

# UNESCO-Chair in Arts and Culture in Education

## Prof. Dr. Benjamin Jörissen



Organisation der  
Vereinten Nationen für  
Bildung, Wissenschaft,  
Kultur und Kommunikation



Friedrich-Alexander-Universität  
Erlangen-Nürnberg

UNESCO-Lehrstuhl für kulturelle Bildung  
Friedrich-Alexander-Universität  
Erlangen-Nürnberg

# Digitalization and Arts Education: New responsibilities of AE since the Seoul Agenda

## WAAE International Conference

October 28 – Nov. 1 2019 Frankfurt



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

Digitalization as  
Challenge,  
Responsibility,  
& Chance  
for Arts Education

# Digitalization as a Challenge for AE

Changes in arts & creativity

Changes in student's cultures

„Network“/„Next“/„Digital“ Society

Changes in arts &  
creativity

from art's  
autonomy  
to  
**remix**  
culture



# Changes in arts & creativity



ancestors  
laughing at  
colonizer's  
attempts to  
weaken our  
connection  
to the land

nuniyeh • Abonniert

nuniyeh ya bitch.. no  
pic: @kentmonkman  
17Wo.

danaconnz ❤️  
17Wo. Antworten

nanookfareal Dats me 🐾  
17Wo. Gefällt 1 Mal Antworten

briskool Ayyyyyyyyeee I'm in this  
2x 😊 Miigwech! Debewin, so  
TRUE  
17Wo. Gefällt 1 Mal Antworten

Gefällt 249 Mal  
26. JUNI

Kommentar hinzufügen ... Posten

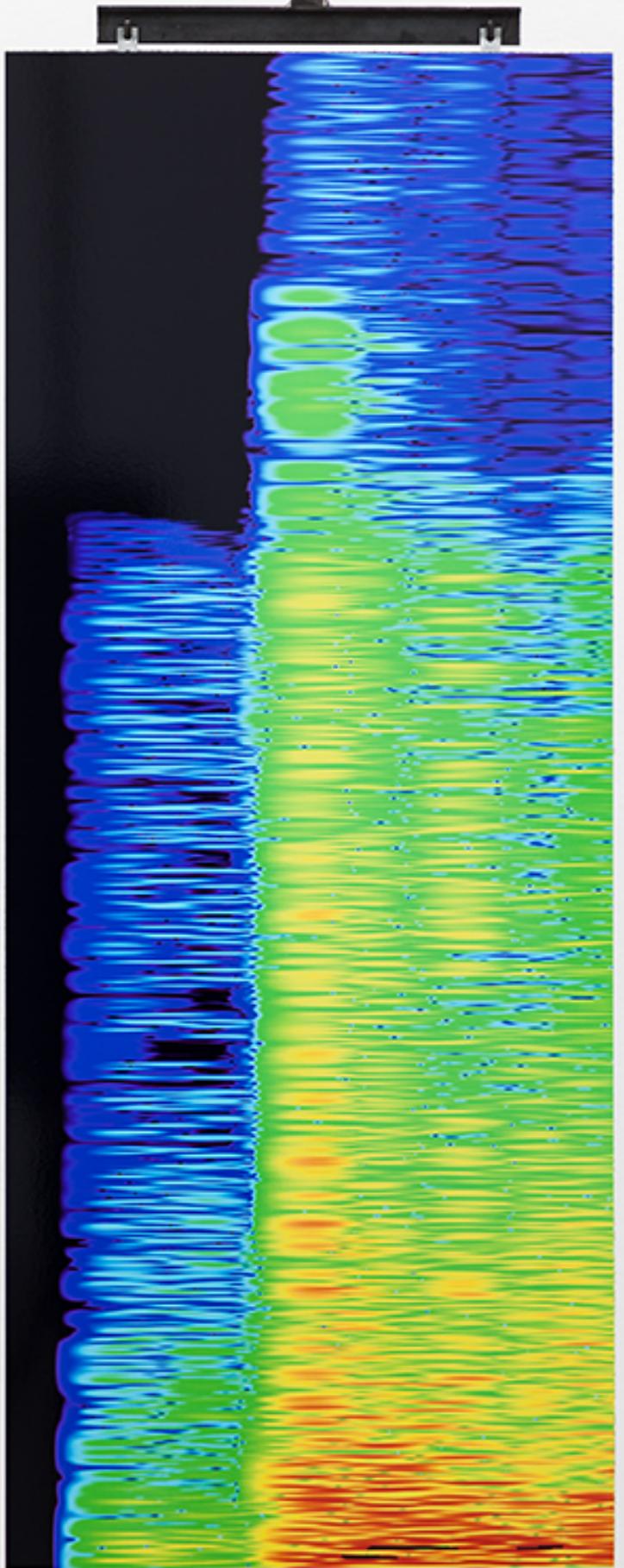
<https://www.instagram.com/nuniyeh/>

# Changes in arts & creativity

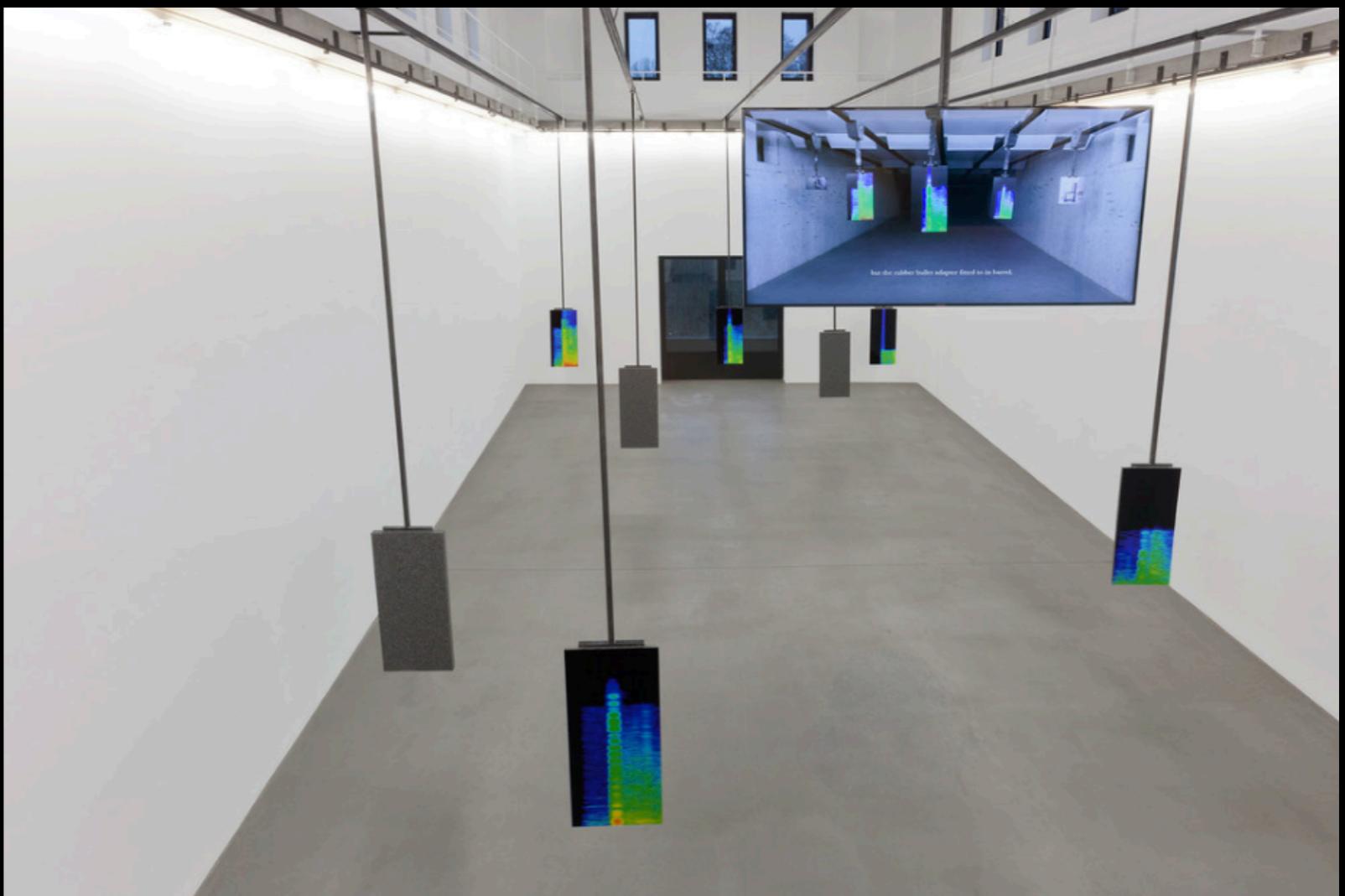
„to create projects which move seamlessly from physical representation to Internet representation“

Artie Vierkant, *The Image Object Post-Internet* (2010)



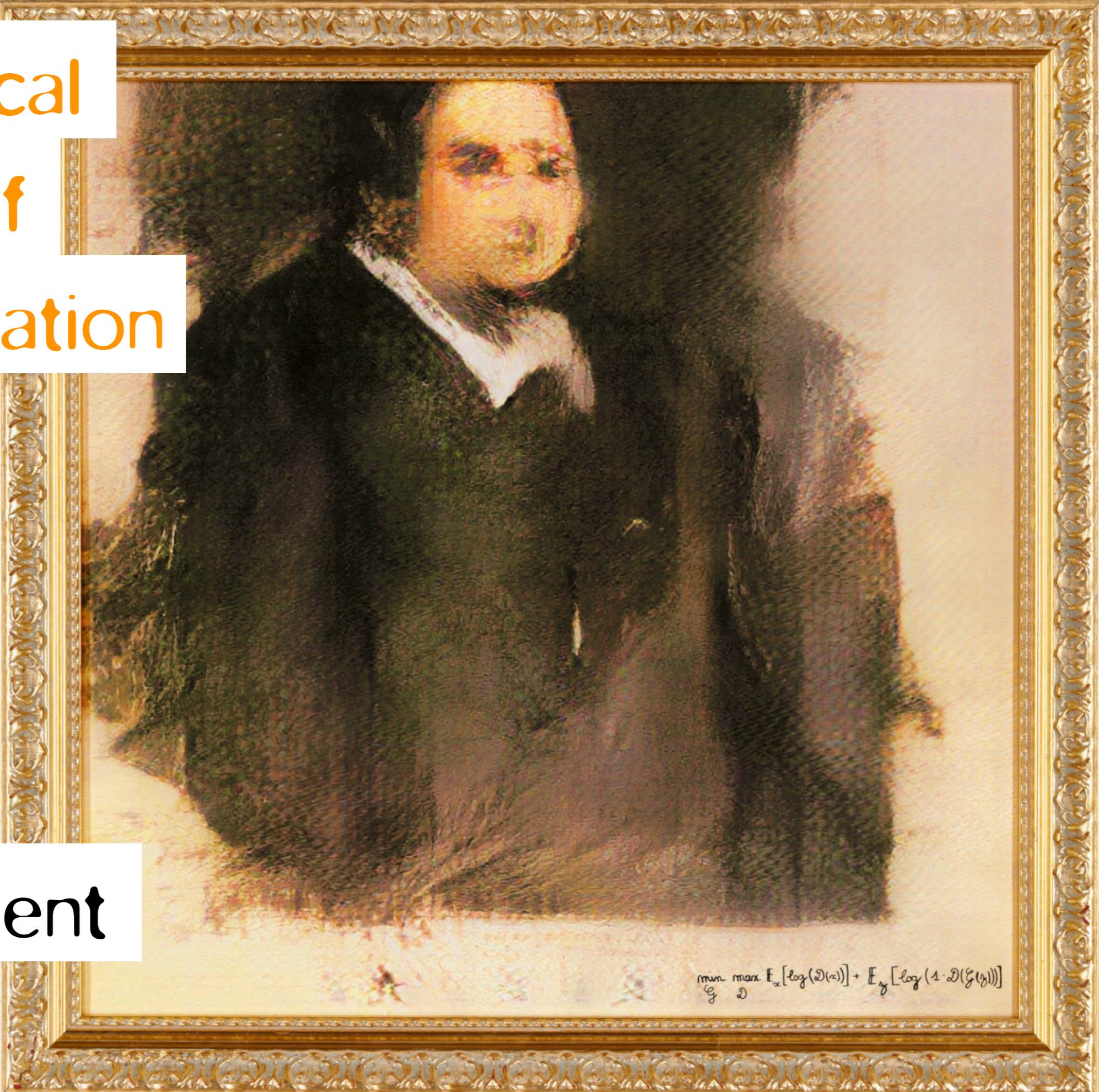


# Changes in arts & creativity



Lawrence Abu Hamdan: Earshot (2015)  
<http://lawrenceabuhamdan.com/>

technological  
mimesis of  
artistic creation  
by [REDACTED]  
means  
of [REDACTED]  
deep [REDACTED]  
reinforcement  
learning



$$\min_{\mathcal{G}} \max_{\mathcal{D}} \mathbb{E}_x[\log(\mathcal{D}(x))] + \mathbb{E}_{\mathcal{G}}[\log(1 - \mathcal{D}(\mathcal{G}(y)))]$$



SALE 16388

## Prints &amp; Multiples

New York | 23 - 25 October 2018

[Browse Sale](#)

LOT 363

*Edmond de Belamy, from La Famille de Belamy*Price realised i

USD 432,500

Estimate i

USD 7,000 - USD 10,000

[Follow lot](#)[+ Add to Interests](#)*Edmond de Belamy, from La Famille de Belamy*

generative Adversarial Network print, on canvas, 2018, signed with GAN model loss function in ink by the publisher, from a series of eleven unique images, published by Obvious Art, Paris, with original gilded wood frame

S. 27 1/2 x 27 1/2 in (700 x 700 mm.)

ANDREAS RECKWITZ

# THE INVENTION

# OF CREATIVITY

Creativity  
as a  
„dispositif“  
of power  
& everyday  
imperative  
in an  
aestheticized  
society

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Reckwitz, A. (2017). *The Invention of Creativity: Modern Society and the Culture of the New* (1.; S. Black, Trans.). Malden, MA: Polity.

# Digitalization as a Challenge for AE

Changes in student's cultures

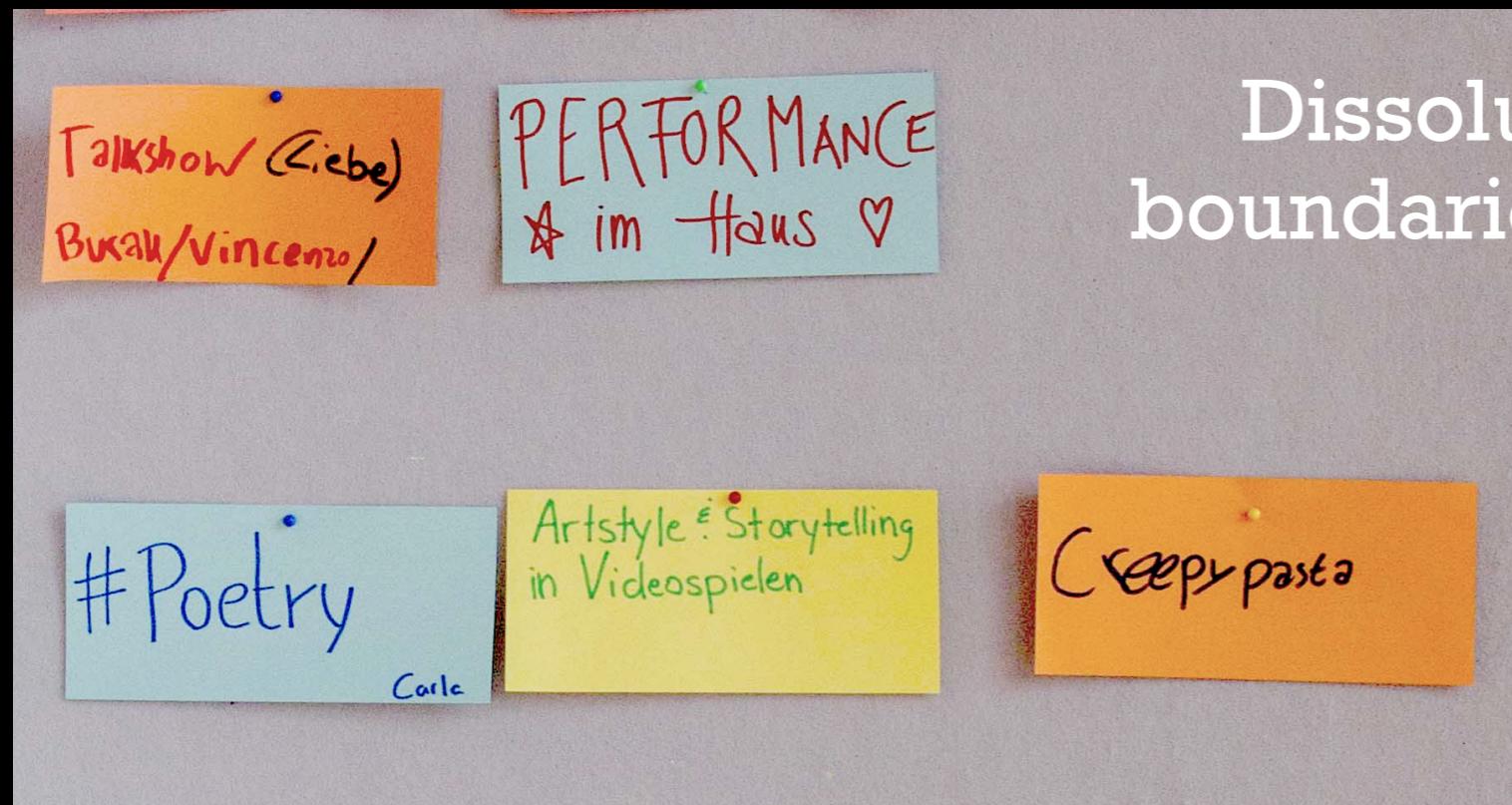
i.e.  
„post-digital“  
youth culture

# Post-digital Youth Culture

„my son once asked  
how we used the internet  
before computers were invented“

Baym, N. K. (2015). *Personal Connections in the Digital Age*. Hoboken: John Wiley & Sons.

# Post-digital Youth Culture



Dissolution of conventional  
boundaries between arts genres



„(Post-) Digital Cultural Youth Worlds“  
Keuchel & Jörissen, 2016-2019

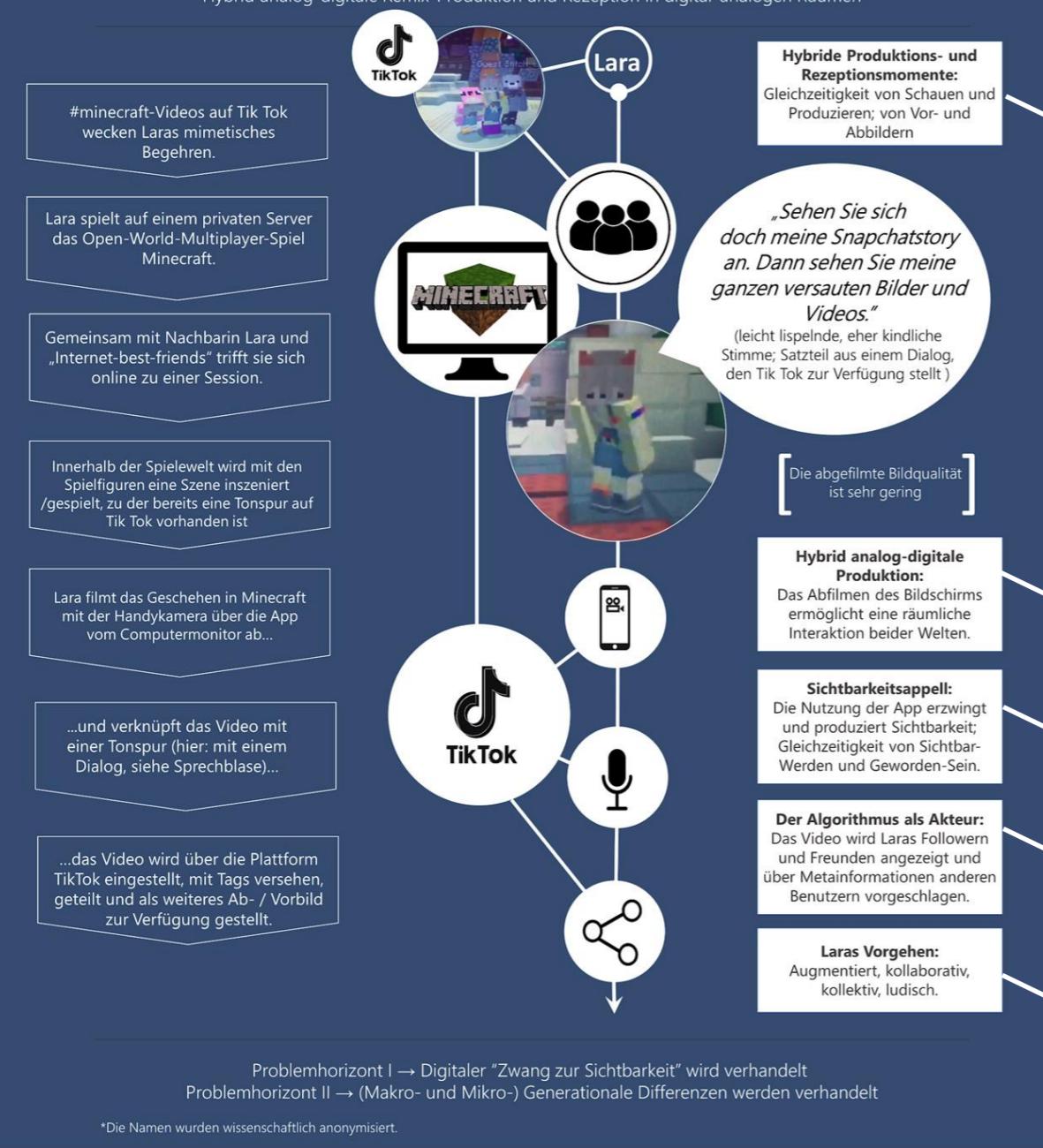
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Federal Ministry  
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and Research

## Postdigitale ästhetische (Medien-) Praktiken am Beispiel von Lara und Lara\* mit Minecraft, Tik Tok, Smartphone und Computer

Hybrid analog-digitale Remix-Produktion und Rezeption in digital-analogen Räumen



# Deeply integrated digital/non-digital creative practices

Production/reception are intertwined

„onscreen“ + „in life“ = „onlife“ (hybrid)

App (TikTok) enforcing non-controlled visibility

Algorithm as actant (networking, ranking)

mode of action:  
augmented, collaborative,  
collective, ludic

„(Post-) Digital Cultural Youth Worlds“  
Keuchel & Jörissen, 2016-2019

# Emerging new aesthetic & performative paradigms



MY BIRTHDAY IS RUINED

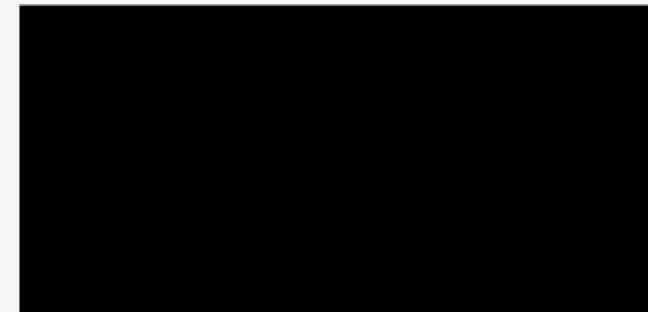
6.871.186 Aufrufe • 17.05.2018

1 like 267.653 1990 1 share 1 save ...



emma chamberlain ✓  
8,5 Mio. Abonnenten

may 22. don't forget.



# JUGEND/YOUTUBE/ KULTURELLE BILDUNG. HORIZONT 2019

STUDIE: EINE REPRÄSENTATIVE  
UNTER 12- BIS 19-JÄHRIGEN ZU  
BILDUNGSANGEBOTE AN DIGITAL

N = 800 (age 12-19)

„The classic educational constellation of teaching, learning and knowledge is fundamentally changing as a result of digitisation.“

„YouTube is the leading medium and digital cultural venue for young people.“

„Web videos are stimulating for young people to become culturally active themselves.“

„YouTube vs. classical educational institutions: Young people identify strengths and weaknesses.“



# „Network“/„Next“/„Digital“ Society

Manuel Castells (1999)

Dirk Baecker (2007)

Armin Nassehi (2019)

# Structural elements of digitality:

Code/Software  
executive aspect

Protocols &  
Data Formats  
formative aspect

Networks  
relational aspect

Hardware & Interfaces  
material aspect

# Interdisciplinary complexity of digitality:

**Code/Software**

Computer Science

Software Studies

**Protocols &  
Data Formats**

Epistemology

Media  
Studies

Sociology

**Networks**

Cultural Studies

Design Studies

**Hardware & Interfaces**

Engineering

Interdisciplinary complexity of digitality:

Code/Software

Protocols &  
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Networks

Hardware & Interfaces

# Digitalization & „The Distribution of the Sensible“<sup>\*</sup>

Software as „Logos“ (immediate execution of rules)

Softwareization as Environmentalization

Data Formats as (Im-) Perceptual Capital

Solutionism as a Regime of the Computable

Algorithmic Aesthetics, Algorithmic Thinking

De- & Rematerialization of the Sensible

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Sterne, J. (2012). MP3: The Meaning of a Format. Duke University Press.

Morozov, E. (2013). To Save Everything, Click Here: The Folly of Technological Solutionism. PublicAffairs.

Parisi, L. (2013). Contagious Architecture: Computation, Aesthetics, and Space. MIT Press.

Cubitt, S. (2016). Finite Media: Environmental Implications of Digital Technologies. Duke University Press.

# solutionism

„[...] reduces all human problems to technical problems. [...] It divides the world in that what ‚counts‘, i.e. what can be technologically identified, and the rest.“

Morozov, Evgeny (2013): To Save Everything, Click Here:  
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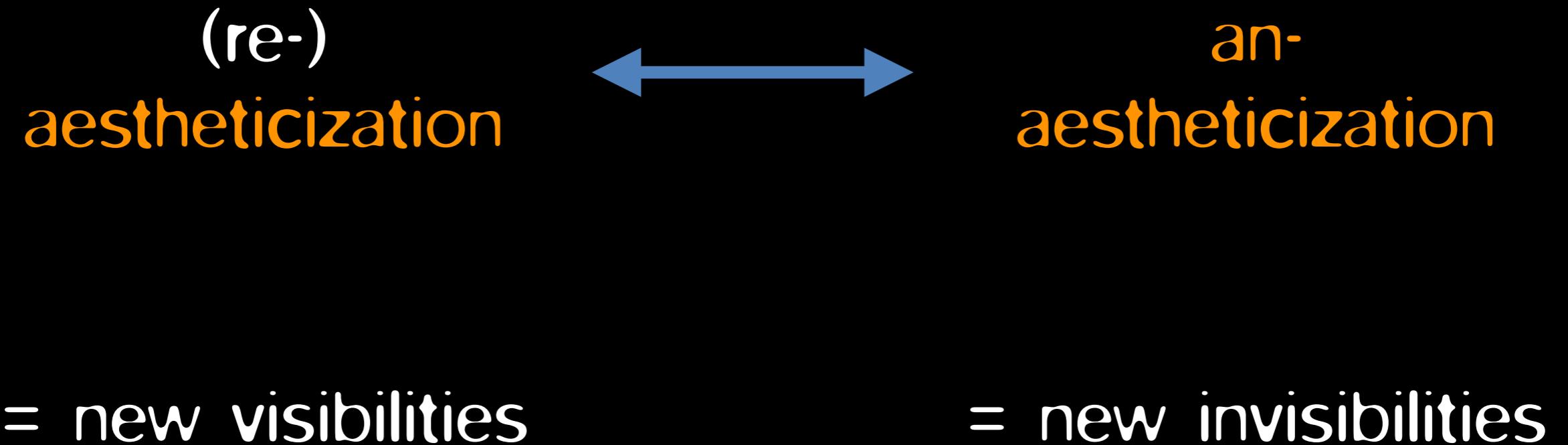
# Digitalization & „The Distribution of the Sensible“

# (re-) aestheticization



# an- aestheticization

# Digitalization & „The Distribution of the Sensible“\*



# „Network“/„Next“/„Digital“ Society

## & „Post-digital“ Culture

Post-digitality  $\overset{\text{def}}{=}$

a state in which formerly digitally related structures (forms, semantics, practices) become universal.

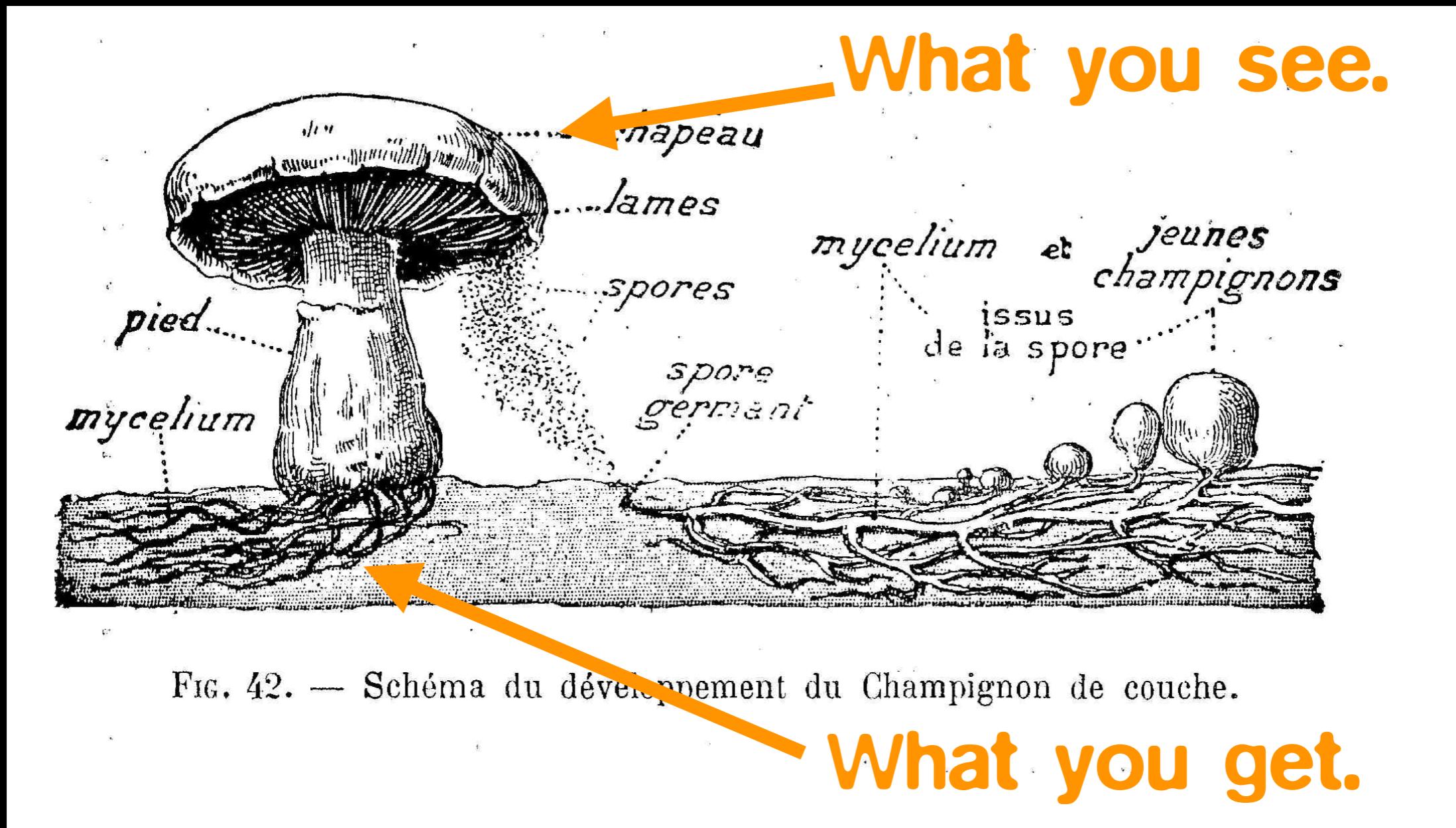
e.g.  
distributed  
problem solving  
(WhatsApp)

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

e.g. modes of  
communication  
(memes)

e.g. hybrid  
materialities (cars,  
airports ...)

The digital web is a mycelium.



# Digitalization as a Responsibility for AE

Irritation & Innovation of Arts Education itself:

- Catching up with post-digital arts
- Catching up with new learning cultures
- Catching up with post-dig. youth culture

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Irritation & Innovation of Arts Education itself:

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New Responsibilities of AE:

- critically reflecting patterns of aestheticization
- empowerment with & against the digital regimes of sensible

# Digitalization as a Chance for AE



- 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)

Federal Ministry  
of Education and  
Research:

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



Federal Ministry  
of Education  
and Research

Meta-Project conducted by the  
**FAU**  
FRIEDRICH-ALEXANDER  
UNIVERSITÄT  
ERLANGEN-NÜRNBERG

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

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

# Spaces

How should a „virtual museum of the future“ look like?

How do social media change our relationship to the [urban] spaces we live in?

# Platforms

Anyone can write a review on literature and art online today:  
How does this change the way we deal with culture?

An online platform to collectively explore the diversity of digital cultures.

What opportunities does e-learning offer for musical learning?

# Institutions

How does digitalization change the offers of arts & cultural education at adult education centres?

How is digital technology changing the way people create art and culture?

Playing music together over wifi:  
What is changing?

How is (post-internet) art education changing in the context of digitalization?

Making music with Apps:  
What's new with it?

How do you make music with apps?

Making music with silicone and software: How digital materialities change creativity.

What new possibilities do music apps offer people with (complex) disabilities?

Dancing algorithms: How digital tools can change dance practices.

Cultural youth education and the digital challenge: How young people and institutions deal with it.

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**web:** [www.dikubi.de](http://www.dikubi.de)



**intagram:** dikubimeta

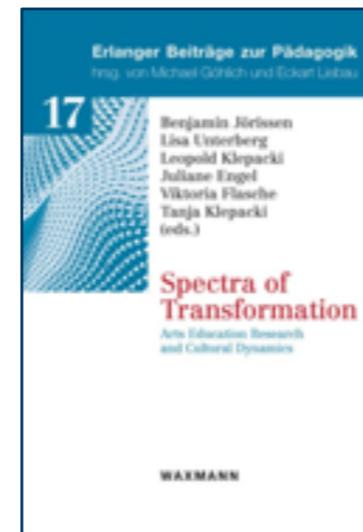


**twitter:** DiKuBi-Meta (@DiKuBi2)



**please contact:** [lpk-dikubi-meta@fau.de](mailto:lpk-dikubi-meta@fau.de)

Jörissen et al. (eds.) (2018):  
***Spectra of Transformation.***  
Münster, New York: Waxmann



Jörissen, B., Kröner, S., & Unterberg, L. (Eds.). (in print).  
**Forschung zur Digitalisierung in der kulturellen Bildung.** München: kopaed. (*open access*)



KULTURELLE BILDUNG und DIGITALITÄT # 1

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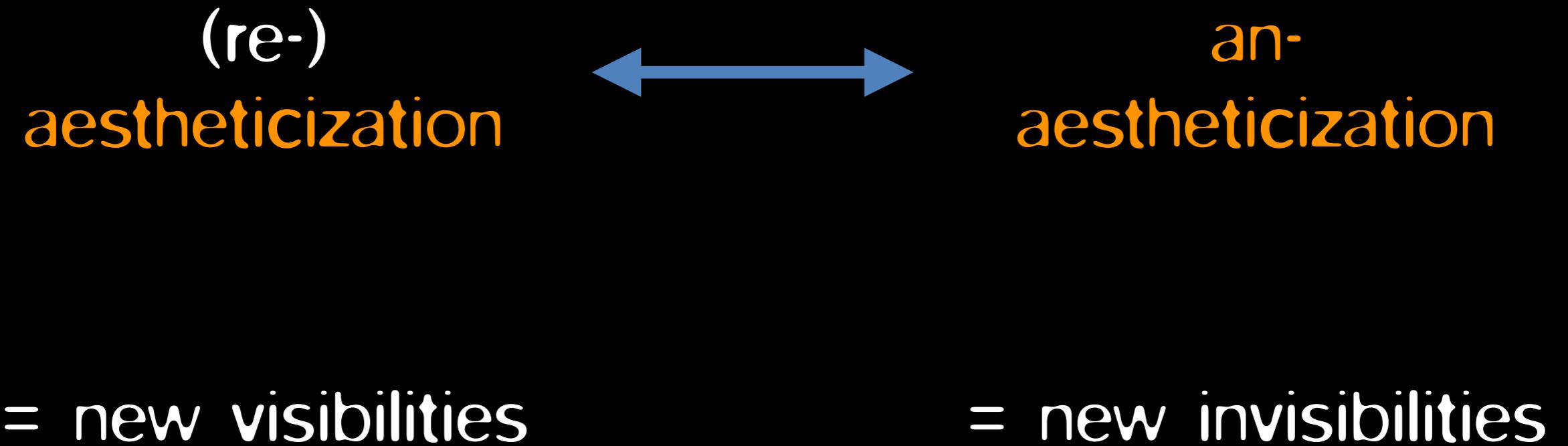
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# an- aestheticization

# Digitalization & „The Distribution of the Sensible“\*



„code is law“

vs.

„code as logos“

---

Lawrence Lessig (2000). Code Is Law. On Liberty in Cyberspace. <http://harvardmagazine.com/2000/01/code-is-law-html> [20.6.2015]

Wendy Hui Kyong Chun: Programmed Visions: Software and Memory. MIT Press 2011.

rule → hermeneutics (judge) → conclusion

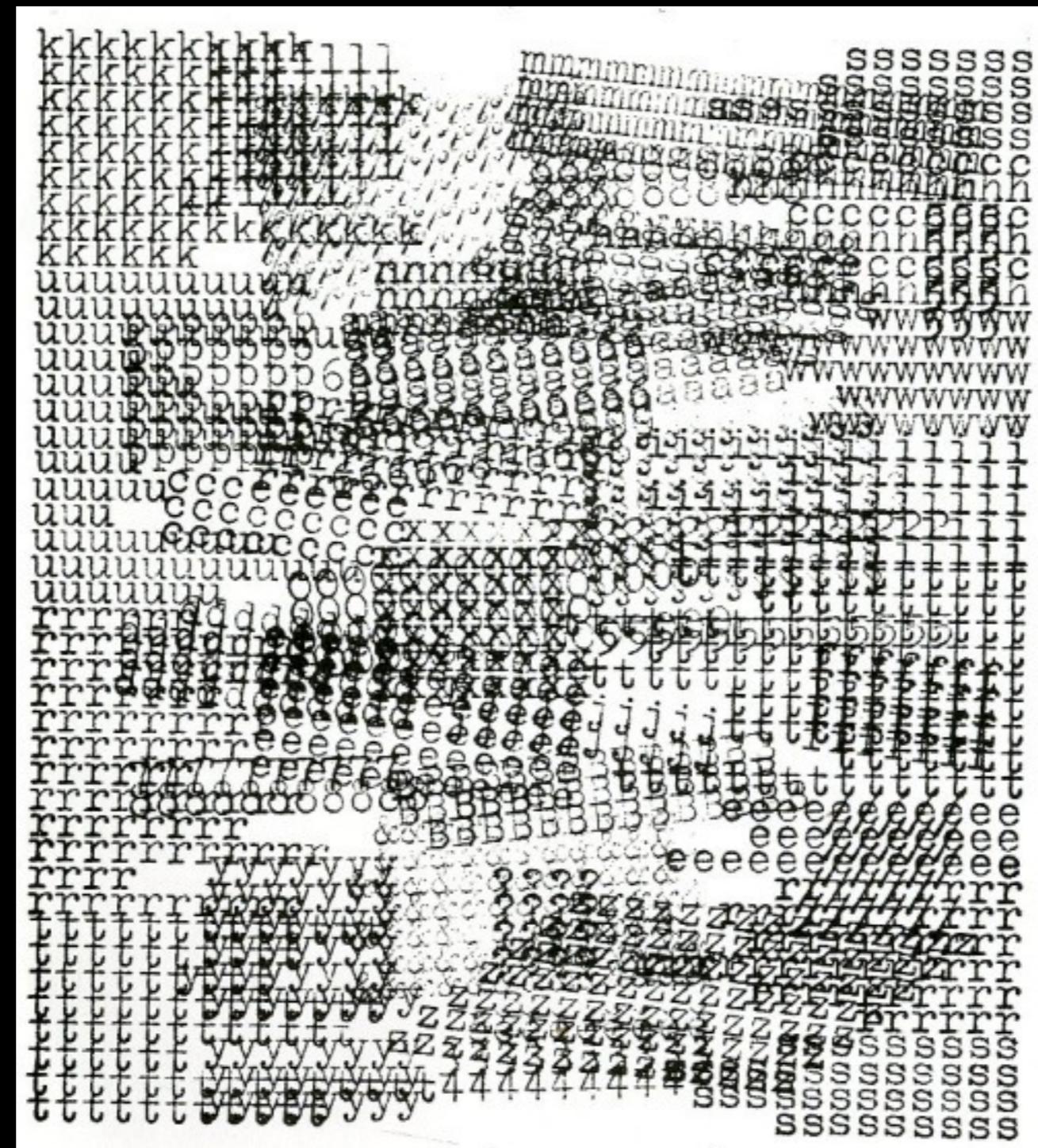
„code is law“

vs.

„code as logos“

rule (→ compilation) → execution

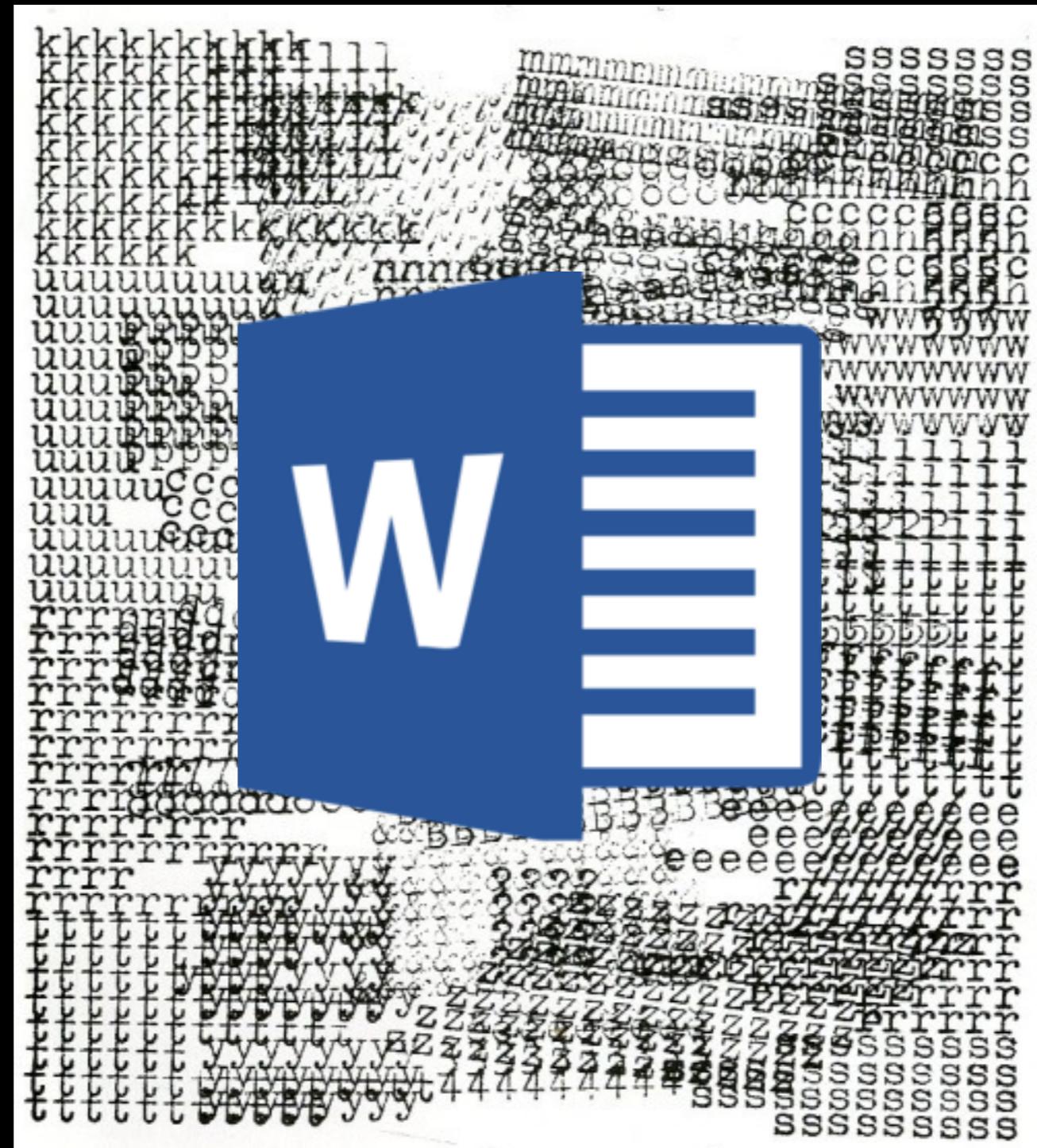
# Jiří Kolář as a user-subject of his typewriter



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Jiří Kolář: Kurt Schwitters (strojopis), 1964.

Try this with



---

Jiří Kolář: Kurt Schwitters (strojopis), 1964.

„becoming a software user“  
involves  
radical interpellation  
through  
radicalized affordance

„solutionism“

,,lock-in“

(e.g. MIDI<sup>\*</sup> becoming standard)

- Musical Instrument Digital Interface



d) researching the transactional relations  
of hybrid digital-material things

a) understanding material-digital things  
as design-things

b) understanding the transactional  
processes and modes of subjection

