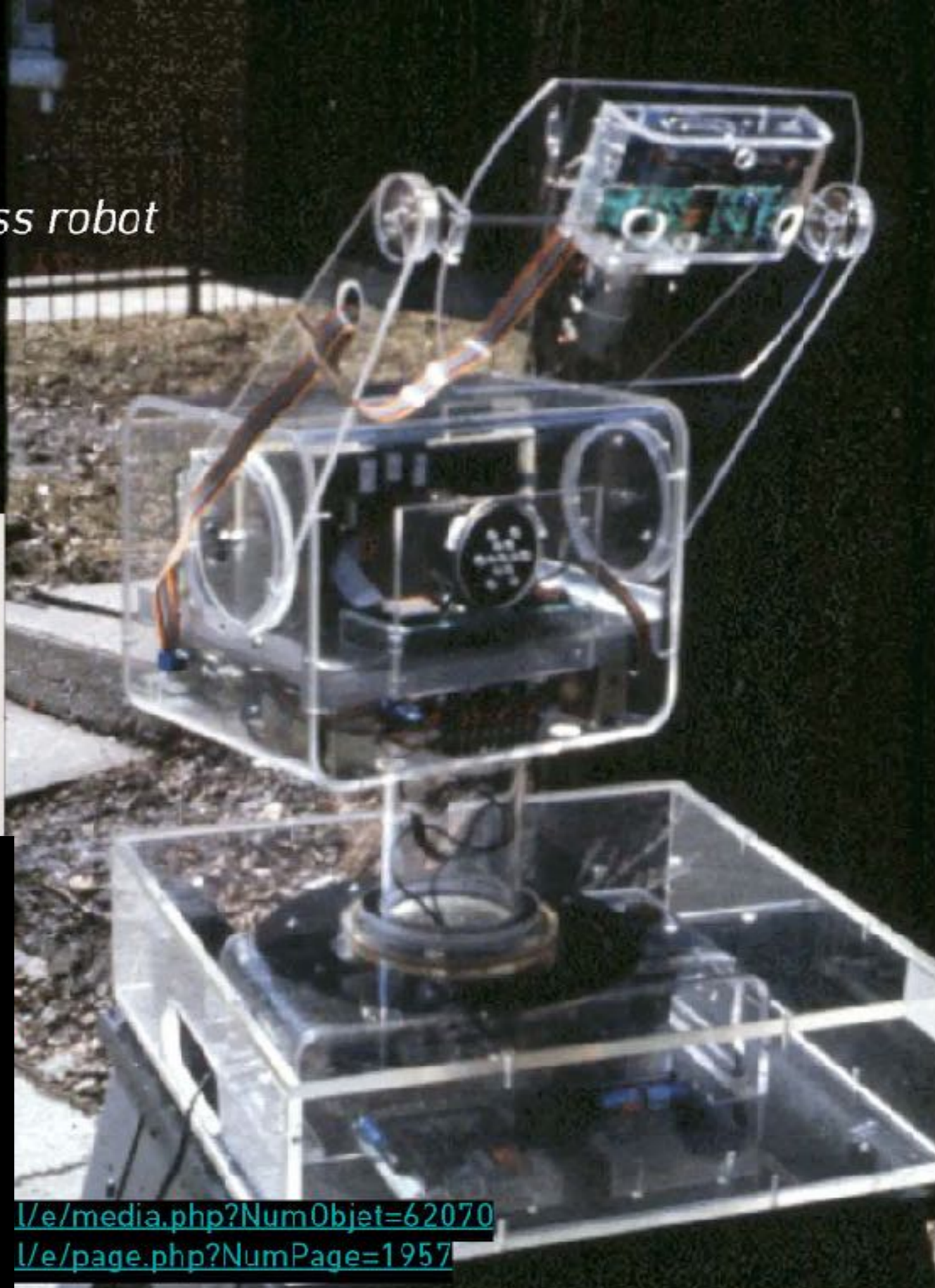


[Interview](#)

## Norman White: *The helpless robot*



[Documentary on Norman White](#)  
[Them fuckin' Robots with Laura Kikauka](#)  
[recommendation: 43:15 Min.-49:00 Min.](#)



[/e/media.php?NumObjet=62070](#)  
[/e/page.php?NumPage=1957](#)

## **Simon Penny:** *Petit Mal an Autonomous Robotic Artwork*

Although much work has been done in the field of screen-based interactive art, the mode of interaction in these works is confined by the very existence of image material on a screen, the so called "graphical user interface". I am particularly interested in interaction which takes place in the space of the body, in which kinesthetic intelligences, rather than "literary-imagistic" intelligences play a major part.

The goal of Petit Mal is to produce a robotic artwork which is truly autonomous; which is nimble and has "charm"; that senses and explores architectural space and that pursues and reacts to people; that gives the impression of intelligence and has behavior which is neither anthropomorphic nor zoomorphic, but which is unique to its physical and electronic nature.

Petit Mal is in some sense an anti-robot. Most conventional robots are elaborations of von Neumanns~ notion of the universal machine, in which the physical machine is simply a formless form to be filled with software "content". This attitude is an application of the Cartesian idea of the mind-body split. Petit Mal is an attempt to build a robot which opposes this attitude. Hardware and software were considered as a seamless continuity, its behavior arises from the dynamics of its "body".

## **Simon Penny:** *Petit Mal an Autonomous Robotic Artwork*

In neurological terminology, a Petit Mal is a momentary loss of consciousness. It is important that Petit Mal is just a little out of control, it is a reaction to oppressive theories of control so ubiquitous in computer science. It is an engineer's nightmare, although the mechanical structure is inherently stable it has a chaotic motion generator at its heart, the double pendulum, an emblem of unpredictability.

## Simon Penny: *Petit Mal*



© Simon Penny 2006

[Documentation](#)  
[Work on his website](#)



**Luis Philipp Demers: *The blind Robot***

<https://vimeo.com/lpdemers>

<https://vimeo.com/127440786>

## Myron Krueger: *Videoplace*



[Video documentation](#)  
[Publication](#)

## Golan Levin



[https://www.ted.com/talks/golan\\_levin\\_art\\_that\\_looks\\_back\\_at\\_you?language=de#t-133926](https://www.ted.com/talks/golan_levin_art_that_looks_back_at_you?language=de#t-133926)

Min. 2:23 - 3:34

<https://youtu.be/3paLKLZbRY4>

Golan Levin, Jaap Blonk: *Messa di Voce*



<https://vimeo.com/221803295>

<http://www.tmema.org/messa/messa.html>

# Timo Arnall

*Robot Readable World 2012*



As robots begin to inhabit the world alongside us, how do they see and gather meaning from our streets, cities, media and from us? The robot-readable world is one of the themes that the studio has been preoccupied by recently. ...

This film uses found-footage from computer vision research to explore how machines are making sense of the world. And from a very high-level and non-expert viewing, it seems very true that machines have a tiny, fractional view of our environment, that sometimes echoes our own human vision, and sometimes doesn't.

For a long time I have been struck by just how beautiful the visual expressions of machine vision can be. In many research papers and Siggraph experiments that float through our inboxes, there are moments with extraordinary visual qualities, probably quite separate from and unintended by the original research. Something about the crackly, jittery but yet often organic, insect-like or human quality of a robot's interpretation of the world. It often looks unstable and unsure, and occasionally mechanically certain and accurate.

<https://vimeo.com/36239715>

**Gramazio Kohler Architects: *Rock Print*, Architectural installation  
at the inaugural Chicago Architecture Biennial 2015**



<https://vimeo.com/141097712>

**Gramazio Kohler Architects: *Building a rope bridge with flying machines in the ETH Zurich Flying Machine Arena.***



<https://www.youtube.com/watch?v=CCDluZUfETc>

## **Maria Yablonina: *Mobile Robotic Fabrication***



<https://vimeo.com/152438993>

## Art & Com

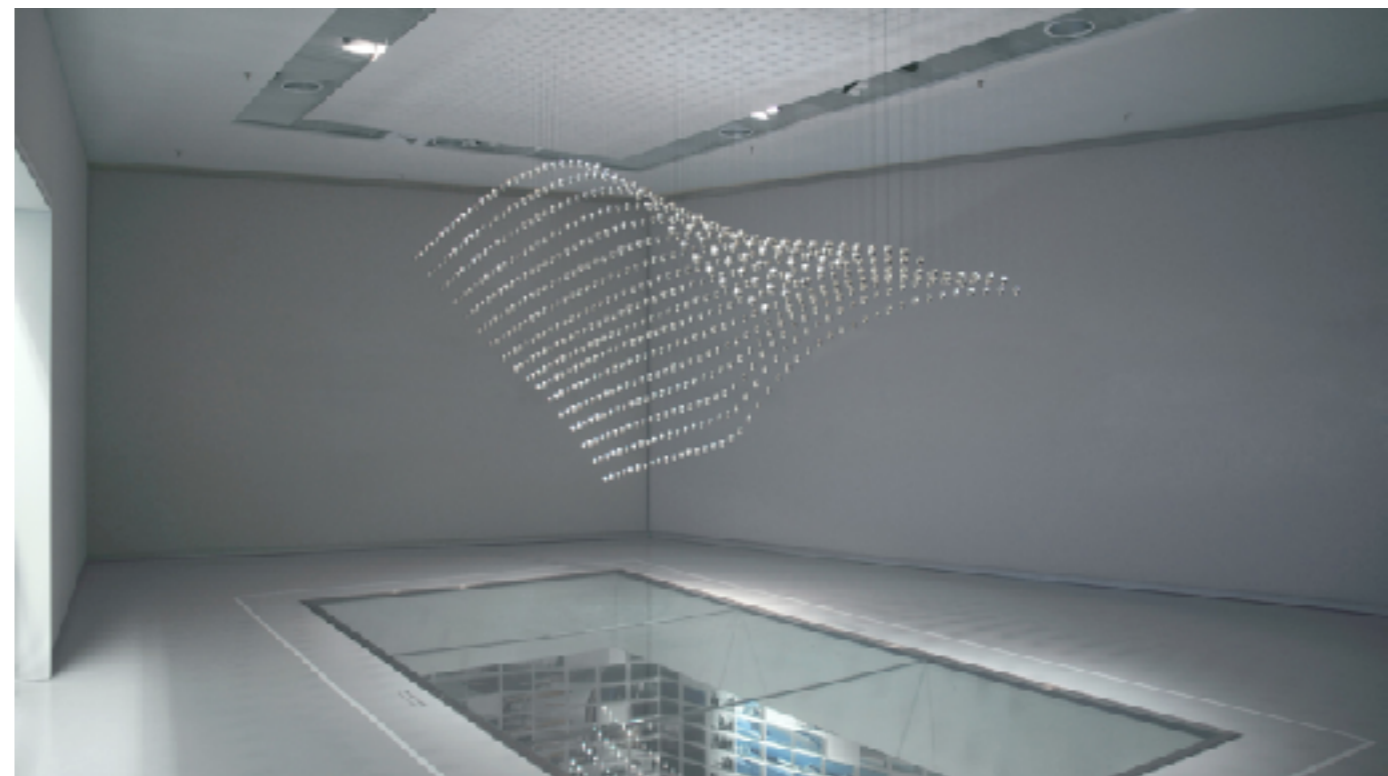
### Kinetische Skulptur – The Shapes of Things to Come, 2008

BMW Museum, München

714 an feinen Metallfäden hängende Metallkugeln bilden ein sechs Quadratmeter großes Feld, in dem sie sich im Zusammenspiel aus Mechanik, Elektronik und Code bewegen.

Die Kinetische Skulptur übersetzt den Prozess der Formfindung im Fahrzeugdesign in eine siebenminütige metaphorische Narration. Anfangs zeigt die Installation einen chaotischen Zustand: Noch ist die Form nicht gefunden. Die Kugeln bewegen sich unabhängig von einander und vermitteln den Eindruck eines räumlichen weißen Rauschens. Daraus bilden sich die ersten geometrischen Formen, die die Umrisse der Automodelle antizipieren, die sich später zeigen werden. Dann lösen sich quasi im Wettstreit liegende Formen ab und kulminieren schließlich in dem Umriss eines finalen Automodells. Diese Narration wiederholt sich mehrmals und erzählt so den Gestaltungsprozess fünf ikonischer BMWs aus Gegenwart und Vergangenheit.

[Video der Installation](#)



## Andreas Muxel

CONNECT / 2008

feedback-driven sculpture

Die kinetische Skulptur "CONNECT" besteht aus dreizehn oszillierenden Kugeln aus Stahl, welche jeweils mit einem Gummi an eine Matrix gebunden sind. Ein Eisenstab mit einem Magnet an jeder Seite kontrolliert die Aktion von jedem Element des Systems.

Wenn eine Kugel mit dem Stab verbunden ist, aktiviert ein Motor seine Schwingungen so lange, bis der Stab sich ablöst und eine neue Verbindung mit einer anderen Kugel eingeht. Jedes Element hat sein eigenes kleines Programm - ohne dass es ein Programm gäbe, das von aussen das System bestimmt. Es wird kein Chaos oder Zufall prozessiert, weil die Physik der Installation stets ihr eigenes Programm aufbaut und die Skulptur ein eigenes Programm für nicht-lineares Verhalten hat.

So produziert die Skulptur komplexes Verhalten, auch wenn die Regeln sehr einfach sind.

<http://www.andreasmuxel.com/>

[Video](#)