

# The Good, the Bad, and the Digital: Digitalisation in Aesthetic and Arts Education

Music, Media, Arts Education. A Pan-European Exchange of  
Views on Research, Praxis and Musical Education in the  
Digital Age. Stiftung Genshagen, 17./18. Nov. 2020



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creative commons-Lizenz:  
nichtkommerzielle Nutzung,  
Abwandlung, Weitergabe (bei  
Nennung der Quelle)  
erwünscht.

Music making quickly learned  
on the Yamaha Electone-Organ  
DK-40A

Technology  
as a  
Promise

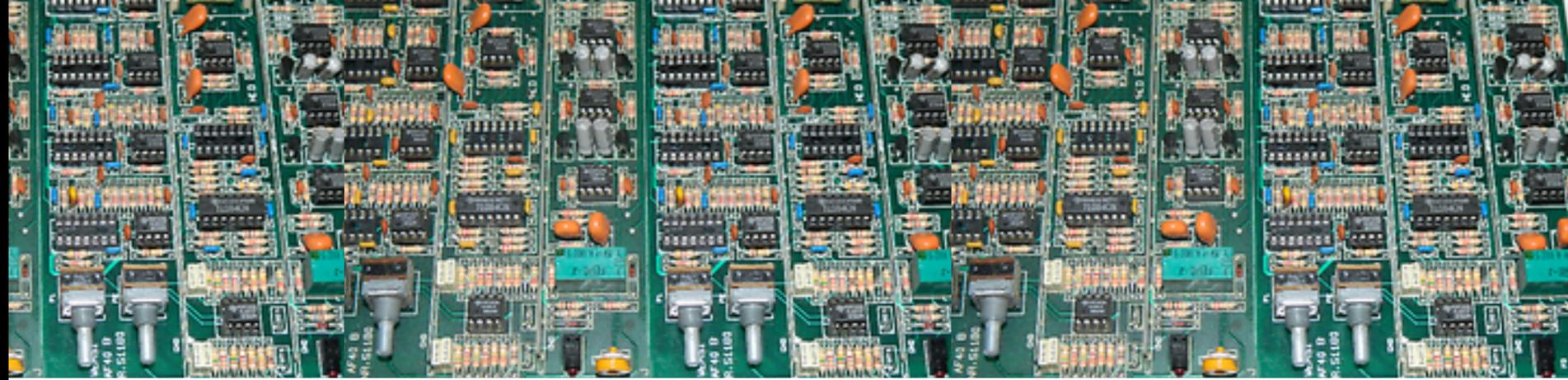
**Musizieren schnell erlernt  
auf der Yamaha Electone-Organ  
DK-40A**



Technology  
as a  
Promise



Technology  
as a  
Promise



# Digitality as a Promise

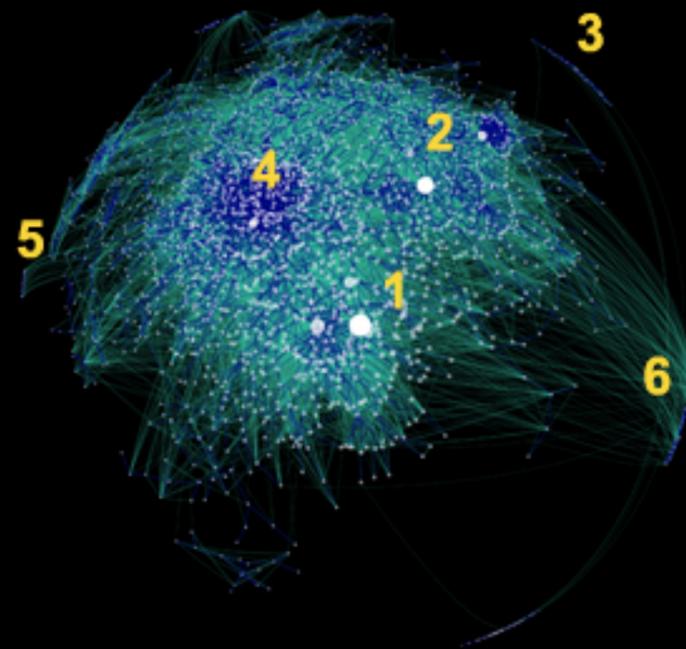


## A Declaration of the Independence of Cyberspace

by John Perry Barlow

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.

We have no elected government, nor are we likely to have one, so I address you with no greater authority than that with which liberty itself always speaks. I declare the global social space we are building to be naturally independent of the tyrannies you seek to impose on us. You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear.



Blogosphere, by Jenna Greenbaum, Attribution, <https://commons.wikimedia.org/w/index.php?curid=18432308>

The New York Times

## *The Ultimate Distance Learning*



A Harvard Law School lecture in Second Life.

# vs. digitalization unleashed

2012

1 B. active FB-users

NSA-Skandal

arab spring

> 1B. smartphones sold per year

Smart Everything  
„Big Data“

Deep Learning

2016 Cambridge Analytica

Amazon Alexa Business 4.0

AlphaGo Zero

autonomous weapons

autonomous cars #fakenews

#metoo

2020

Covid-19

mobile revolution

Datafication

artificial intelligence

algorithm cultures

affective economies &  
filter bubbles

viral hashtag-politics

post truth/post fact-era

# Gen X wants its internet back

Sascha Lobo ist enttäuscht

## "Das Internet ist kaputt"

13.01.2014

**Vorzeige-Blogger und Internet-Erklärer Sascha Lobo (38) rückt von seiner Web-Euphorie ab.**

 **Empfehlen**

 **PDF**

 **URL**

 **Xing**

 **LinkedIn**

"Das Internet ist nicht das, wofür ich es gehalten habe", schrieb der Autor Lobo ("Wir nennen es Arbeit") in einem Beitrag für die "Frankfurter Allgemeine Sonntagszeitung". Er habe sich "geirrt, und zwar auf die für Experten ungünstigste Art, also durch Naivität". Es gebe seit 2013 spätestens "die digitale Kränkung der Menschheit: Was so viele für ein

Sascha Lobo is disappointed

**„The Internet is broken“**

Showcase blogger and Internet explicator Sascha Lobo (38) is moving away from his web euphoria.

# Post-digitality <sup>def</sup>

a state in which structures of the digital realm (forms, semantics, practices) become universal.

e.g.  
distributed  
problem solving  
(WhatsApp)

e.g. body,  
patterns of movement  
(videogames)

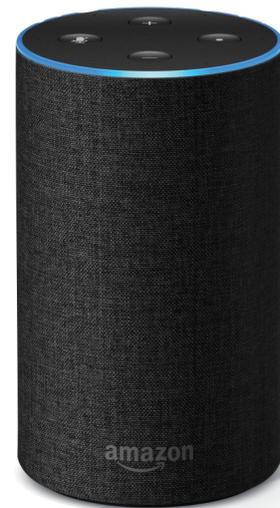
e.g. modes of  
communication  
(memes)

e.g. hybrid  
materialities  
(instruments, cars)

e.g. hybrid  
spatialities (airports)

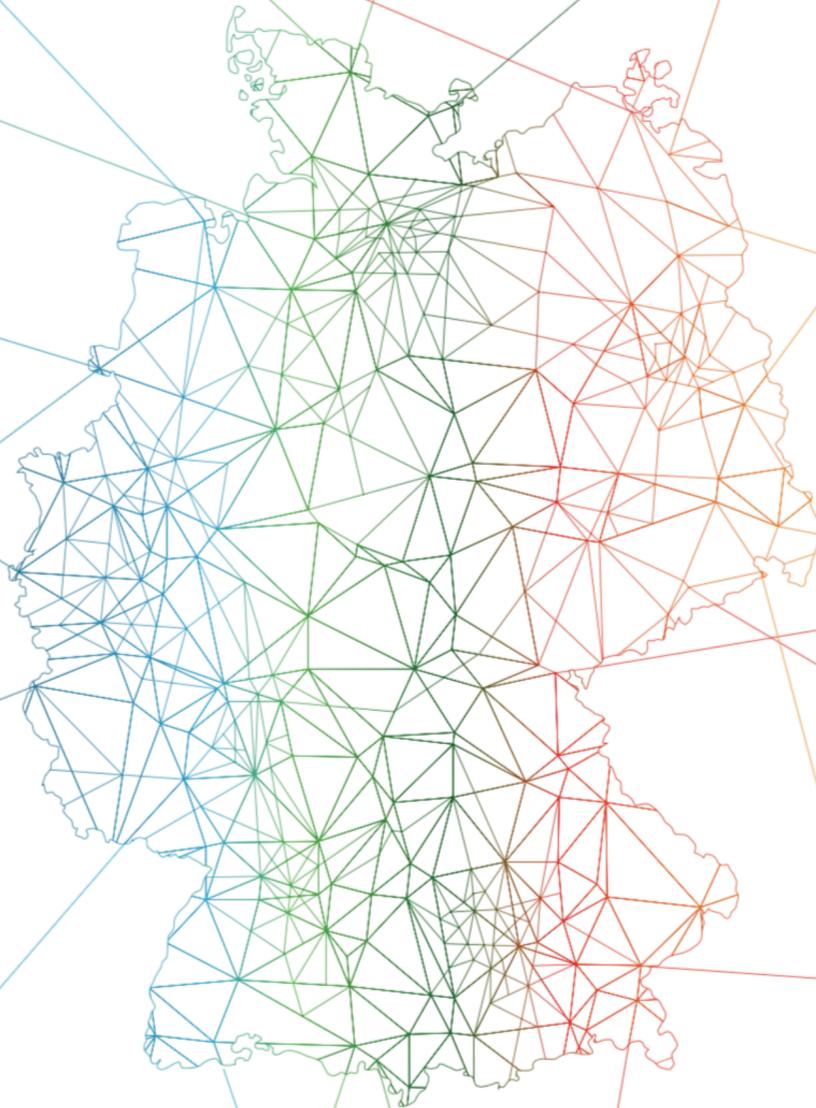
"Homes then are metamachines of literally thousands of different technological components. Indeed, it seems likely that the majority of **objects** that currently use electrical power will become **colonized by computer code** in the **(near) future** [...]."

„Softwarization“ of  
Everyday Life



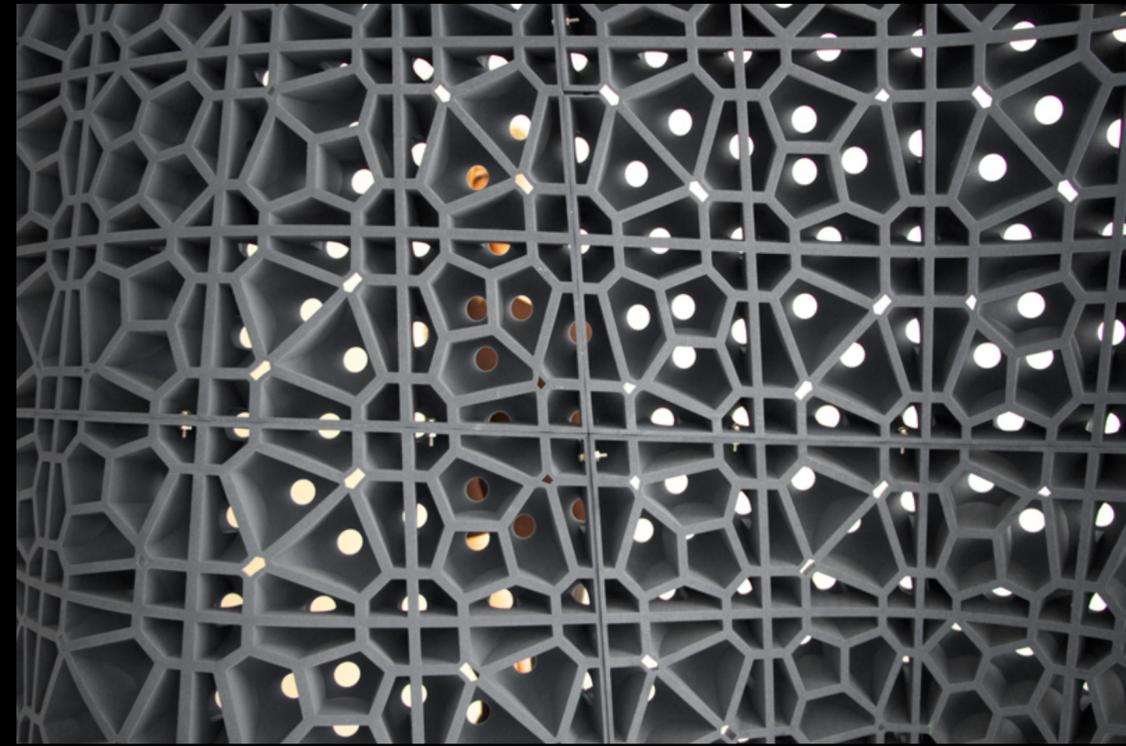
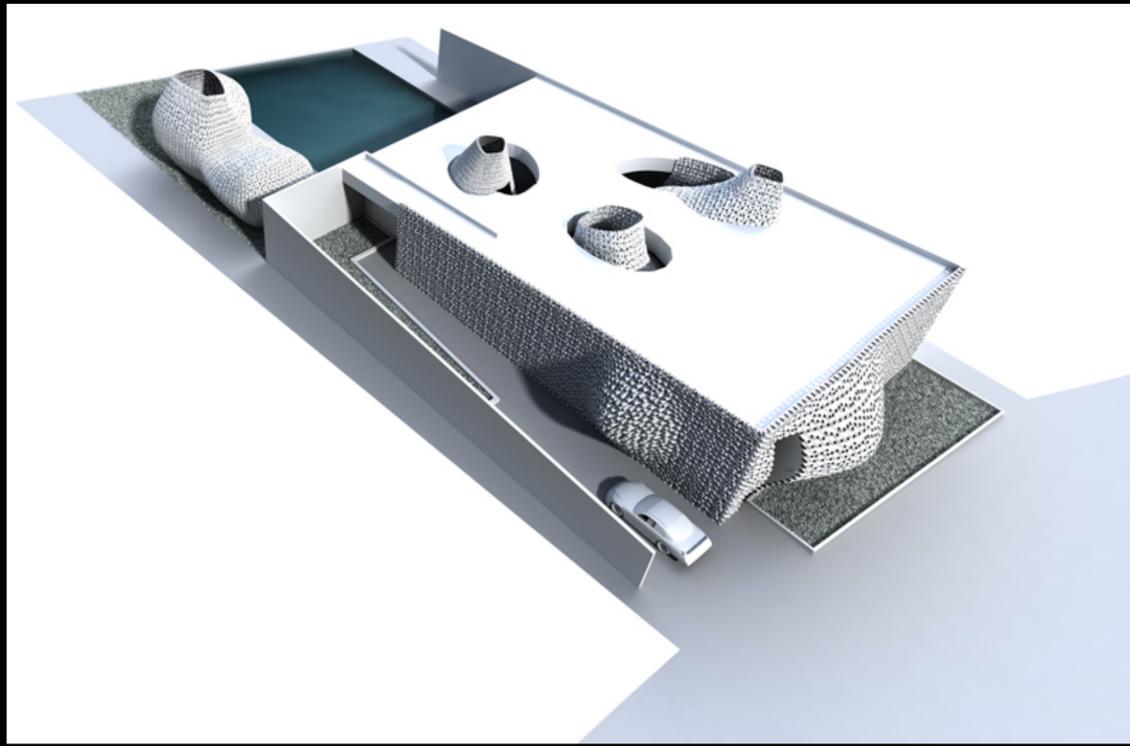
Rob Kitchin/Martin Dodge: Code/Space. Software and Everyday Life.  
MA: MIT Press, 2011.

**Atlas der Automatisierung**  
Automatisierte Entscheidungen  
und Teilhabe in Deutschland

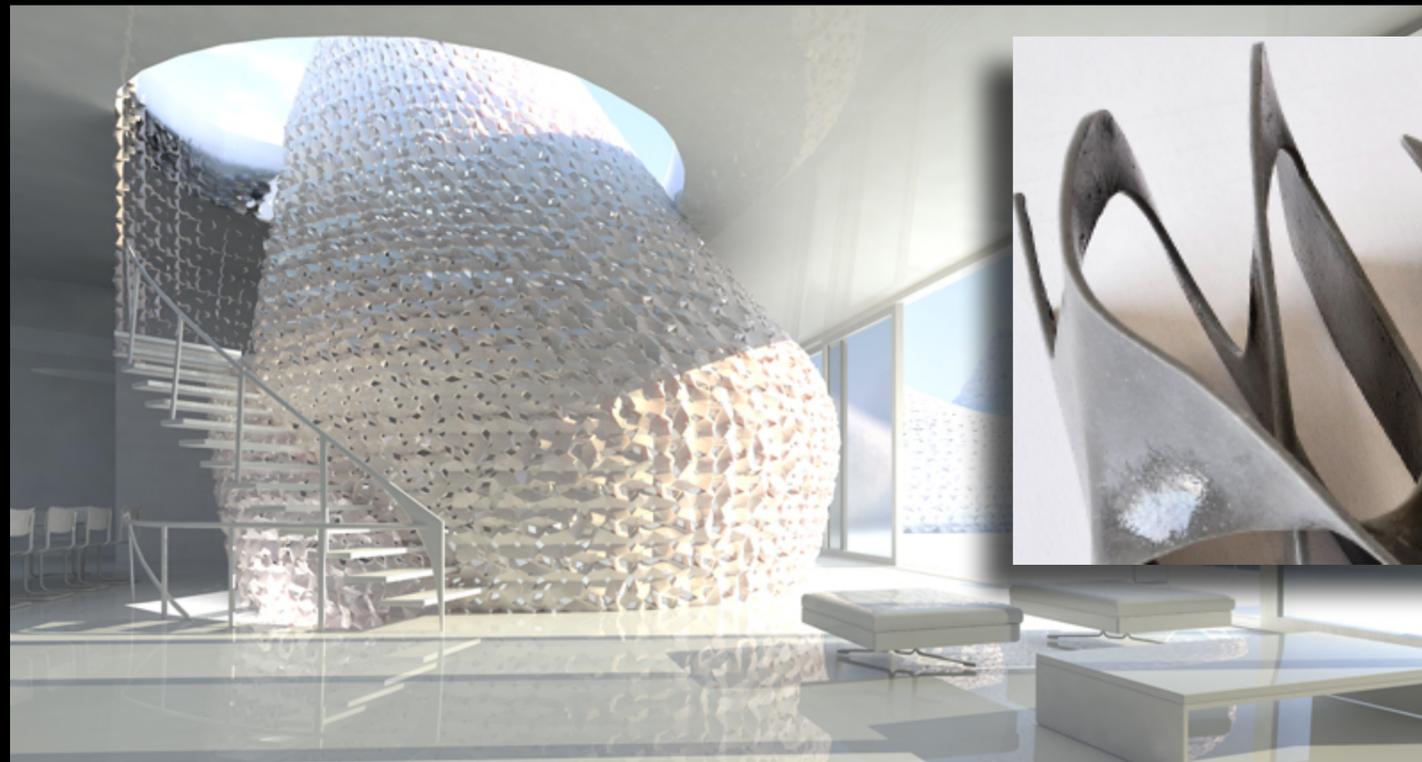


# Automated Decision Making

[https://atlas.algorithmwatch.org/wp-content/uploads/2019/04/Atlas\\_der\\_Automatisierung\\_von\\_AlgorithmWatch.pdf](https://atlas.algorithmwatch.org/wp-content/uploads/2019/04/Atlas_der_Automatisierung_von_AlgorithmWatch.pdf)



Form and matter as expression/printout of code



<http://www.emergingobjects.com/2013/09/27/concrete/>

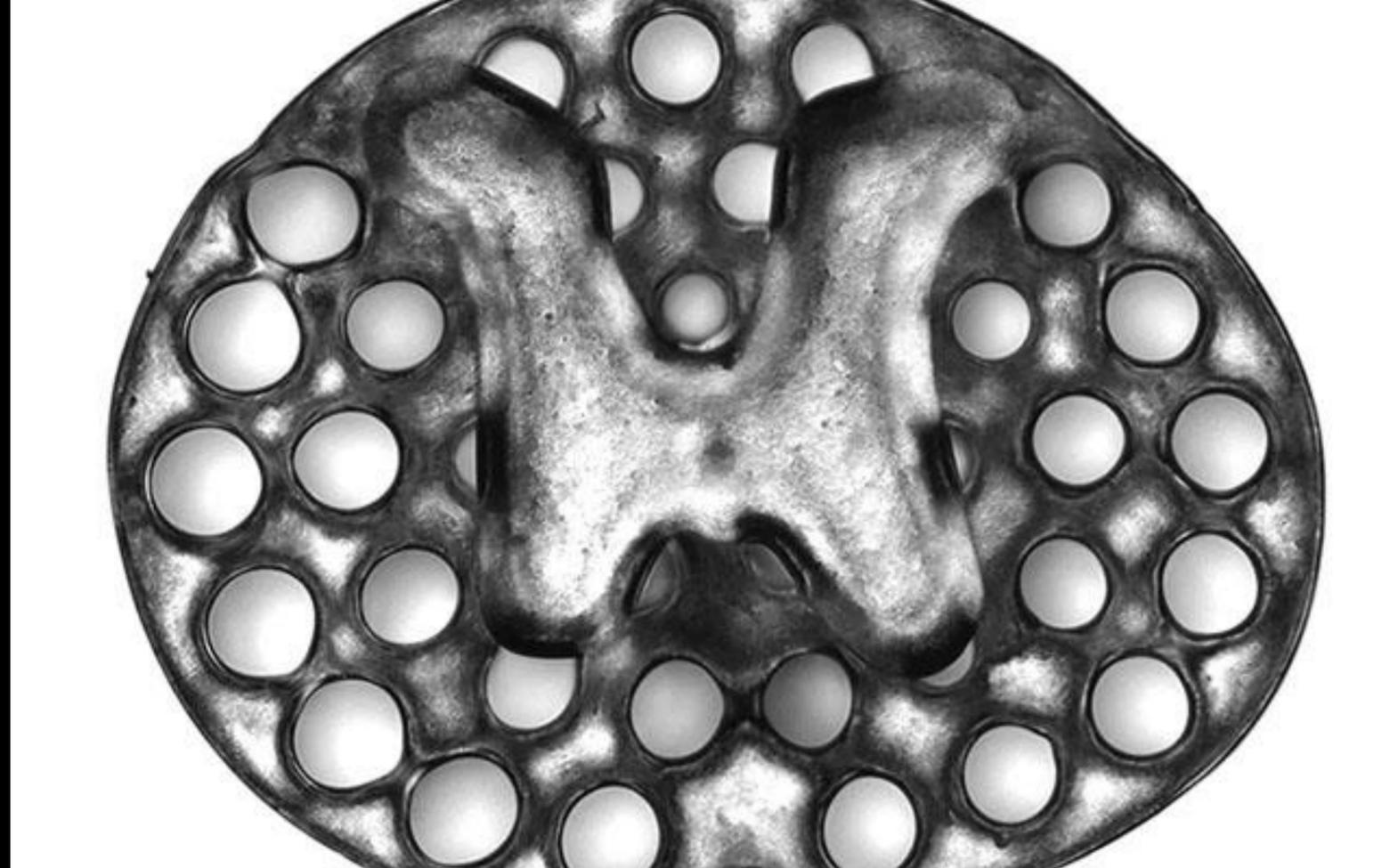
<http://www.rael-sanfratello.com/?p=1771>

# „Bioprinting“



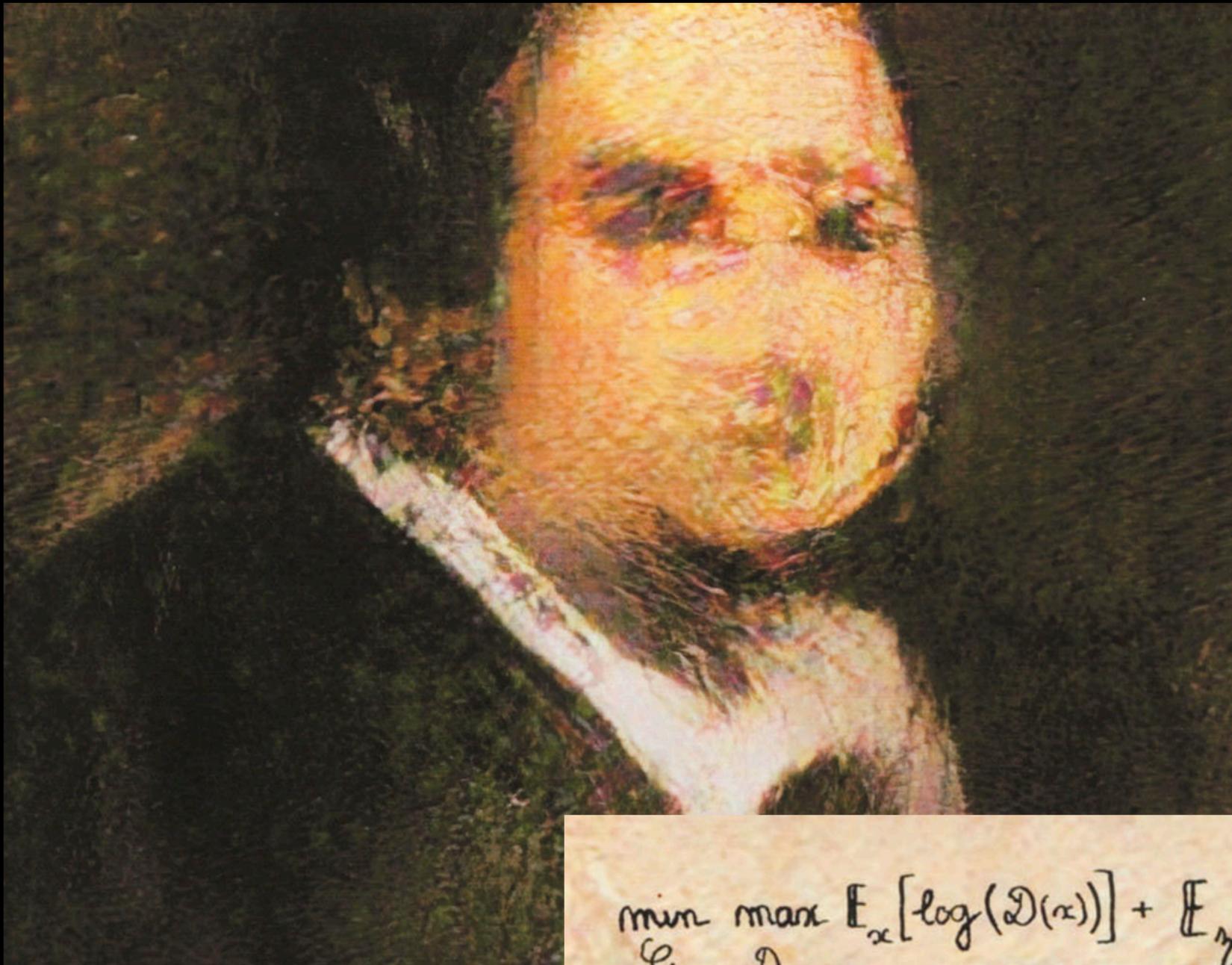
The Cellink Bio X is a desktop bioprinter. With its three (swappable) print heads, this bioprinter can make truly unique objects. The Bio X is the winner of the 2018 Reddot award and is praised for its responsive Neocortex M1 internal computer coupled with HeartOS, the most powerful bioprinting operating system out there. This allows the user to orchestrate the intricate process of building human tissues. \$39,000 - \$49,000

<https://3dprinting.com/pricewatch/industrial-3d-printer/cellink-bio-x/>

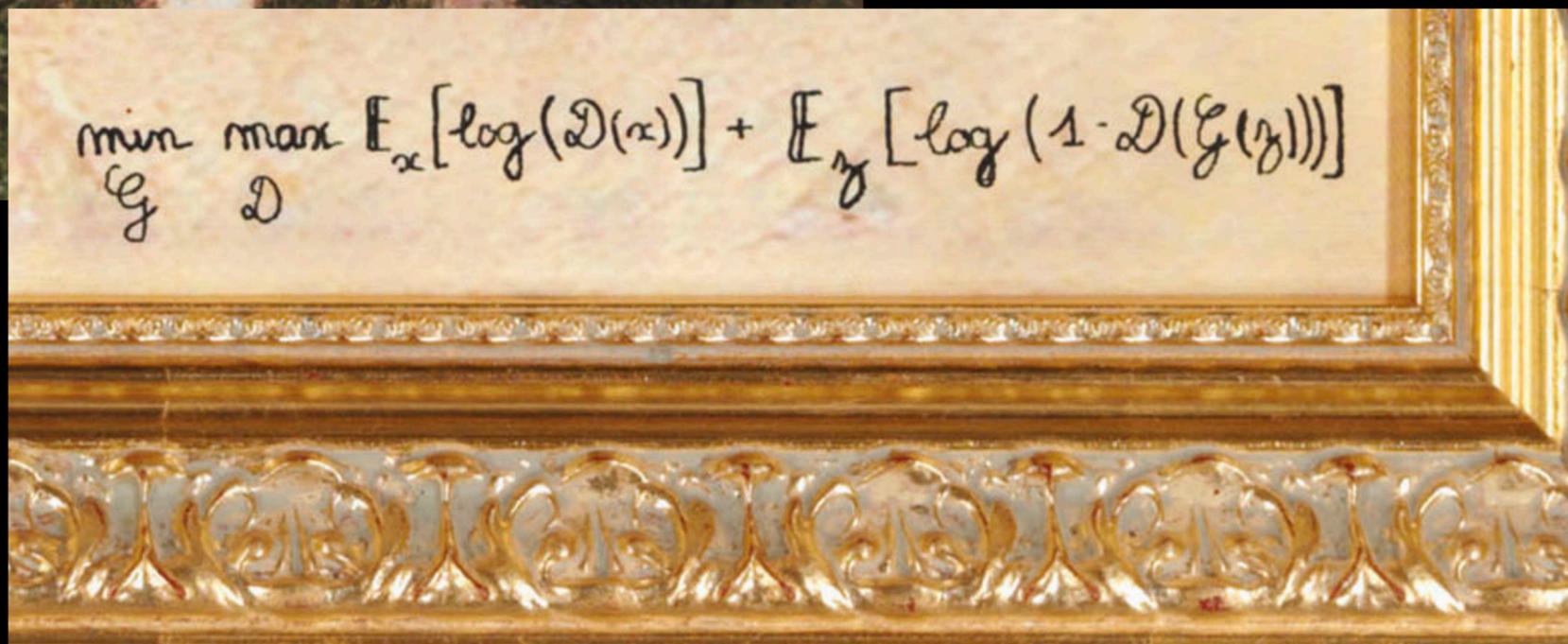


## Spinal Cord Implant - Printing Scaffolds With Stem Cells

The implants are 2 millimeter in size and are the product of microscale continuous projection printing method ( $\mu$ CPP) tech.  $\mu$ CPP allowed the researchers to print 3D biomimetic hydrogel scaffolds that met the exact dimensions of the rodent spinal cord in 1.6 seconds, so the process is also lightning fast. *“This shows the flexibility of our 3D printing technology,”* said co-first author Wei Zhu, PhD, nanoengineering postdoctoral fellow. *“We can quickly print out an implant that’s just right to match the injured site of the host spinal cord regardless of the size and shape.”* (<https://3dprinting.com/bio-printing/spinal-cord-implant-nerve-cell-growth/>)



# Creative Machines



So, digitalization goes along with massive transformations on cultural & social levels.

What does this have to do with aesthetic, arts, and cultural education?



„Education“



THEORIZING EDUCATION SERIES

continuation  
of  
culture

Forgotten Connections

On culture and upbringing

Klaus Mollenhauer

Edited and translated by Norm Friesen



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a Pelican  Original

# WAYS OF SEEING

Based on the BBC television series with

**JOHN BERGER**

Seeing comes before words. The child looks and recognizes before it can speak.

But there is also another sense in which seeing comes before words. It is seeing which establishes our place in the surrounding world; we explain that world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled.



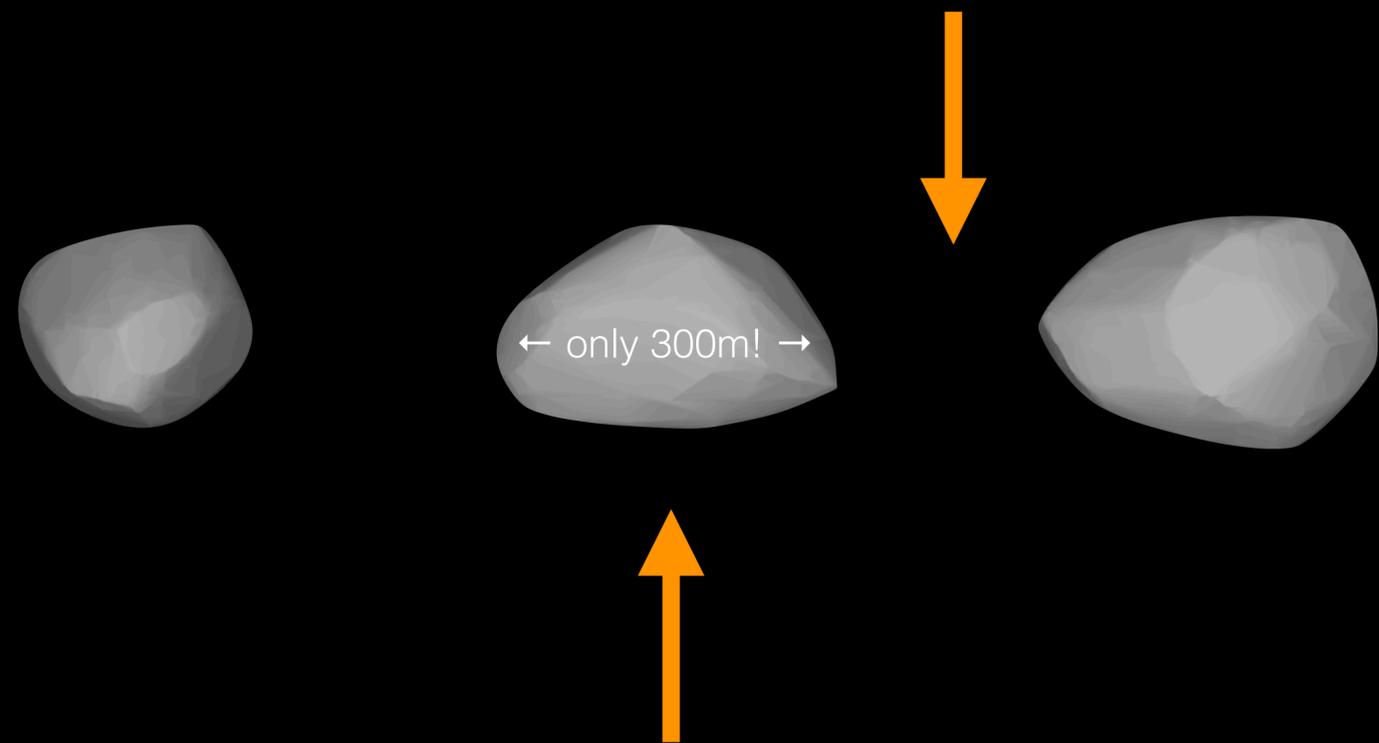
The Surrealist painter Magritte commented on this always-present gap between words and seeing in a painting called *The Key of Dreams*.

The way we see things is affected by what we

„Culture“

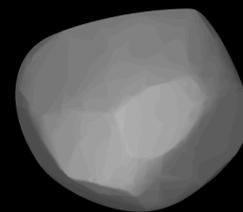
„Culture“

meaningless voids of empty space



insignificant lump of stone

„Culture“



=



Apophis

„Aesthetics“

„Chaos“ =



perceivable form  
responding to an  
abstract cultural concept



„Aesthetics“

„Chaos“ =



abstract cultural concept  
deeply rooted in  
values and cosmology



perceivable form  
responding to an  
abstract cultural concept



aesthetic order  
of things

„Aesthetics“

abstract cultural concept  
deeply rooted in  
values and cosmology



normative order  
of things

realm of the aesthetic



aesthetics following  
its own rules

„Aesthetics“



normative order  
of things:  
WTF?

realm of the normative

realm of the aesthetic



aesthetics following  
its own rules

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„Aesthetics“

DISSENSUS

---

normative order  
of things:  
WTF?

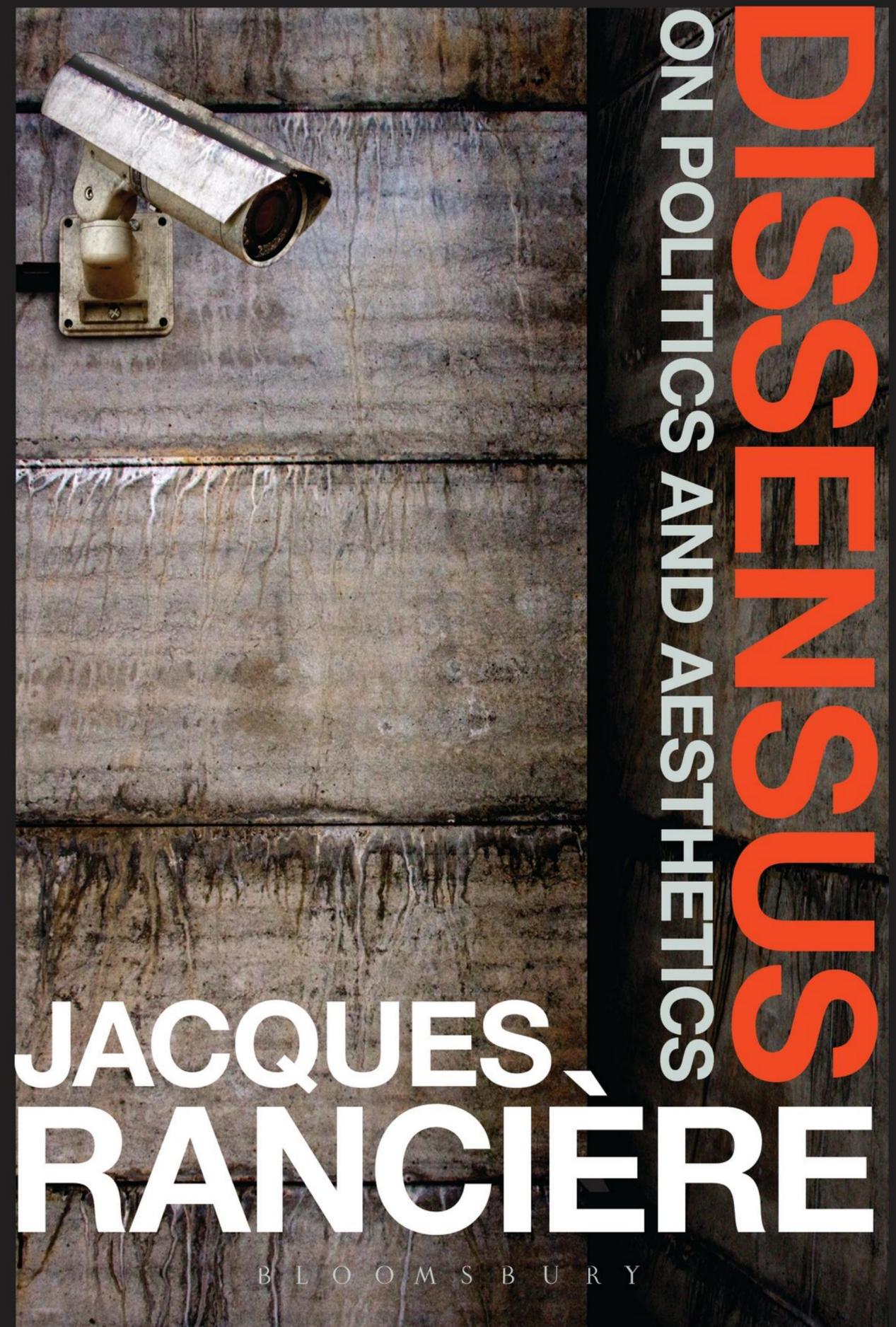


realm of the normative

„A dissensus is not a conflict of interests, opinions or values; it is a **division inserted in ‘common sense’**: a dispute over what is **given** and about the frame within which we see something as **given.**“

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(Rancière, Dissensus, 69)



This is what this has  
to do with Aesthetic,  
Arts and Cultural

Education:

Inquiring about the  
possibilities of  
dissensus.

aesthetics following  
its own rules

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DISSENSUS

---

digital/digitalized  
order of things

(and btw. this is what it would have looked like)

Why have we  
gathered together  
here (I think)?



Herbst im Schloss Genshagen | Foto © Stiftung Genshagen | René Arnold



Virtuell, vernetzt, analog. Fachtag über Künste, Kulturelle und politische Bildung im digitalen Wandel | Foto © Stiftung Genshagen | René Arnold



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Research Focus Area  
„Research on Digitalization in  
Arts and Cultural Education“

- 13 Interdisciplinary Research Projects on Digitalization in Arts & Cultural Education
- 24 Universities involved
- Funding: about 10 Mio. €
- biggest research context on the topic of digitalization in arts education in Germany (probably in Europe, too)

Meta-Project conducted by the



Part 1: Theory development,  
qualitative methods, PR:  
Prof. Dr. Benjamin Jörissen

Part 2: Quantitative methods &  
quantitative research synthesis:  
Prof. Dr. Stephan Kröner

Thanks!

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