

Digitalization in and of Arts and Cultural Education: Challenges and Opportunities

ISME World Conference

Brisbane/online, 18 July 2022

UNESCO Chair in Arts and Culture in Education



Welcome

The **UNESCO Chair in Arts and Culture in Education** is located in Nürnberg, Germany and hosted by Friedrich-Alexander-Universität Erlangen-Nürnberg. Together with the Canadian [UNESCO Chair in Arts & Learning](#), we are proud to serve as a dedicated chair to fostering UNESCO-related issues and perspectives on aesthetic, arts, and cultural education in a global view.

The Erlangen UNESCO-Chair was established in 2010 and has ever since been particularly involved in national and international research in the field of cultural education. In 2019, Prof. Dr. Benjamin Jörissen succeeded Prof. Dr. Eckart Liebau as chair holder, who had held the chair since its inception.

As a Chair we aim to achieve and work towards two main **strategic goals**:

1. Deepen the research approach on the issue of "aesthetic education" within the scope of the broader field of arts education (respectively cultural education) oriented towards the [Sustainable Development Goals](#), while at the same time
2. fostering global research dialogues and collaborations to contribute to the enhancement of quality arts education research worldwide.

The basis for achieving these goals is an intensive collaboration with other scientists in **international networks**, like the [UNESCO UNITWIN „Arts Education Research for Cultural Diversity and Sustainable Development“](#) and the [European Network of Observatories in the Field of Arts and Cultural Education \(ENO\)](#), who offer an open and quality-oriented global research context.

TEAM



Prof. Dr. Benjamin Jörissen

Chair Holder



Dr. Tanja Klepaki

Senior Researcher

<https://www.ucace.fau.de/>



By Janericloeb - Own work, CC BY 3.0, <https://commons.wikimedia.org/w/index.php?curid=20988378>

Presentation
slides
will be made
available by
ISME
&
on my
website!

https://joerissen.name/downloads/

EDUCATION & CULTURE

Bilingual (German/English) Blog & Website of Prof. Dr. Benjamin Jörissen

Blog Video/Audio Downloads Publications Talks & Workshops Research Conferences about Impressum

https://joerissen.name/downloads/

DOWNLOADS



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If not stated otherwise, documents are in german language.

Presentation Slides (pdf)

- 2022
 - [Cultural Resilience and Digitalization: Chances, Challenges, and Responsibilities for Arts Education](#).
Short impulse for the UNESCO International Expert Meeting on Culture and Arts Education,
Seoul/online, 24/25 May 2022.
 - [Hacking Humanity: Digitalität und Anthropopraxis](#) (DGfE-Kongress, Symposium „Bildung des Menschen im Anthropozän. Die Grenzen des Menschen neu erforschen. Einsätze Pädagogischer Anthropologie“, 15.3.22)
 - [Die Entgrenzung von Erziehung und Bildung in der digitalen Transformation und die Notwendigkeit](#)

1

The Scope of Change: Digitalization in Culture, Arts, and Education

2

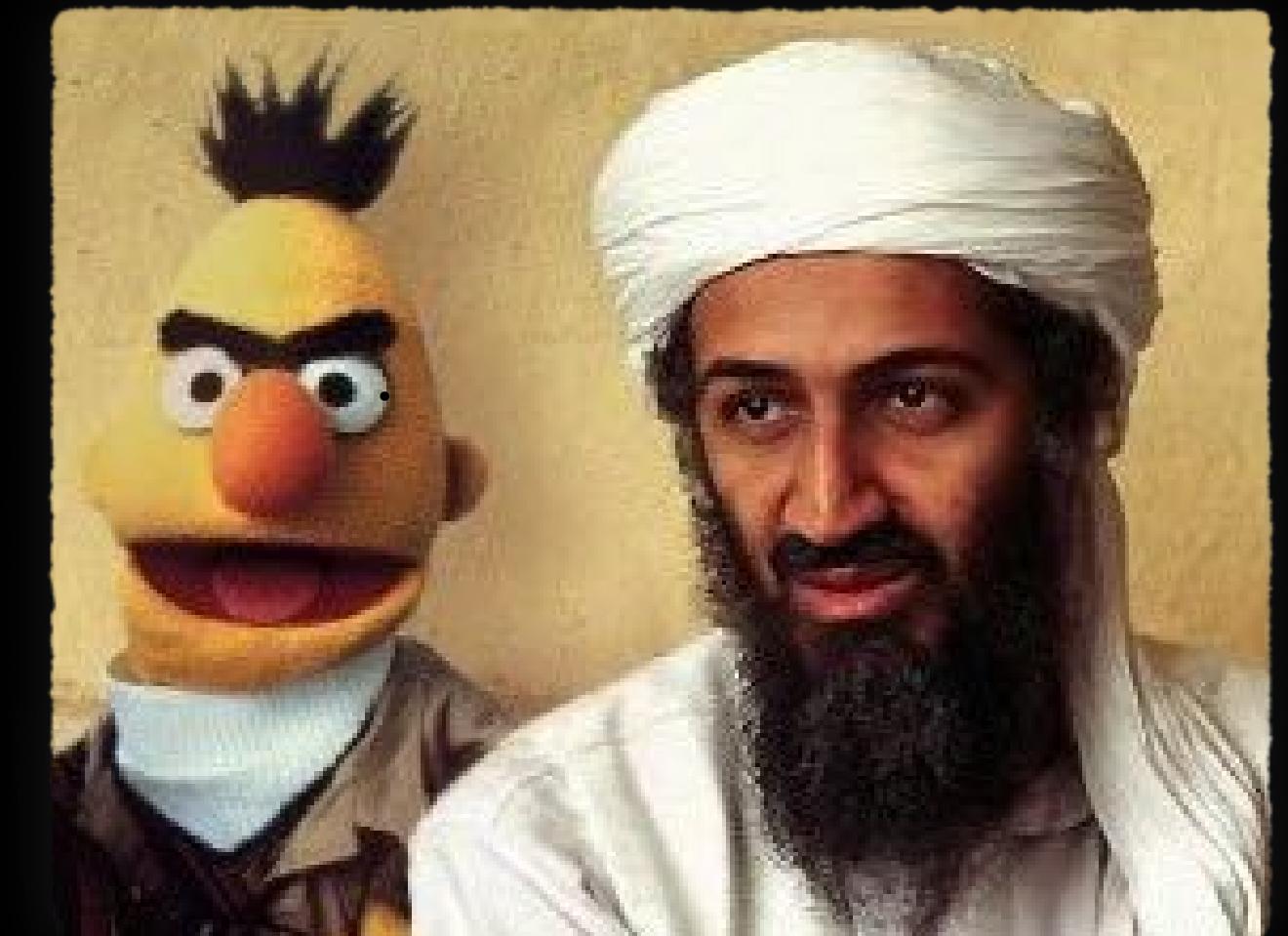
Understanding Digitality: Insights from recent research in Arts and Cultural Education

1

The Scope of Change:
Digitalization in Culture, Arts, and Education

The Scope of Change: Digitalization in Culture, Arts, and Education

1) Cultural Changes





From „Cultural Globalization“ to „Planetary Culture“

„With globally networked digital communications, one must be especially careful in taking as an offence the legitimate cultural practices of another even if they are on one's soil. [...] Interpretive practices must accordingly recalibrate themselves to the conditions of planetary culture.“

Poster, M. (2003). Perfect Transmissions: Evil Bert Laden. *Television & New Media*, 4(3), 283–295. <https://doi.org/10.1177/1527476403253968>
(also: http://dc-mrg.english.ucsb.edu/conference/2002/documents/mark_poster.html)



Pablo Abend, Mathias Fuchs (eds.)
Quantified Selves and Statistical Bodies

[transcript]



Cindy Kohtala, Yana Boeva, Peter Troxler (eds.)
Alternative Histories
in DIY Cultures and Maker Utopias

[transcript]

Everyday Culture:

- communication, consumption, work, play
- algorithms changing self-expression, usage & meaning of memory, modes of gathering (sociality), decision making
- on all levels: affectivity, aesthetics, and knowledge

Digital Culture & Society

Open Access: <http://digicults.org/issues/>



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

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

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Arts education has
to develop its own
strengths in order to
support digital
empowerment in a
changed world.

The Scope of Change: Digitalization in Culture, Arts, and Education

1) Cultural Changes

2) Changes in & of the Arts



From Digital to Post-Digital Art



GRAPHICS INTERCHANGE FORMAT IMAGES (.GIF).

THIS INTERLACED GIF IMAGE WAS DATABENT BY THE INTRODUCTION OF A RANDOM ERROR TO THE INFORMATION DATA. THE IMAGE GENERATED IS AN IRREVERSIBLE DATABEND.

Menkman, R. (o. J.). Institute of Network Cultures | No. 04: The Glitch Moment(um), Rosa Menkman. Amsterdam: Institute of Network Cultures. Retrieved from <http://networkcultures.org/blog/publication/no-04-the-glitch-momentum-rosa-menkman/>

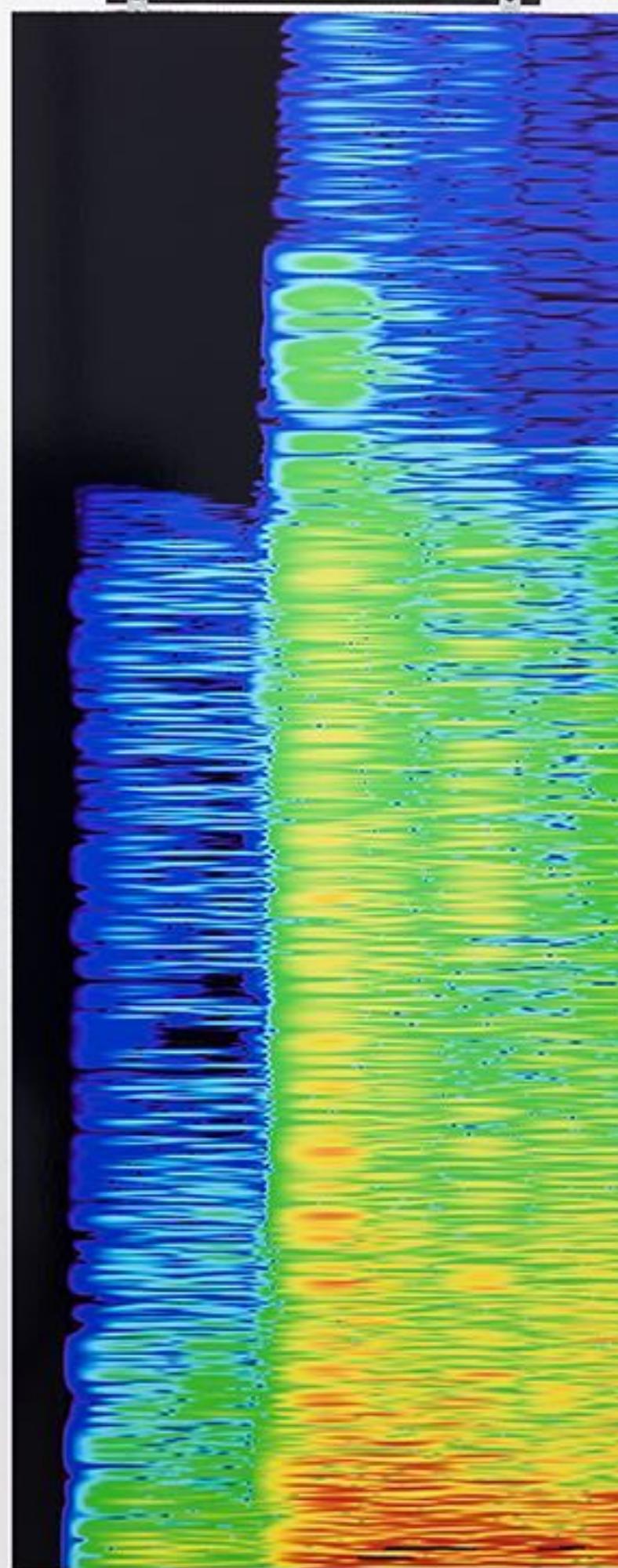
From Digital to Post-Digital Art

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

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



Artie Vierkant: *The Image Object Post-Internet*. 2010
<http://artievierkant.com/imageobjects.php>



**Audio-ballistic analyses
as evidence and art:
The „politics of sound and silence“ in
Lawrence Abu Hamdan: Earshot (2016)**

<http://lawrenceabuhamdan.com/#/new-page-1/>

Earshot, 2016

*Installation comprising **Rubber Coated Steel** (HD video, color, sound, 21:47 min.) and six chromogenic prints on Kodak metallic paper (125 × 50 cm each)*

In May 2014, Israeli soldiers in the occupied West Bank of Palestine shot and killed two unarmed teenagers, Nadeem Nawara and Mohammad Abu Daher. The human rights organization Defence for Children International contacted Forensic Architecture, a Goldsmiths College-based agency that undertakes advanced architectural and media research, which in turn worked with Abu Hamdan to investigate the incident. The case hinged upon an audio-ballistic analysis of the recorded gunshots to determine whether the soldiers had used rubber bullets, as they asserted, or illegally fired live ammunition.

A detailed acoustic analysis, for which Abu Hamdan used special techniques designed to visualize sound frequencies, established that they had indeed fired live rounds, and moreover had tried to disguise the fatal shots to sound like rubber bullets. These visualizations later became a crucial piece of evidence picked up by CNN and other international news agencies, forcing Israel to renounce its original denial. The investigation was also presented before the US Congress as an example of Israel's violation of US-Israeli arms agreements.

Lawrence Abu Hamdan: Earshot (2015)
Abb: <http://lawrenceabuhamdan.com/#/new-page-1/>

A little over a year after Abu Hamdan completed his report, he returned to the case in his exhibition *Earshot*. Expanding on the original body of evidence, he created an installation encompassing sound, photographic prints, and a video to reflect more broadly on the aesthetics of evidence and the politics of sound and silence. The video, *Rubber Coated Steel*, is the main element and acts as a tribunal for these serial killing sounds. The video tribunal does not preside over the voices of the victims, but rather seeks to amplify their silence, fundamentally questioning the ways in which rights are being heard today.



[Investigations](#) → [Audio Analysis](#) [PROGRAMME](#) [ABOUT](#) [SEARCH](#)



DATE 15.05.2014	LOCATION Beitunia, West Bank, Occupied Palestinian Territories	FORUMS Exhibition, Media
COMMISSIONED BY DCI Palestine	When Israeli military police killed two Palestinian teenagers, the event was recorded by security cameras, US news teams, and photographers. Using that footage, our audio and image analysis exposed a tactic by which Israeli personnel disguise live rounds as rubber-coated 'non-lethal' munitions.	

AUDIO ANALYSIS

Sometimes, the most crucial information captured by a video is not the image, but the sounds that are heard 'off camera'. Similarly, radio communications by police or other emergency services personnel can contain vital evidence, either in what is said, or what is heard in the background.

Forensic Architecture uses a number of techniques to employ audio recordings for investigative ends, including synchronisation, identification of weapons, or using 'ear-witness' testimony and 'echo profiling' to reconstruct spaces and events through sound.

<https://forensic-architecture.org/methodology/audio-analysis>

NAM JUNE PAIK AWARD2016
LAWRENCEABU HAMDAN

Winner of the International Award

Lawrence Abu Hamdan is an artist, private ear and currently a fellow at the Vera List center for Art and politics at the New School, NYC. He is based in Beirut, and his projects have taken the form of audiovisual installations, performances, graphic works, photography, Islamic sermons, cassette tape compositions, potato chip packets, essays and lectures.

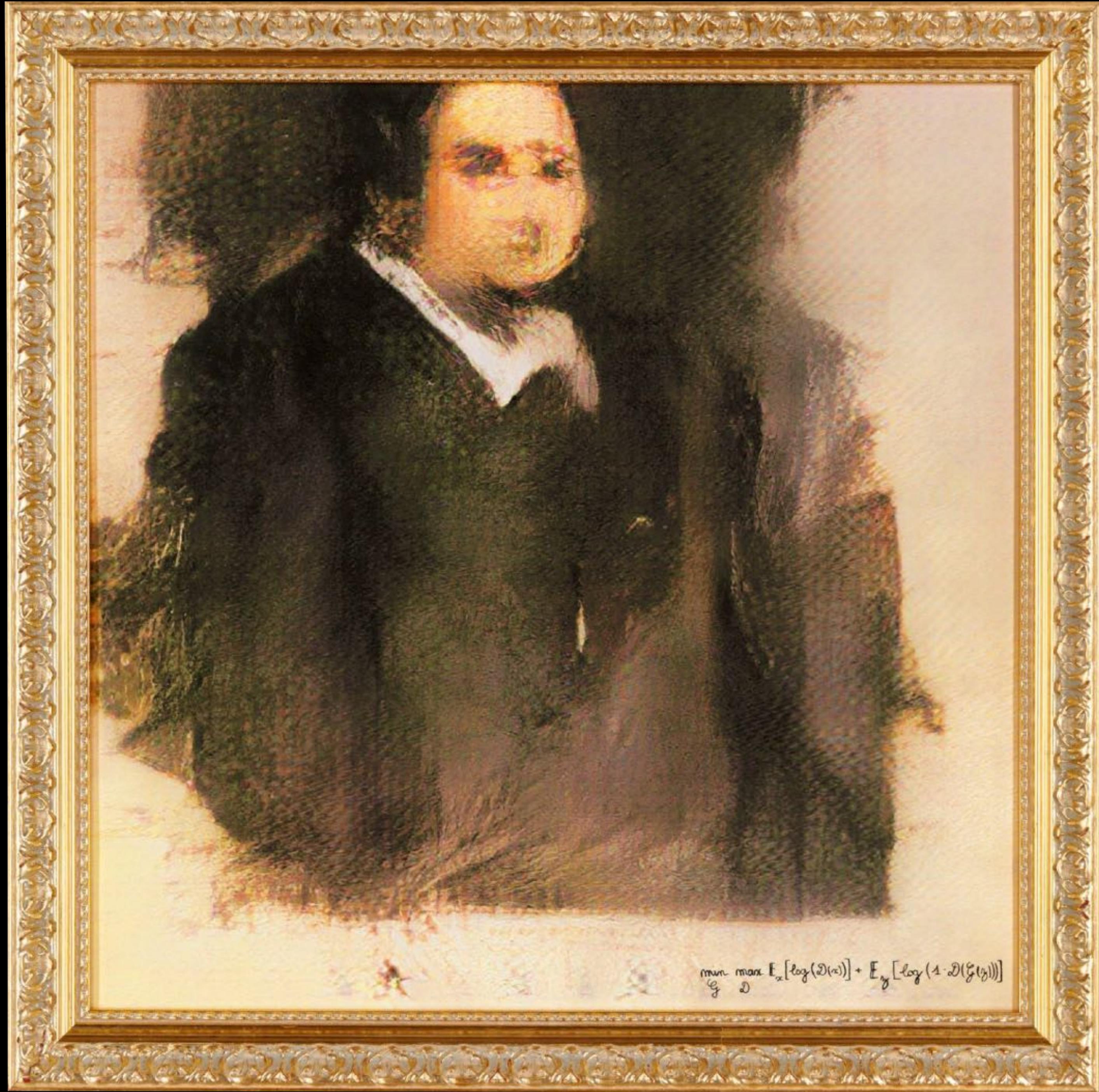
The artist's forensic audio investigations are conducted as part of his research for Forensic Architecture at Goldsmiths College London where he is also a PhD candidate, they have been submitted as evidence in the UK immigration and asylum tribunal and most recently was part the campaign for *Defense for Children International*.



Website of Lawrence Abu Hamdan →
[Forensic Listening](#) →
[Interview with William Kherbek](#) →

<http://namjunepaikaward.org/en/kuenstler/lawrence-abu-hamdan>

technological mimesis
of artistic creation
using
deep reinforcement
learning





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New York | 23 - 25 October 2018

[Browse Sale](#)

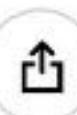
LOT 363

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

USD 432,500

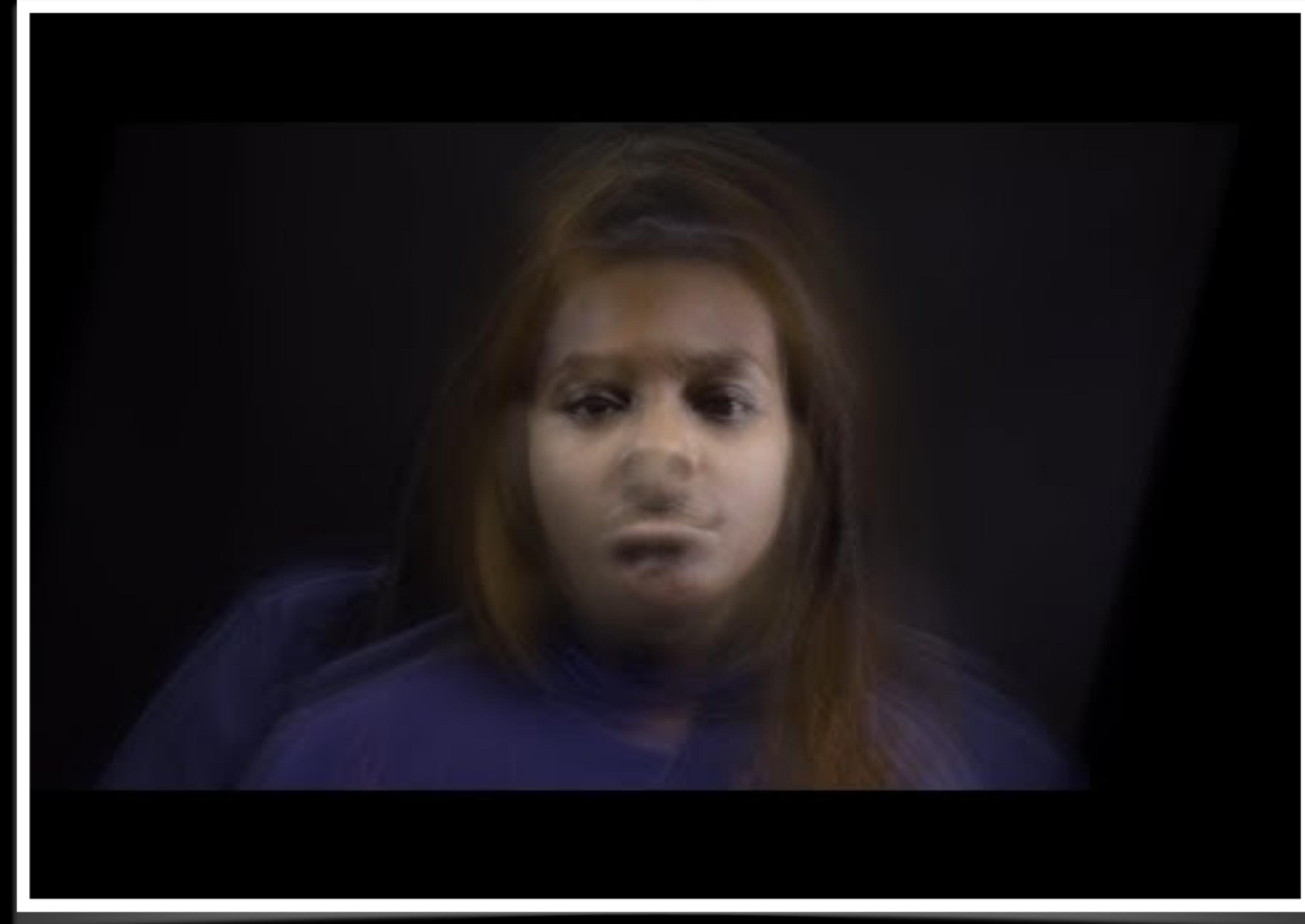
Estimate i

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 ½ x 27 ½ in (700 x 700 mm.)

artistic creation
as hybrid
aesthetic decision-
making



Screenshot: Holly Herndon & Jlin (feat. Spawn) - Godmother

Quelle: <https://youtu.be/sc9OjL6Mjqo> (Datum: 10.6.2020)

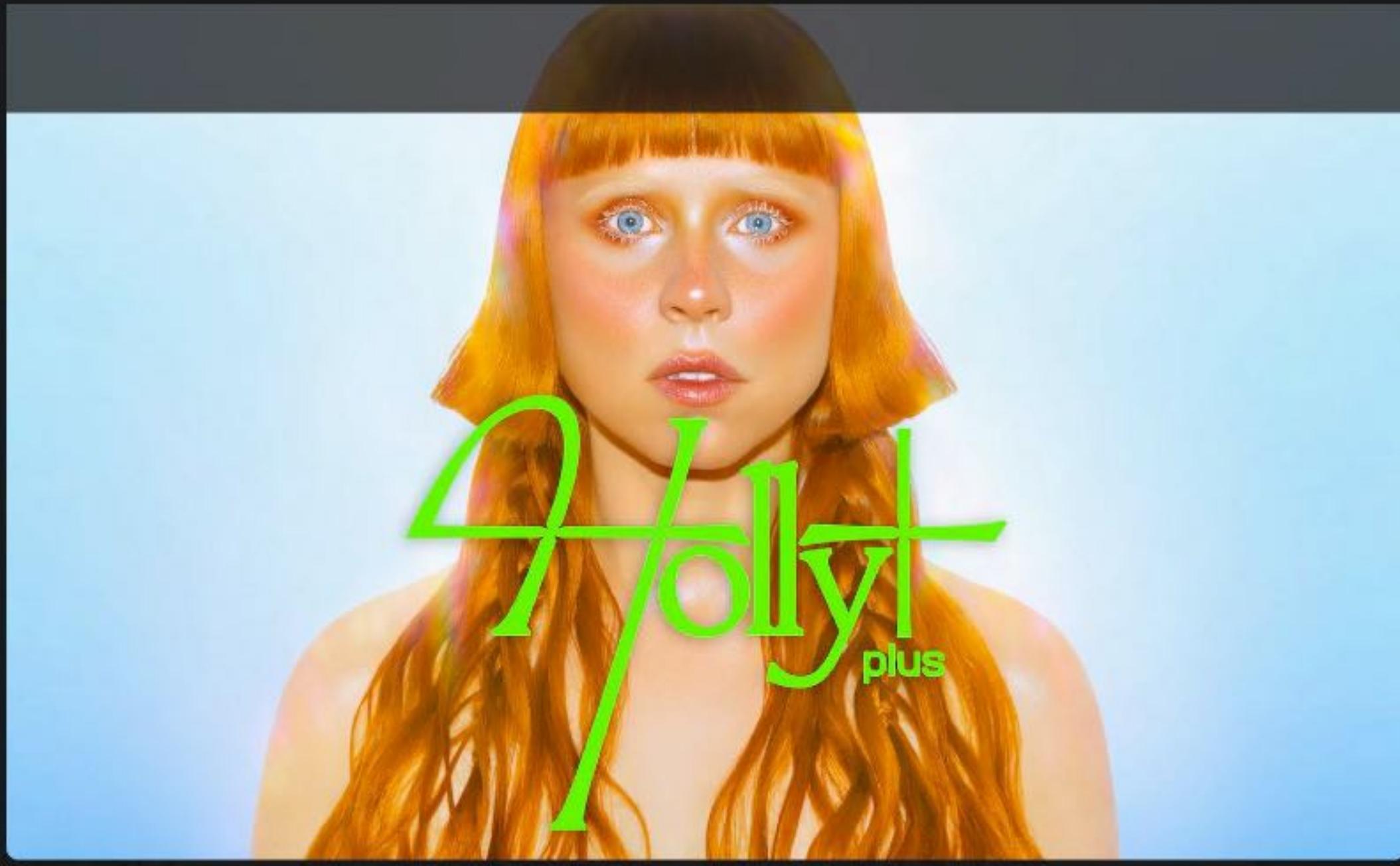


Photo: Andrés Mañón

I'm excited to finally share something I have been working on for the last year ✨ [Holly+](#)

I am releasing [Holly+](#) in collaboration with [Never Before Heard Sounds](#), the first tool of many to allow for others to make artwork with my voice, and will distribute ownership of my digital likeness through the creation of the Holly+ DAO 🤝

My voice is precious to me! It is 1 of 1 🥰

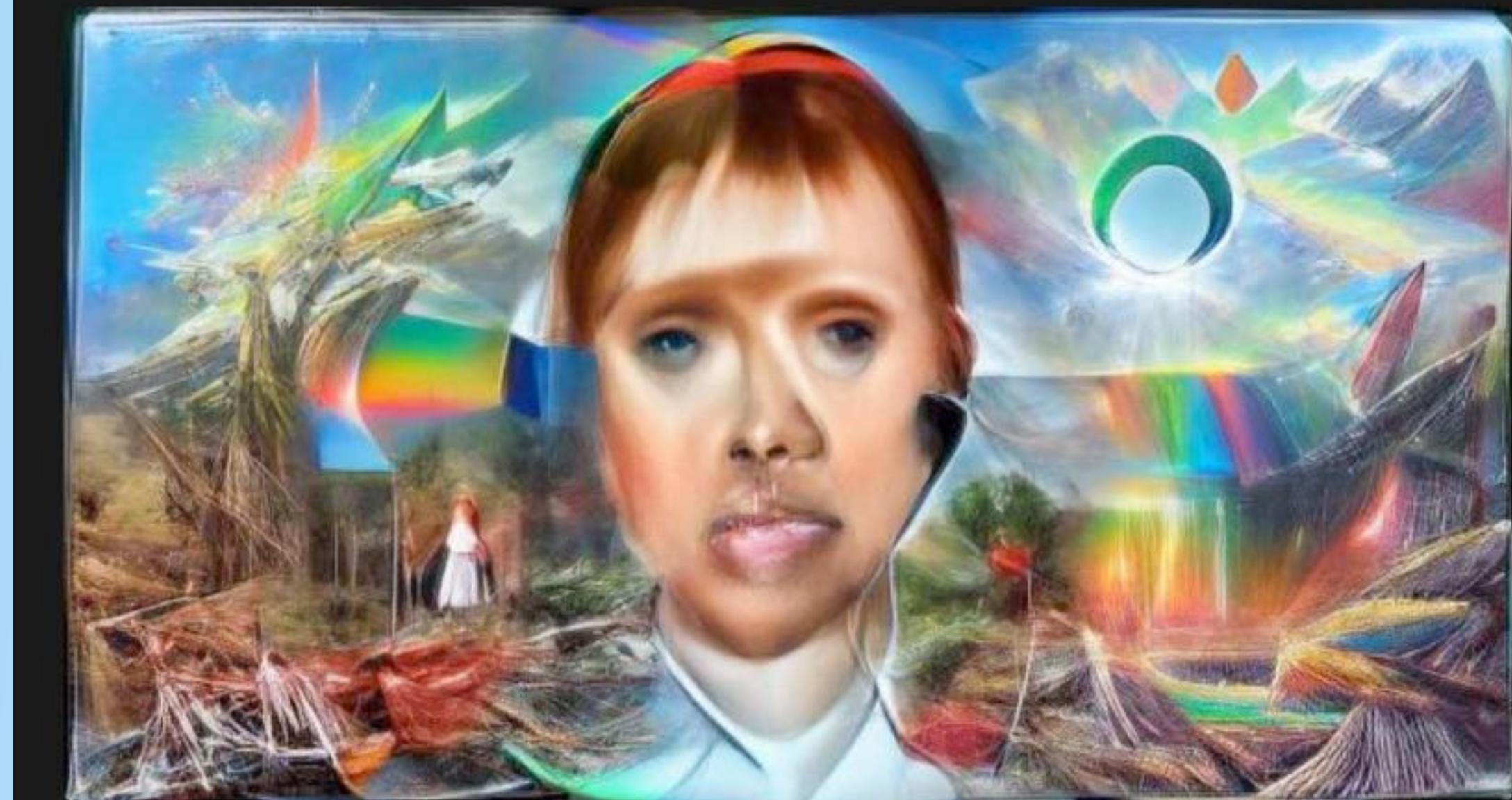
Voice Models, in combination with machine learning technology, already allow for anyone to clone a voice to generate music and media, and the opportunities and complications inherent to these techniques will only intensify!

This development raises novel questions about voice ownership that I think can be addressed by DAO governance ❤️

Who am I?

I'm an artist and composer 🎵 who has been working with machine learning for many years. My last album [PROTO\(4AD,2019\)](#) was the first to utilize singing neural networks, and I completed my Doctorate at [Stanford's Center for Computer Research in Music and Acoustics](#), where my research focus was on the interplay between machine learning and the voice, and the implications of this technology for IP and vocal sovereignty 🎩

Some AI models already know who I am! Here are some images spawned from my likeness using [OpenAI's CLIP model](#) 🤖

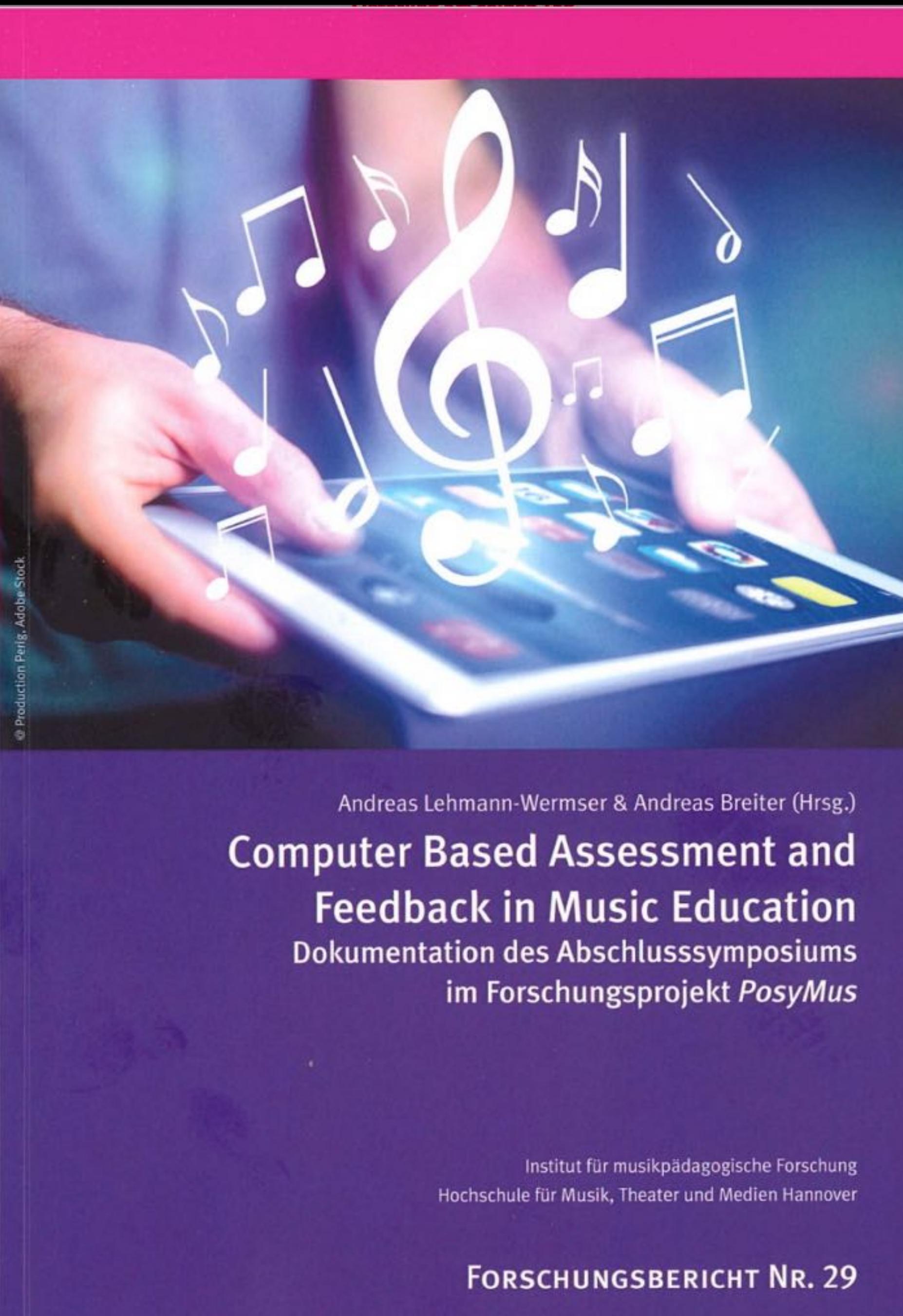


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Arts education has
to embrace
contemporary
changes in artistic,
aesthetic and
creative practices.

The Scope of Change: Digitalization in Culture, Arts, and Education

- 1) Cultural Changes
- 2) Changes in & of the Arts
- 3) Changes in & of Education



a) E-Learning meets learning analytics & ai

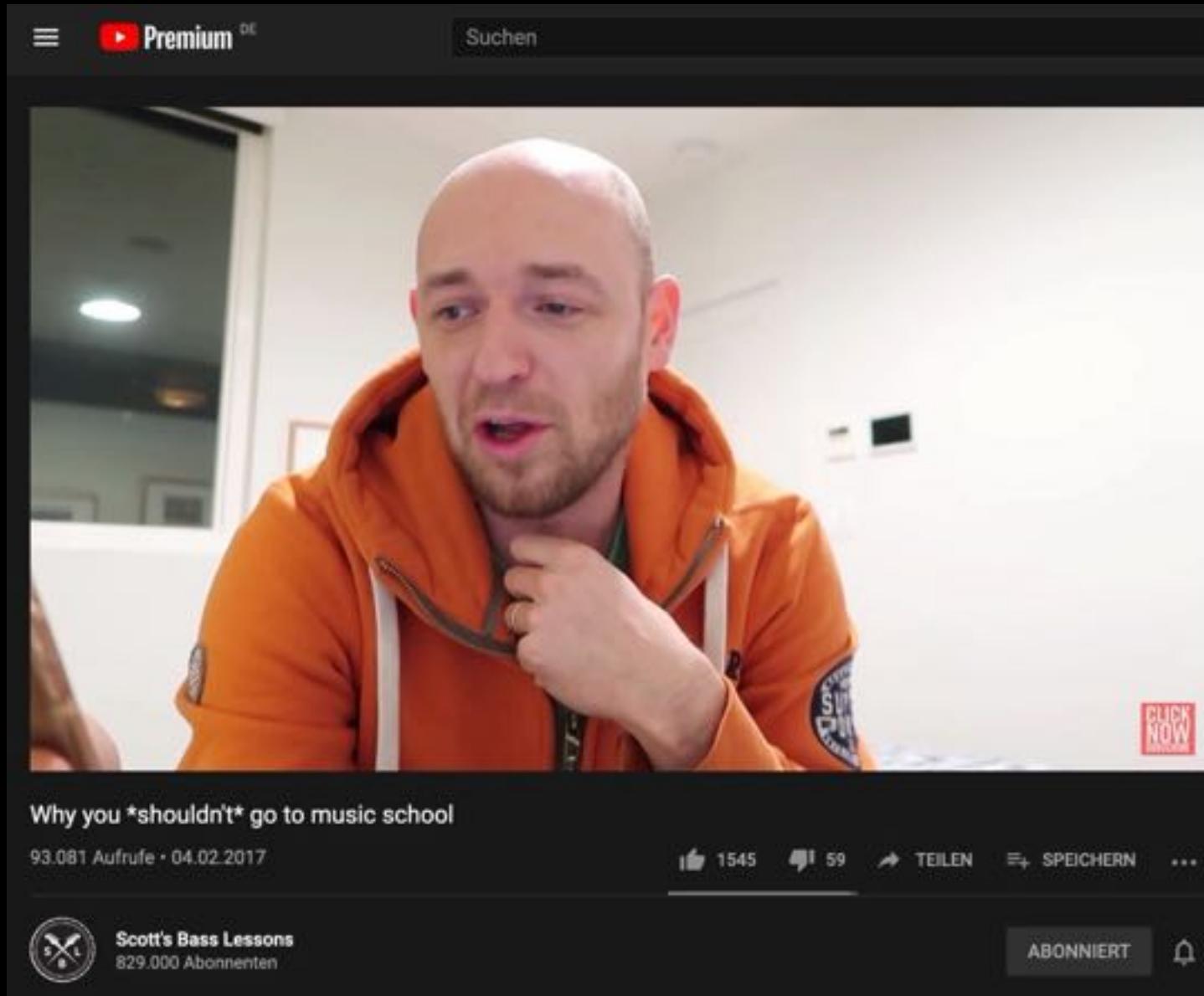
„Intelligent Tutoring Systems (ITS) and other learning support systems are already working with artificial intelligence to analyze learning paths in digital environments and generate recommendations for further action. For example, subsequent content is recommended based on prior learning behavior.

With the help of this technology, music-related content could be taught just like content in other subjects, especially in the context of out-of-school, informal, or lifelong learning.“

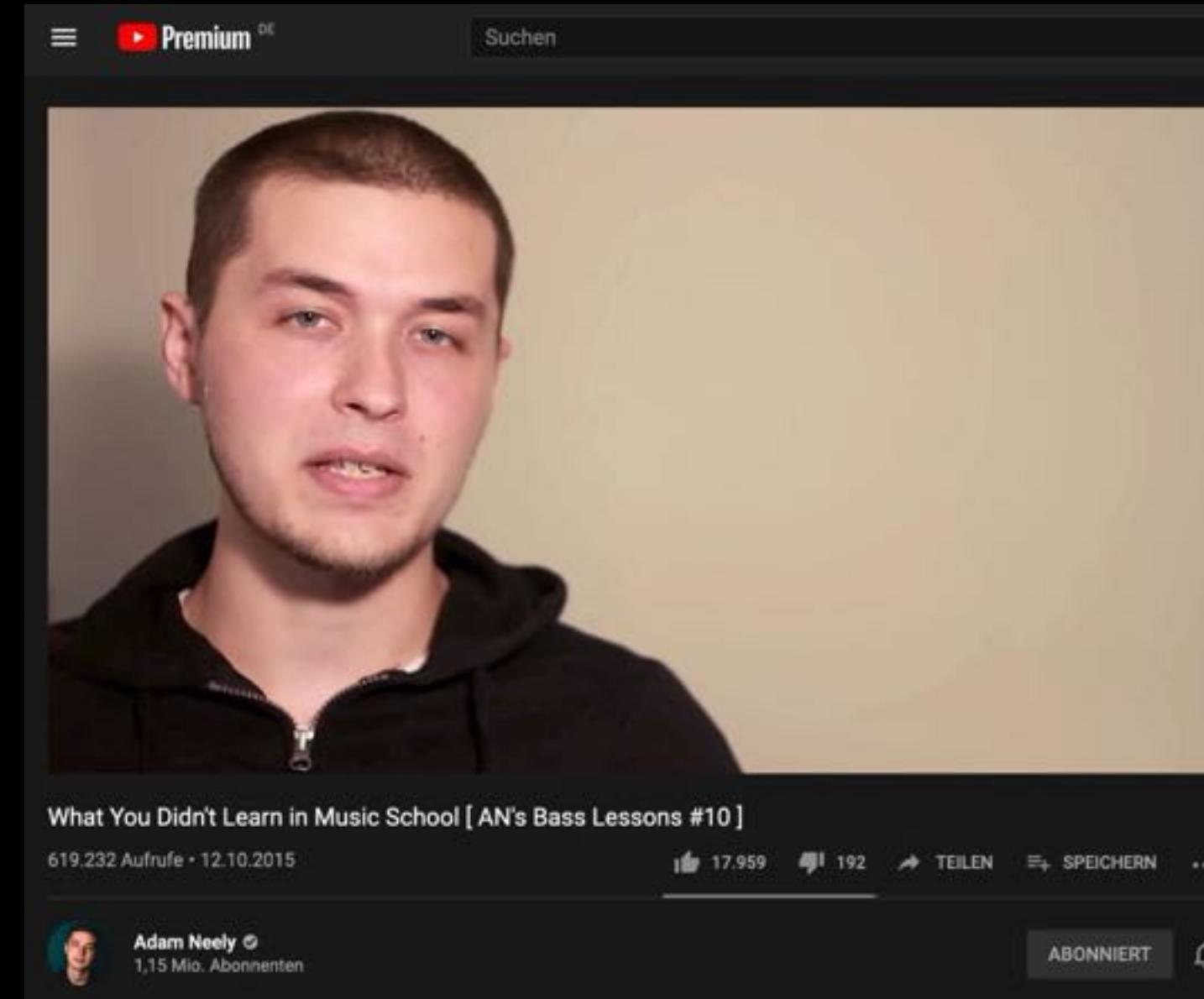
Lehmann-Wermser, A., Breiter, A., Finken, J., Weyel, B., Viertel, M., & Krieter, P. (o. J.). Schlussbericht. Musicalytics. Musikalisches non-formal situiertes Lernen in digitalen Lernumgebungen, p.9 (Translation: BJ)

see also: Lehmann-Wermser, A., & Breiter, A. (Hrsg.). (2021). *Computer Based Assessment and Feedback in Music Education*. Hochschule für Musik, Theater & Medien.

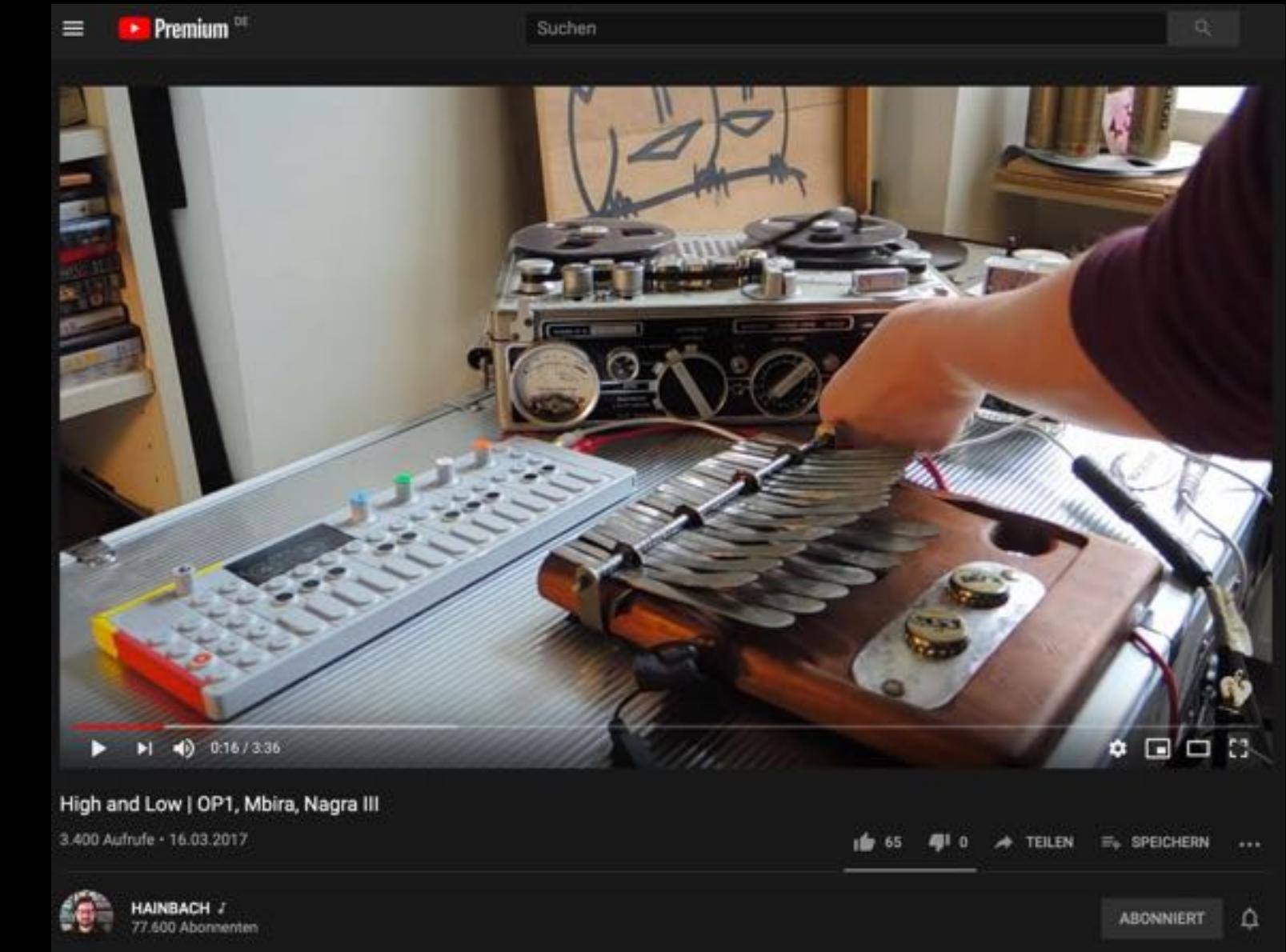
b) Educational Influencers & Online (Arts) Education on the rise



Scott's Bass Lessons
Yt-Channel & Music School
1 Million Followers



Adam Neely
Music Theory & Practice
1.6 Million Followers



Hainbach
Experimental electro-acoustic
composer and performer
155.000 Followers

JUGEND/YOUTUBE/ KULTURELLE BILDUNG. HORIZONT 2019

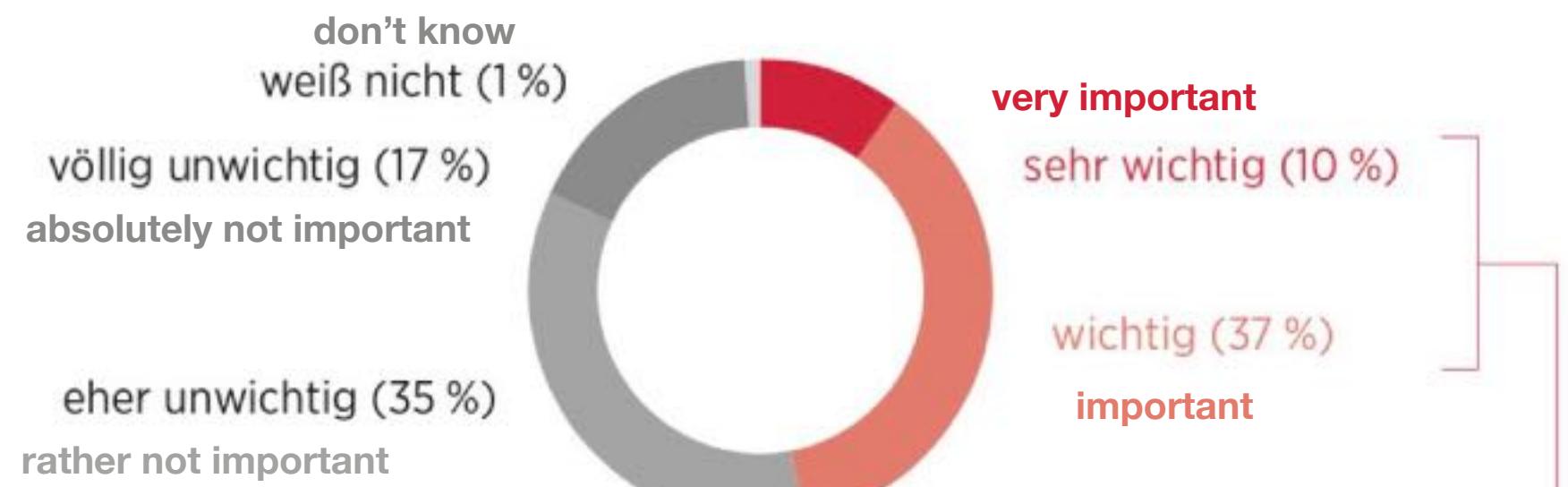
STUDIE: EINE REPRÄSENTATIVE UMFRAU
UNTER 12- BIS 19-JÄHRIGEN ZUR NUTZUNG KULTURELLER
BILDUNGSANGEBOTE AN DIGITALEN KULTUROREN

Importance of YouTube-Videos with regard to school-related Issues

Wichtigkeit von YouTube-Videos zu Schulthemen

a: Wie wichtig sind YouTube-Videos für Dich bei Themen, die ihr in der Schule behandelt?

Damit sind auch YouTube-Videos gemeint, die Du zuhause für die Schule nutzt.



N = 800
(age 12-19)



b) Educational Influencers & Online (Arts) Education on the rise

„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.“

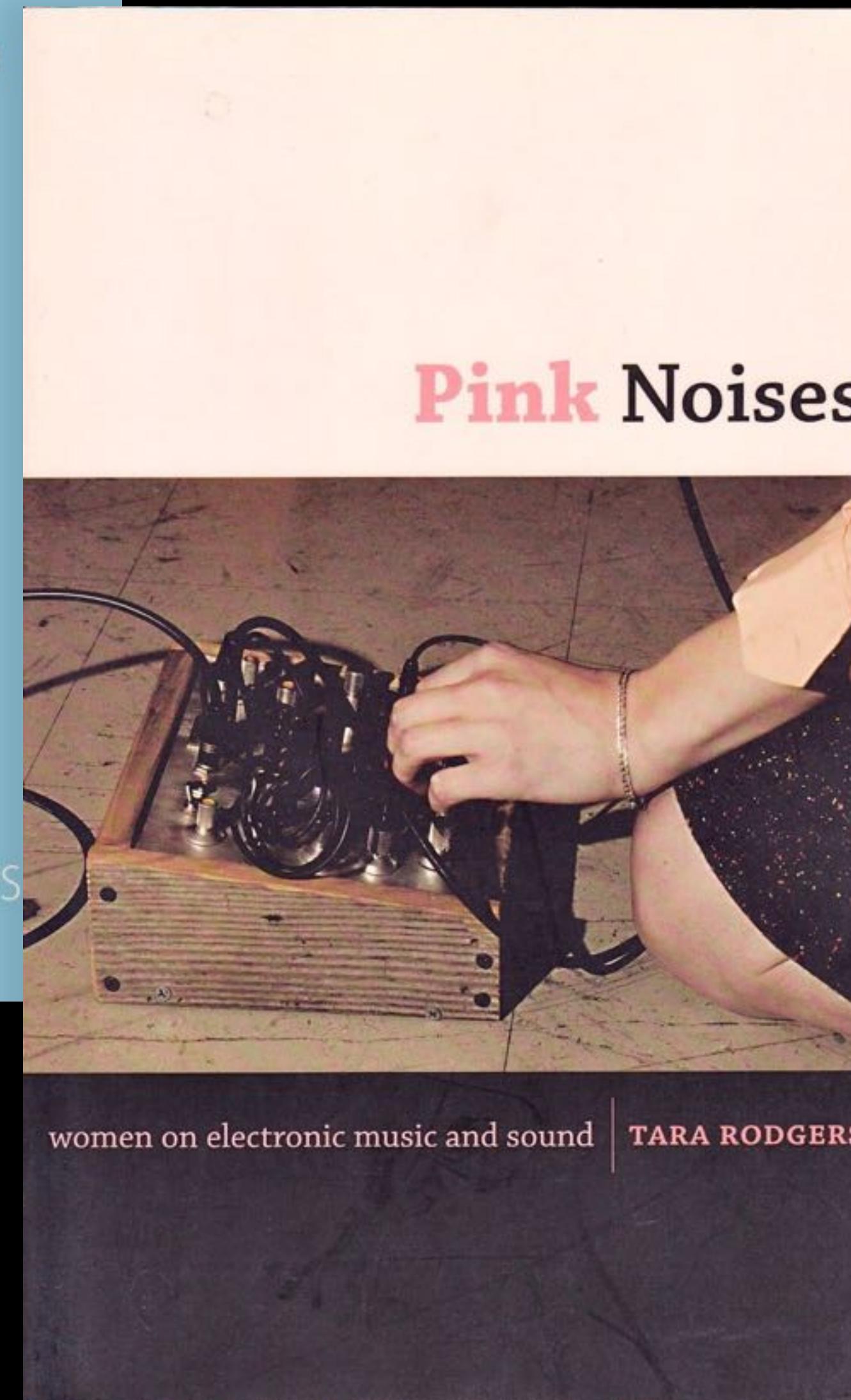
„YouTube vs. classical educational institutions:
Young people identify strengths and weaknesses.“

Michael Ahlers · Lorenz Grünwald-Schukalla
Anita Jóri · Holger Schwetter Hrsg.

Musik & Empowerment



(some chapters in english!)



c) Gadgets and „digital things“ becoming part of formal, non-formal & informal creative learning & empowerment

WOMEN'S AUDIO MISSION
CHANGING THE FACE OF SOUND



WAM Core Training For Adults

WAM provides rigorous, immersive training in professional audio and the recording arts with award-winning women and gender-diverse instructors. Sign-up to build your skills and take the next step in your audio journey!

[All class offerings & tickets here!](#)

Introduction to Live Sound - Beginner/Intermediate Level

Learn the basics of live sound with an industry veteran at a professional music venue. Spend the day focusing on live sound techniques while working with a live band. Join WAM instructor and live sound specialist Heidi Trefethen for a 2-day class on how to set up live sound in a 500-person venue, the historic Berkeley club Freight & Salvage.

On day 1, students will learn the basics including signal flow, speakers, monitors, and microphone placement. Day 2, students will set-up live sound for a full, in-house band.

Dates: Saturday and Sunday, July 16 &17, 2022
Time: 9am – 2pm PDT
Location: Freight & Salvage in Berkeley

<https://womensaudiomission.org/>

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Arts education needs
organizational and
professional development
in order to adapt to
changes in education and
to find its own (creative
& critical) voice regarding
these changes.

Culture

>>>

Arts education has to develop its own strengths in order to support digital empowerment in a changed world.

Arts

>>>

Arts education has to embrace contemporary changes in artistic, aesthetic and creative practices.

Education

>>>

Arts education needs organizational and professional development in order to adapt to changes in education and to find its own (creative & critical) voice regarding these changes.

2

Understanding Digitality:
Insights from recent research 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)

Federal Ministry
of Education and
Research:

Research Focus Area

„Research on Digitalization in Arts and Cultural Education“

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



BMBF Förderschwerpunkt

DiKuBi

Forschung zur Digitalisierung
in der kulturellen Bildung

Chances and limits of an online
platform to collectively explore
the diversity of digital cultures

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

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

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

How are (post-internet) art
changing arts education?

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

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

Which opportunities does
e-learning offer for musical
learning?

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

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

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

Playing music together over wifi:
Musical Education in post-digital
communities.

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

Dancing algorithms: How digital tools
can change dance practices.

Understanding Digitality

- 1) Care to understand digitality
- 2) Understand (post-) digital culture(s)
- 3) Initiate transformative organizational
and professional learning

Understanding Digitality

1) Care to understand digitality & alternative medialities/materialities*

*other than those „your“ art is based upon

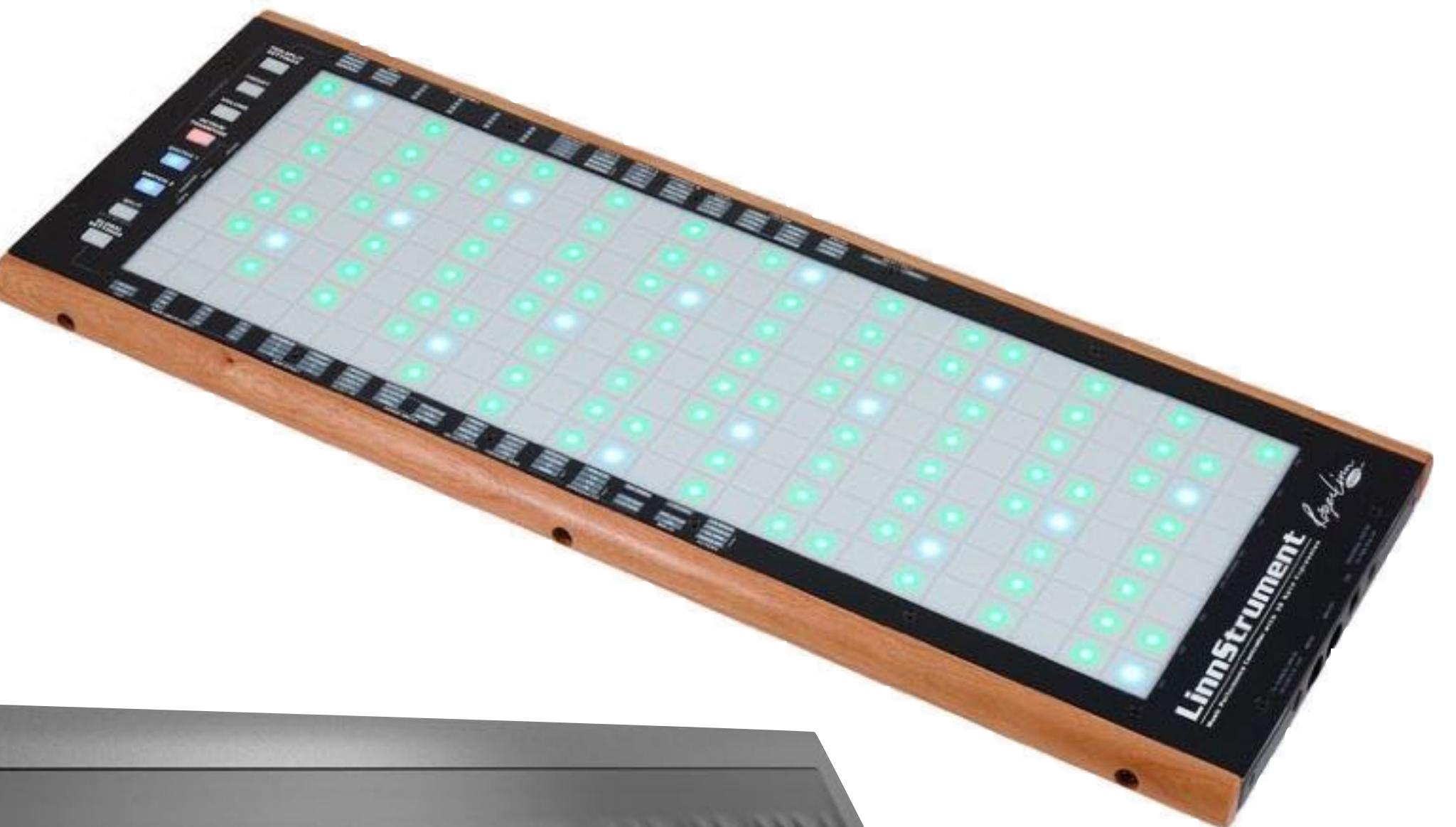


GEFÖRDERT VOM



Musical Interface
Designs:
Augmented Creativity
and Connectivity
(BMBF, 2017-2021)

Prof. Dr. Benjamin Jörissen
Prof. Dr. Michael Ahlers





GEFÖRDERT VOM



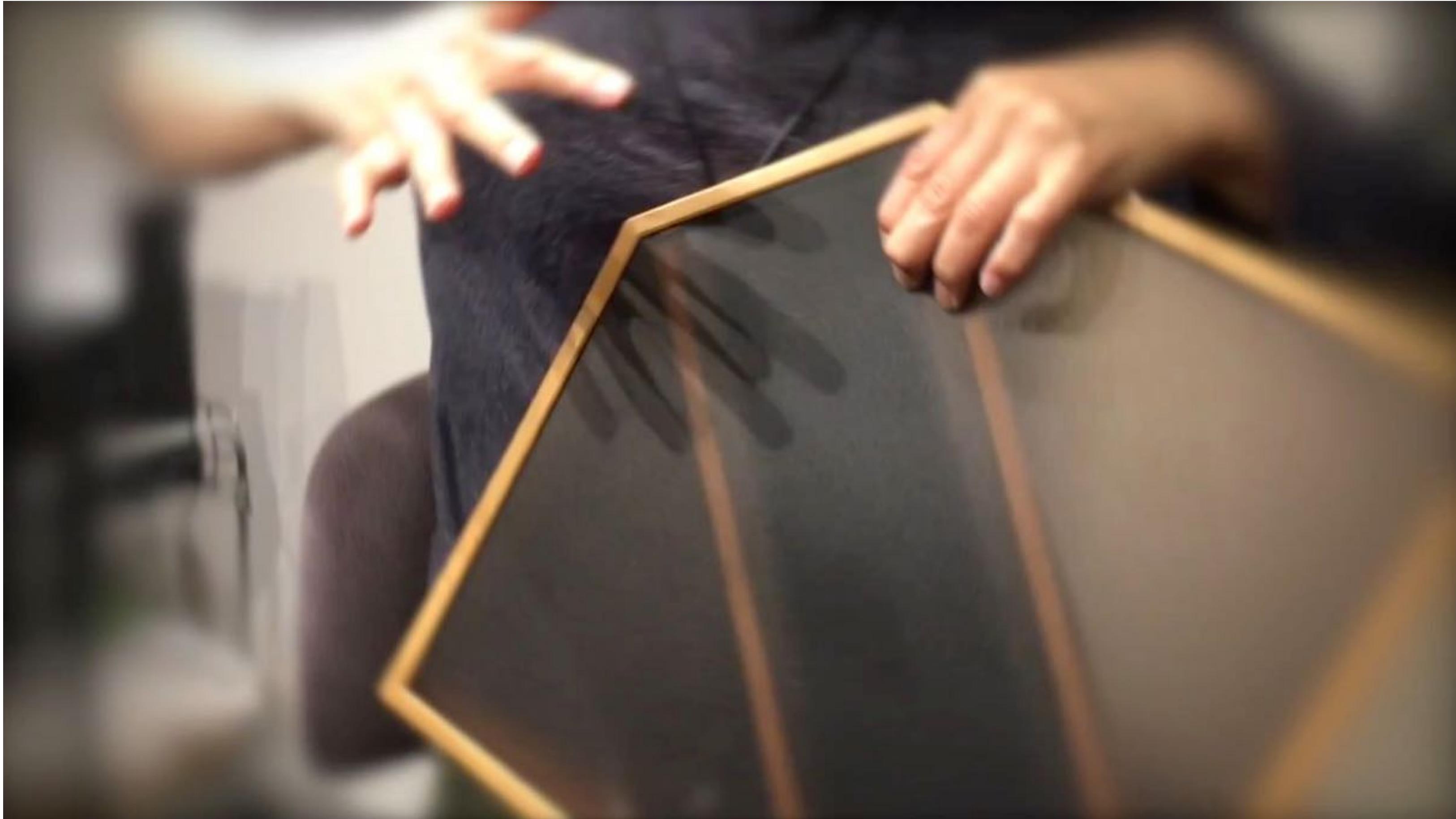
Musical Interface
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Prof. Dr. Benjamin Jörissen
Prof. Dr. Michael Ahlers

Ahlers, M., Jörissen, B., Donner, M., & Wernicke, C. (Hrsg.). (2022). *Digitale Infrastrukturen populärer Musikkulturen. Bildung, Medialität, Materialität.* Olms.

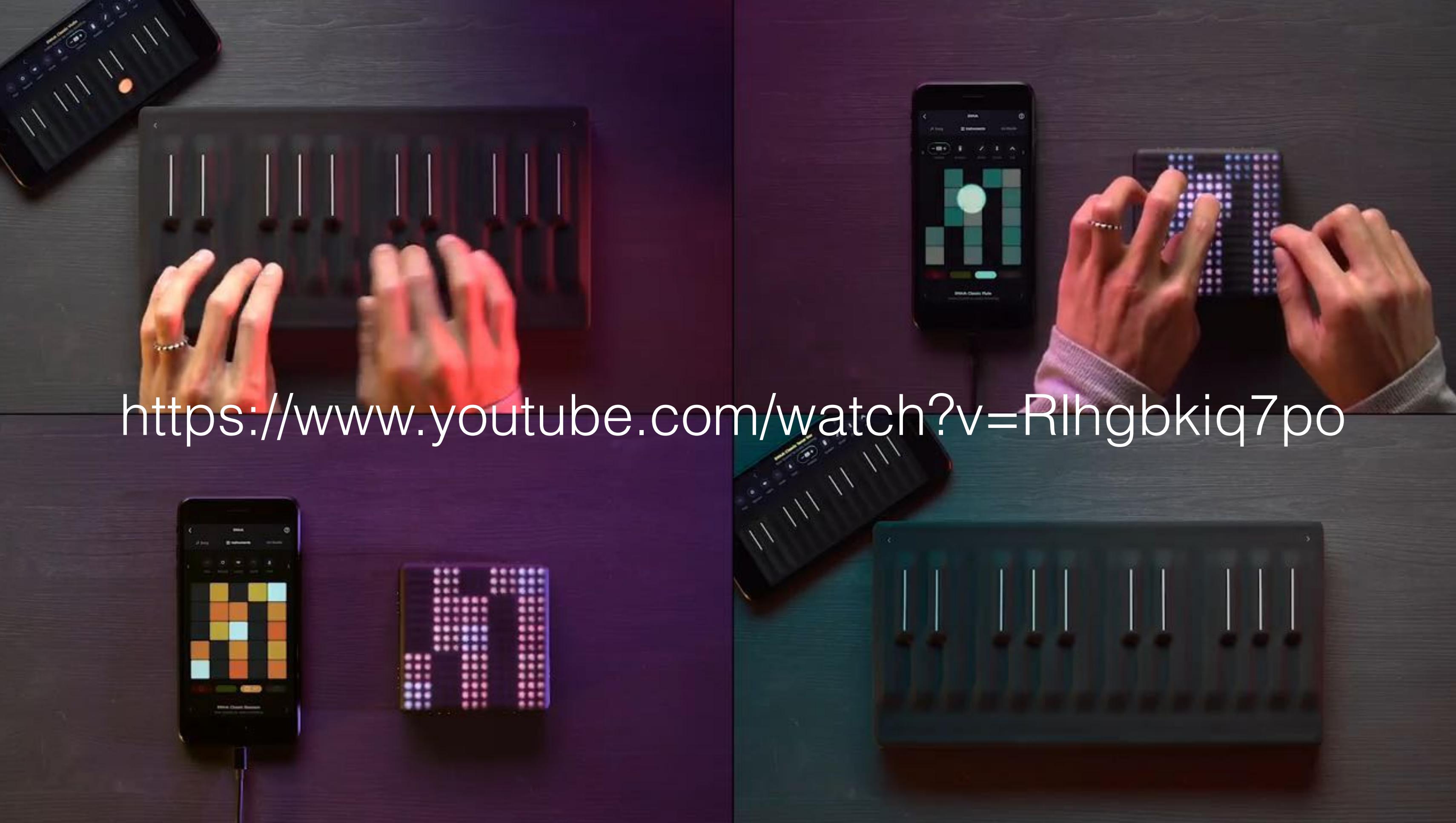


„aframe Handdrum“ (atv inc.)



GEFÖRDERT VOM

„Seaboard + Blocks“ (Roli inc.)



GEFÖRDERT VOM



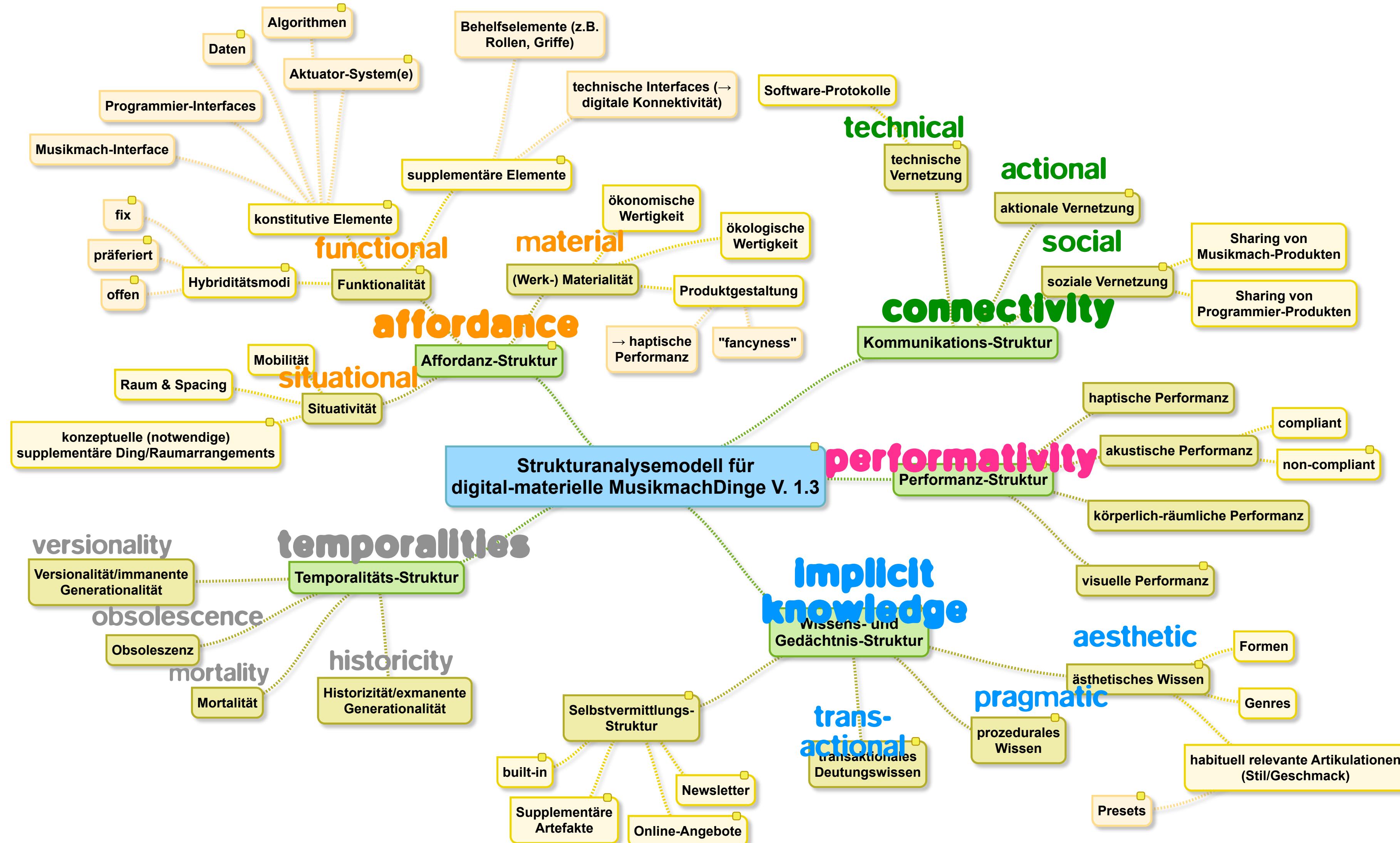
Bundesministerium
für Bildung
und Forschung

„Linnstrument“ (Roger Linn)



GEFÖRDERT VOM

Main outcomes of the conducted Comparative Qualitative Design-Analysis



Main outcomes of the conducted Comparative Qualitative Design-Analysis

Aspect: Responsivity (to bodily interaction)

one-dimensional



multidimensional

Main outcomes of the conducted Comparative Qualitative Design-Analysis

Aspect: Aesthetic Range/Spectrum



Main outcomes of the conducted Comparative Qualitative Design-Analysis



Work (slow achievement)
Potentiality (future)
Expertise
Ambivalence

vs.

Aspect: Mode of Interpellation/Subjectification

The ROLI PLAY app helps you make
music in minutes on your Lightpad Block

Download it now in the App Store

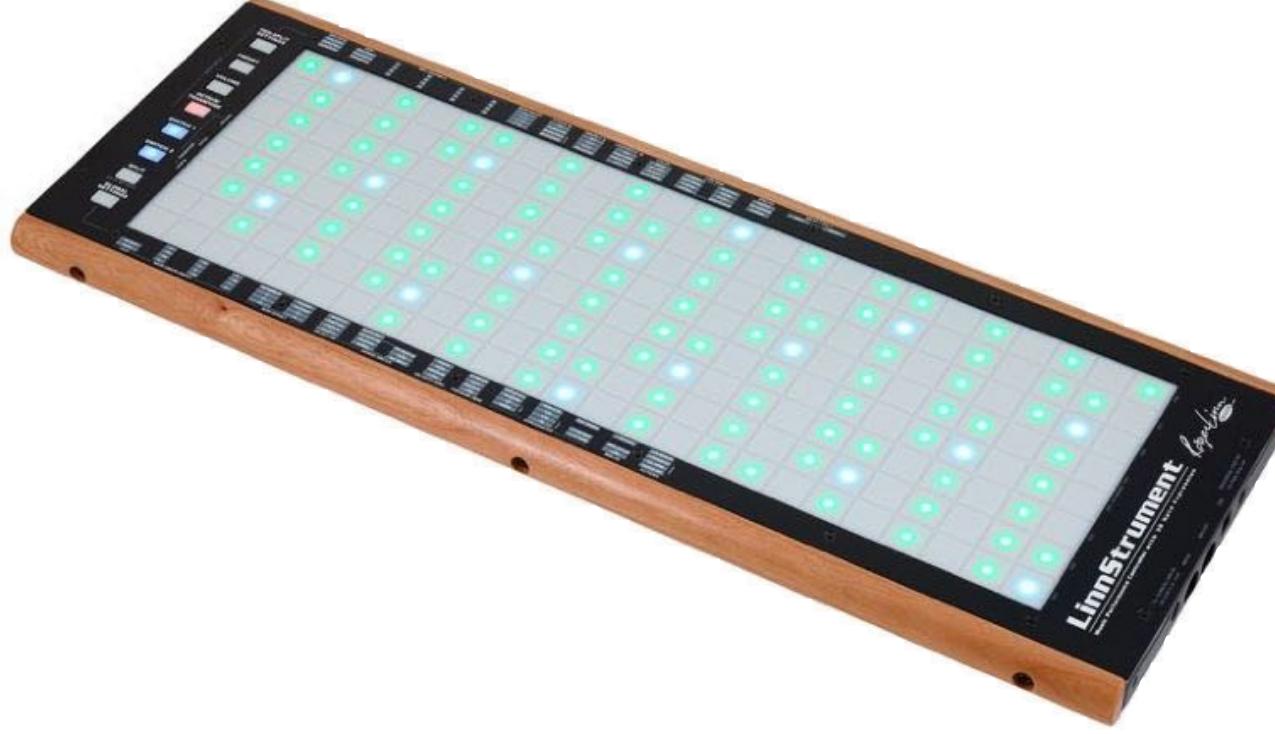
December 19th 2017   

Fun (instant creation)
Augmentation (present)
Attention Economy
Affection



Main outcomes of the conducted Comparative Qualitative Design-Analysis

Aspect: Cultural Situatedness



culturally indifferent
culturally situated



vs.
vs.
inspired by cult. heritage
ostentative culturally diverse



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Bundesministerium
für Bildung
und Forschung



Eigenharp Alpha



Eigenharp Pico



Eigenharp Tau



Identified types of musical orientation

musical craftsmanship

artistic life /
aesthetic care of self

affective/
emotional orientation

technological
explorers

aesthetic
explorers

outcome-
oriented
(Club/EMP)

outcome-
oriented
(hybrid/pop)

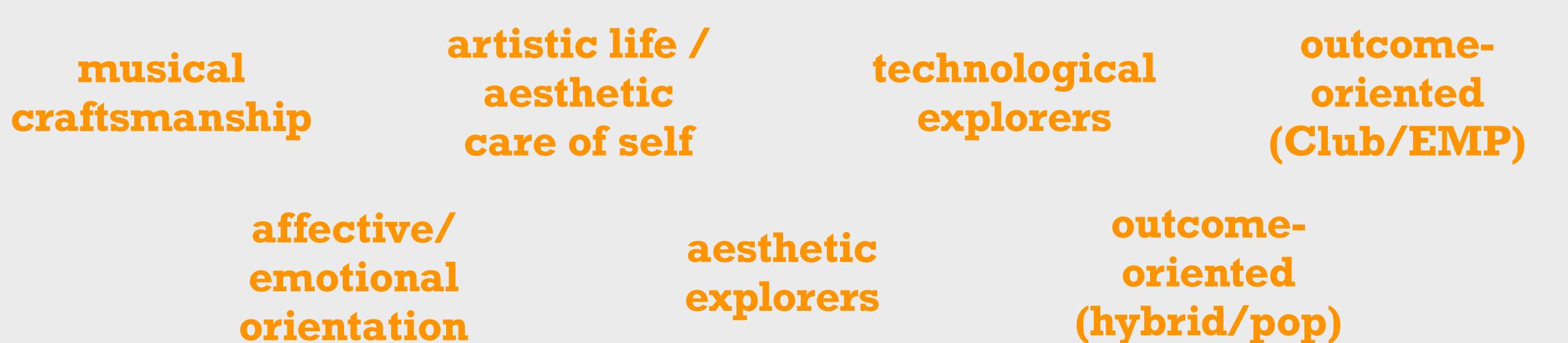
	HALTUNG 1 handwerklich orientiert	HALTUNG 2 emotiona- geföhrlsorientiert	HALTUNG 3 Kunstprojekt orientiert	HALTUNG 4 ästhetisch experiell	HALTUNG 5 technisch experiell	HALTUNG 6 hybrid produktionsorientiert	HALTUNG 7 elektronisch produktionsorientiert
Referenz Schlagworte	Musikschule	Musik emotional zentraler Bezugspunkt im Leben	Post-digitale Künstlerbohème	Ästhetisch Explorierende	Technologisch Explorierende	Popmusik produzierende Musiker*innen	Clubmusik Produzierende und DJs
Geschlechter- verhältnis	3 Teilnehmerinnen 2 Teilnehmer	3 Teilnehmerinnen 0 Teilnehmer	4 Teilnehmerinnen 1 Teilnehmer	1 Teilnehmerin 4 Teilnehmer	0 Teilnehmerinnen 2 Teilnehmer	1 Teilnehmerin 4 Teilnehmer	0 Teilnehmerinnen 4 Teilnehmer
Alter	14-23	20-24	22-25 (und >40)	13-22	14-15	17-24	21-23 (und >40)
Fokus	Lernen durch üben; Interesse an erweiterten techn. Möglichkeiten	Vielseitig: Multiinstrumentalität und Stimme	Elektronische Musikproduktion und Auftritte (DAWless); Medieninstallation	Geschmackliche Experimentier- und Findungsphase; u. U. Livestyle	Technologische Möglichkeiten entdecken	Hybrid-instrumentale Musikproduktion	Elektronische Musikproduktion und Auftritte
MusikmachDinge (MmD) geliehen	5 Instrument-Metapher 2 Metapher & Loops 1 Loop Paradigma	3 Instrument-Metapher 1 Metapher & Loops 1 Loop Paradigma	3 Instrument-Metapher 1 Metapher & Loops 8 Loop Paradigma	3 Instrument-Metapher 3 Metapher & Loops 4 Loop Paradigma	1 Instrument-Metapher 1 Metapher & Loops 1 Loop Paradigma	5 Instrument-Metapher 4 Metapher & Loops 3 Loop Paradigma	1 Instrument-Metapher 3 Metapher & Loops 7 Loop Paradigma
Beste Passungen	Instrument-Metapher	Keine Festlegung möglich	Loop Paradigma Metapher & Loops (ggf. mit DAW)	Metapher & Loops (möglichst vielseitige Anregung)	Loop Paradigma	Metapher & Loops (ggf. mit DAW)	Loop Paradigma (ggf. mit DAW)
Tendenz techn. Komplexität	Bis maximal mittlere (Plug & Play ideal)	Bis mittlere (Plug & Play ideal)	Niedrigste bis höchste	Bis mittlere (Plug & Play ideal)	Bis mittlere	Bis mittlere (Plug & Play ideal)	Mittlere bis höchste
Thematisiertes 'Must have'	Zuverlässigkeit, gute Sensorik und Sounds	Gute Sensorik, Sounds verschiedener Stilistik	Breite (Multimedia-) Konnektivität	Viele Sounds und Demos versch. Stile	Viele Sounds, gutes technisches Design	Zuverlässigkeit, gute Sensorik und Sounds	Gute Konnektivität, sehr guter Klang
Thematisiertes 'Nice to have'	Einfache Bedienung, bekanntes Spielgefühl	Keine Aussagen	Bühnenbetrieb ohne Laptop/Tablet	Portabilität (Akku/Lautsprecher)	Intuitive Bedienung	Bühnenbetrieb ohne Laptop/Tablet, MPE	Betrieb ohne Laptop, Spielhilfen, MPE
Realisierte Musikstile	Klassik, Pop/Rock, Funk, House	Singer-Songwriter, Emo/Alternative, HipHop, House	Singer-Songwriter elektronisch, Techno, Ambient, Hörspiel	Experimente mit verschiedenen Klangwelten	Experimente mit elektronischen Klangwelten	Pop, HipHop, Soul, R'n'B, Jazz, Filmmusik, World	Techno, House, Elektronica, Downbeat
Musikalisches Vorwissen	Musikschul- bzw. Instrumentalunterricht	Instrumentalunterricht und autodidaktisch	Heterogen: lang vergangener Instrumentalunterricht oder nur autodidaktisch	Heterogen: Musikschule oder keine Vorbildung	Keine Vorbildung	Instrumentalunterricht plus hoher autodidaktischer Anteil, multiinstrumental	Autodidaktisch
Technisches Vorwissen	Geringe Vorbildung Musiktechnologien (Verkabelung etc.); Grundkenntnisse Smart Devices	Geringe Vorbildung Musiktechnologien (Verkabelung etc.); Grundkenntnisse Smart Devices	Geringe bis mittlere Vorbildung Musiktech- nologien; Kenntnisse Digitaletechnologien für Kreativbereich (Foto, Video etc.)	Keine Vorbildung Musiktechnologien; gute Kenntnisse Smart Devices	Geringe Vorbildung Musiktechnologien (Verkabelung etc.); gute Kenntnisse Smart Devices	Mittlere bis gute Vorbildung Musiktech- nologien; z.T. Kenntn. Digitaltechnologien für Kreativbereich; gute Kenntn. Smart Devices	Sehr gute Vorbildung Musiktechnologien; Kenntn. Digitaltechno- logien Kreativbereich; z.T. elektrotechn. und informatisches Wissen

Midakuk TPE: beobachtetes Feld im Überblick (ohne Dropouts); vgl. auch Donner und Jörissen 2022.

Main outcomes of the conducted
2 years field-research with 32 participants
(who could borrow any
equipment they chose)



Identified types of musical orientation



	HALTUNG 1 handwerklich orientiert	HALTUNG 2 emotiona- geföhri- orientiert	HALTUNG 3 Kunstprojekt orientiert	HALTUNG 4 ästhetisch experiell	HALTUNG 5 technisch experiell	HALTUNG 6 hybrid produktionsorientiert	HALTUNG 7 elektronisch produktionsorientiert
Referenz Schlagworte	Musikschule	Musik emotional zentraler Bezugspunkt im Leben	Post-digitale Künstlerbohème	Ästhetisch Explorierende	Technologisch Explorierende	Popmusik produzierende Musiker*innen	Clubmusik Produzierende und DJs
Geschlechter- verhältnis	3 Teilnehmerinnen 2 Teilnehmer	3 Teilnehmerinnen 0 Teilnehmer	4 Teilnehmerinnen 1 Teilnehmer	1 Teilnehmerin 4 Teilnehmer	0 Teilnehmerinnen 2 Teilnehmer	1 Teilnehmerin 4 Teilnehmer	0 Teilnehmerinnen 4 Teilnehmer
Alter	14-23	20-24	22-25 (und >40)	13-22	14-15	17-24	21-23 (und >40)
Fokus	Lernen durch üben; Interesse an erweiterten techn. Möglichkeiten	Vielseitig: Multiinstrumentalität und Stimme	Elektronische Musikproduktion und Auftritte (DAWless); Medieninstallation	Geschmackliche Experimentier- und Findungsphase; u. U. Livestyle	Technologische Möglichkeiten entdecken	Hybrid-instrumentale Musikproduktion	Elektronische Musikproduktion und Auftritte
MusikmachDinge (MmD) geliehen	5 Instrument-Metapher 2 Metapher & Loops 1 Loop Paradigma	3 Instrument-Metapher 1 Metapher & Loops 1 Loop Paradigma	3 Instrument-Metapher 1 Metapher & Loops 8 Loop Paradigma	3 Instrument-Metapher 4 Metapher & Loops 4 Loop Paradigma	1 Instrument-Metapher 1 Metapher & Loops 1 Loop Paradigma	5 Instrument-Metapher 4 Metapher & Loops 3 Loop Paradigma	1 Instrument-Metapher 3 Metapher & Loops 7 Loop Paradigma
Beste Passagen	Instrument-Metapher	Keine Festlegung möglich	Loop Paradigma Metapher & Loops (ggf. mit DAW)	Metapher & Loops (möglichst vielseitige Anregung)	Loop Paradigma	Metapher & Loops (ggf. mit DAW)	Loop Paradigma (ggf. mit DAW)
Tendenz techn. Komplexität	Bis maximal mittlere (Plug & Play ideal)	Bis mittlere (Plug & Play ideal)	Niedrigste bis höchste	Bis mittlere (Plug & Play ideal)	Bis mittlere	Bis mittlere (Plug & Play ideal)	Mittlere bis höchste
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Midakuk TPE: beobachtetes Feld im Überblick (ohne Dropouts); vgl. auch Donner und Jörissen 2022.

Main Results:

- 1) Some digital instruments/ „musicking things“ are able to support a very broad diversity of musical goals, habits and artistic attitudes.
- 2) The structural properties of digital musical instruments are closely related to these habits
- 3) Traditional music schools (in Germany!) rather support only a fraction of these orientations.
- 4) The typology of attitudes developed in the research process allows for the development of more inclusive digital musical and sonic education programs for a broader audience.

>>>

Insights into digital
technologies and
practices may foster a
more inclusive arts
education and
contemporary modes of
expression.

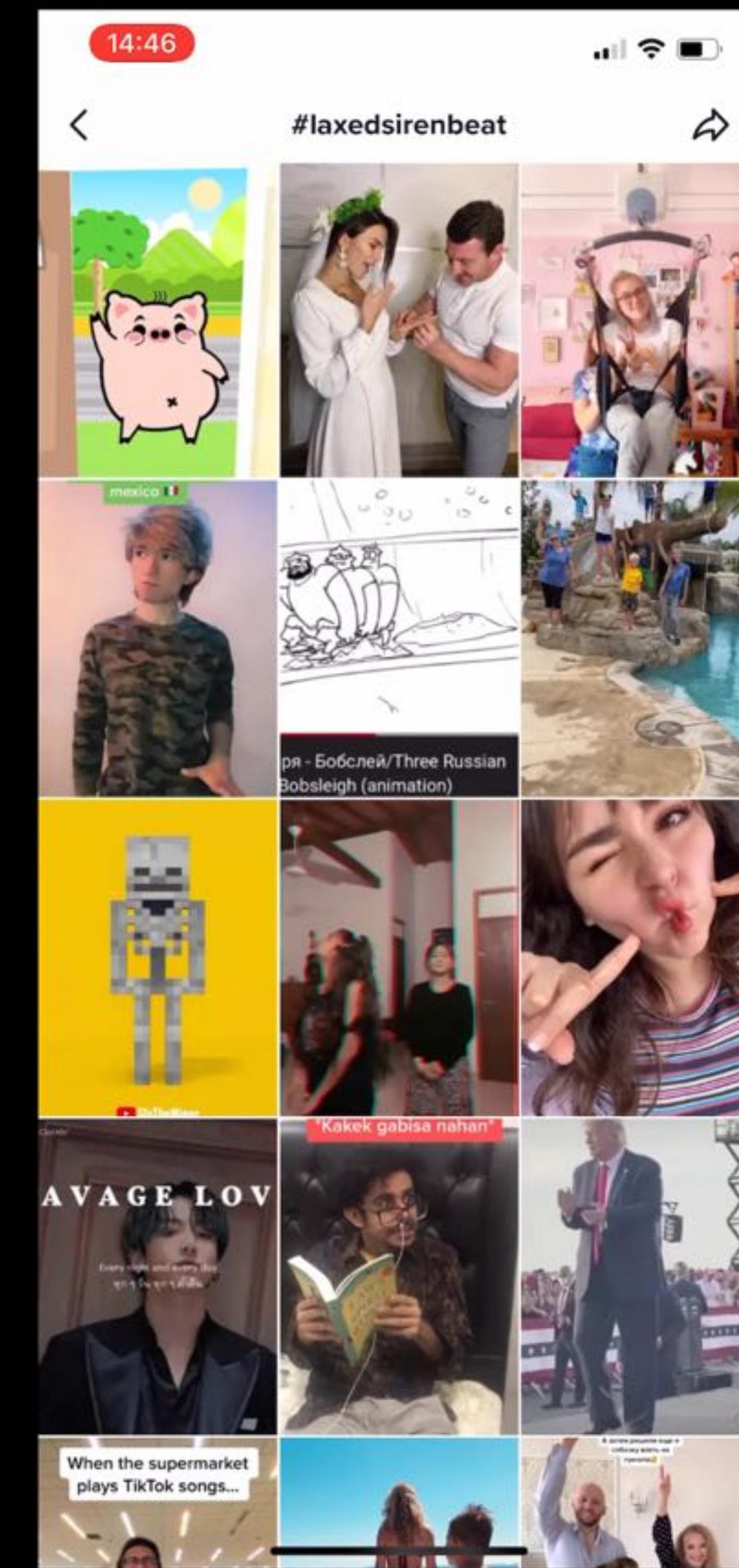
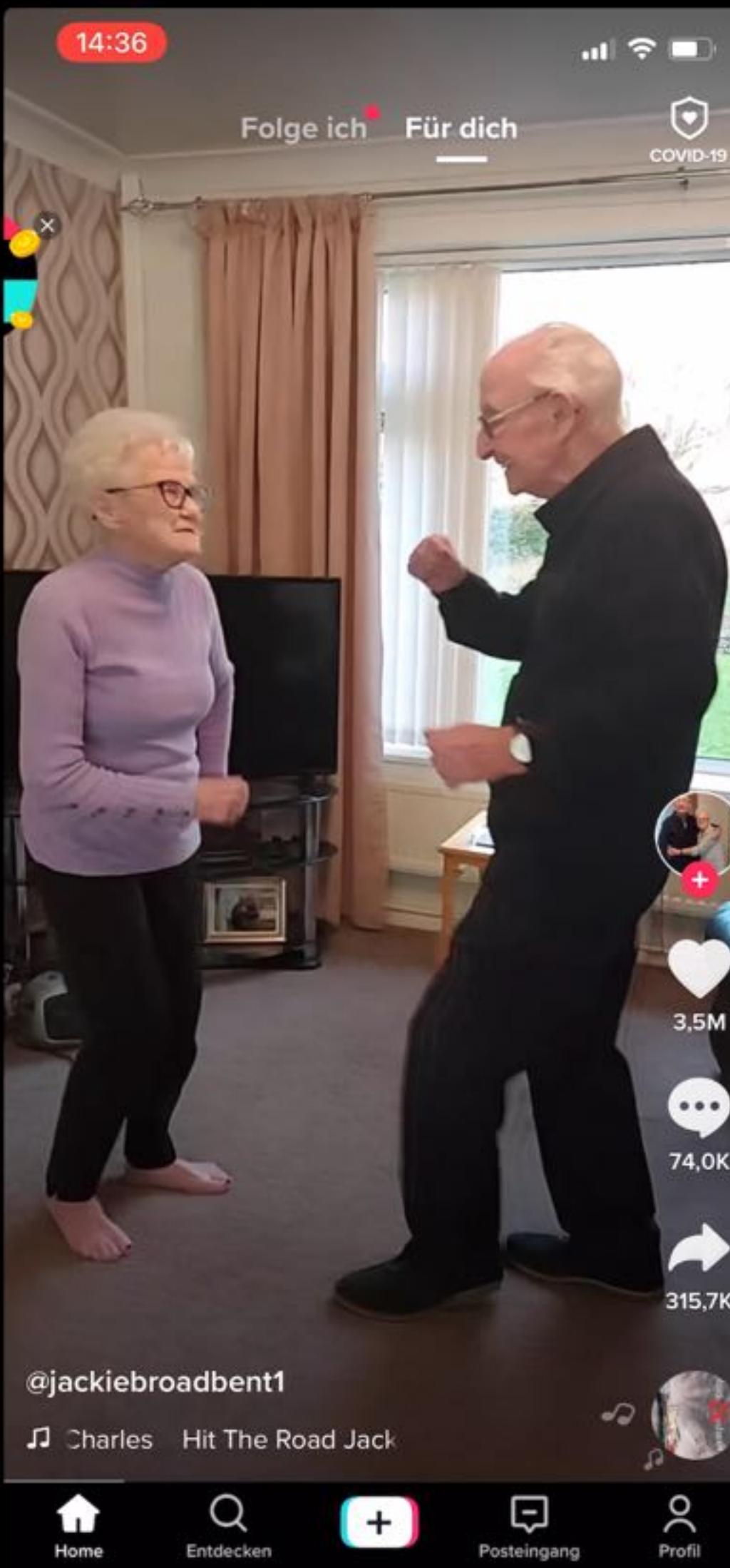
Understanding Digitality

- 1) Care to understand digitality
- 2) Understand (post-) digital culture(s)

a) New models: "influencers" and (micro-) generational aesthetic shifts

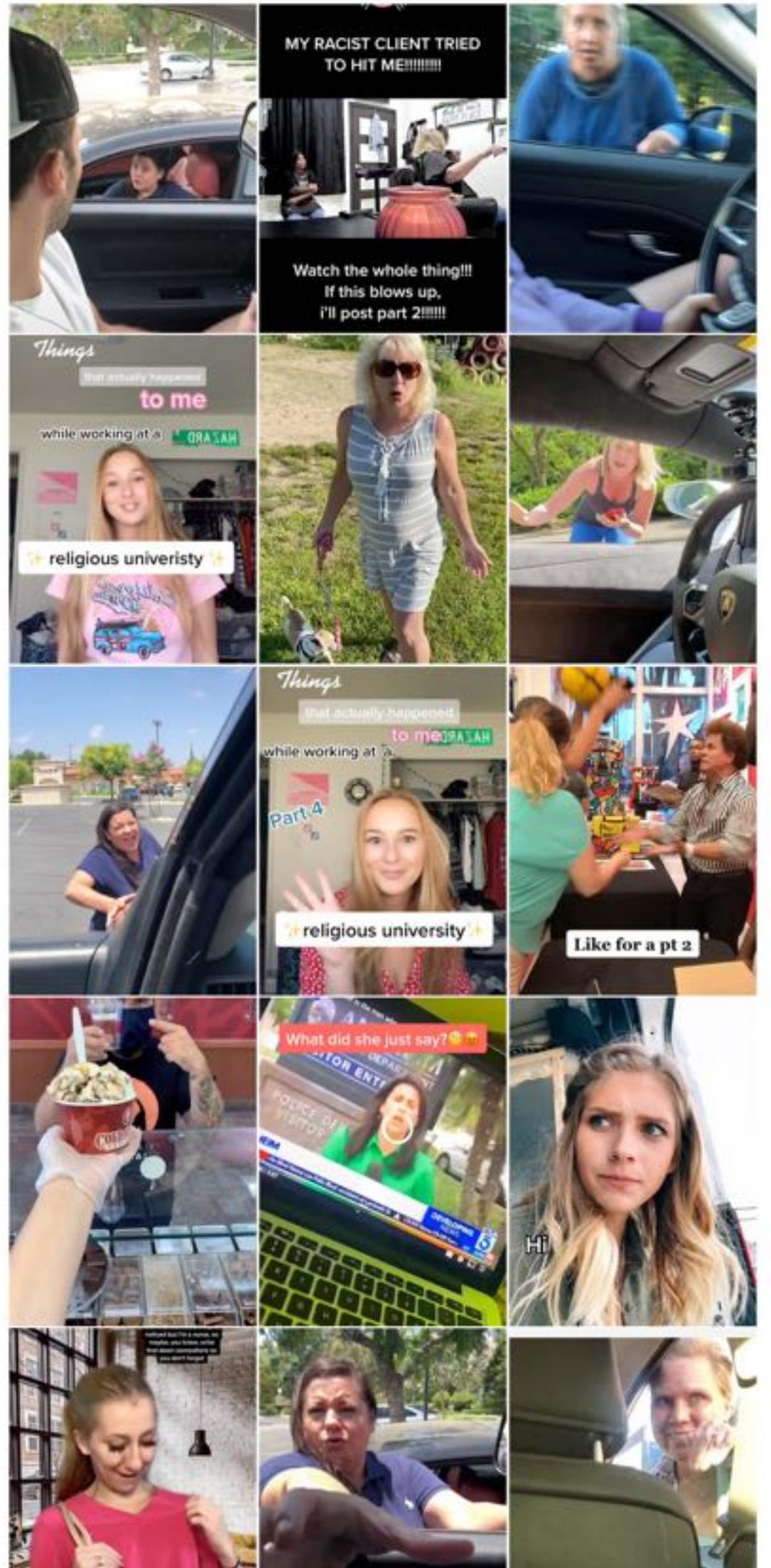


a) New models: "influencers" and (micro-) generational aesthetic shifts



#karen

7B views



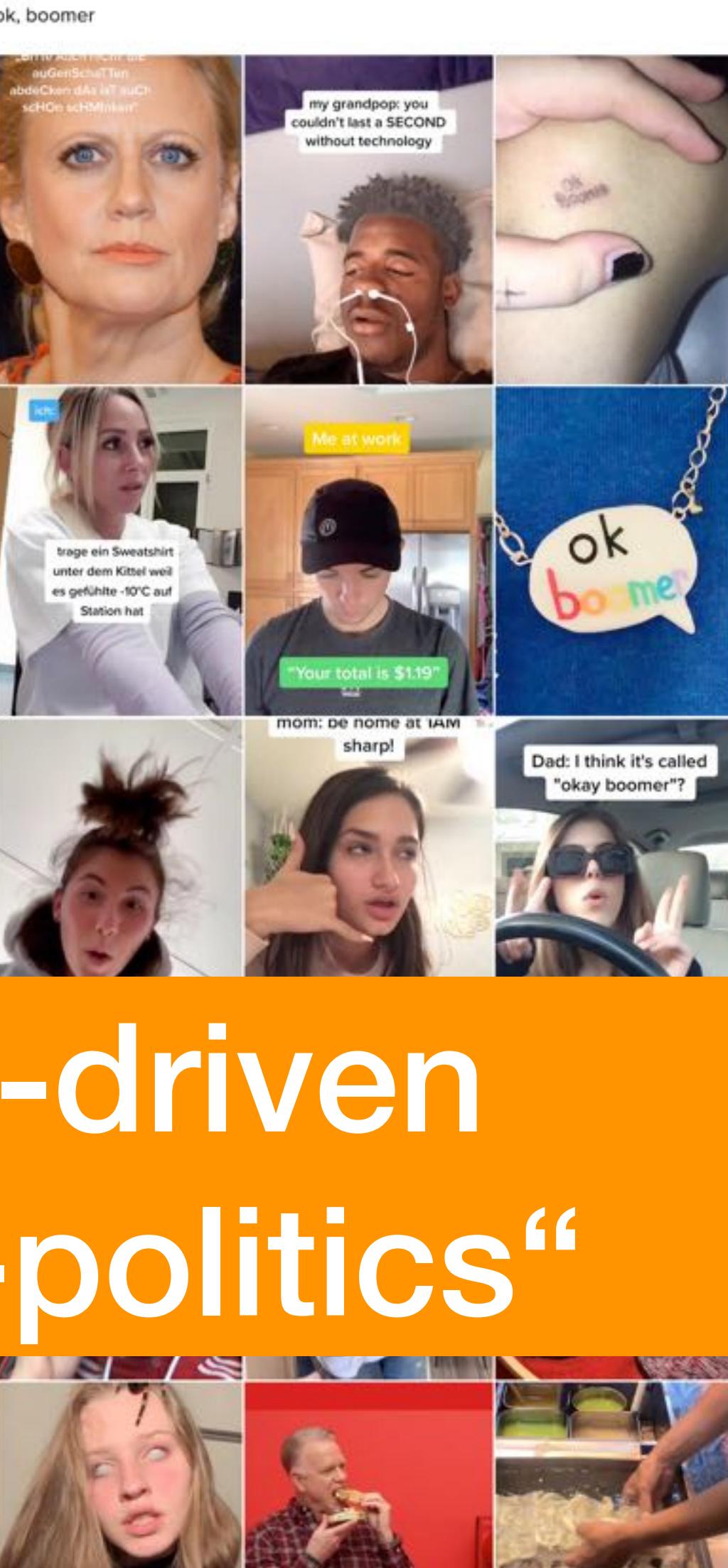
#maga

3.8B views



#okboomer

3.5B views

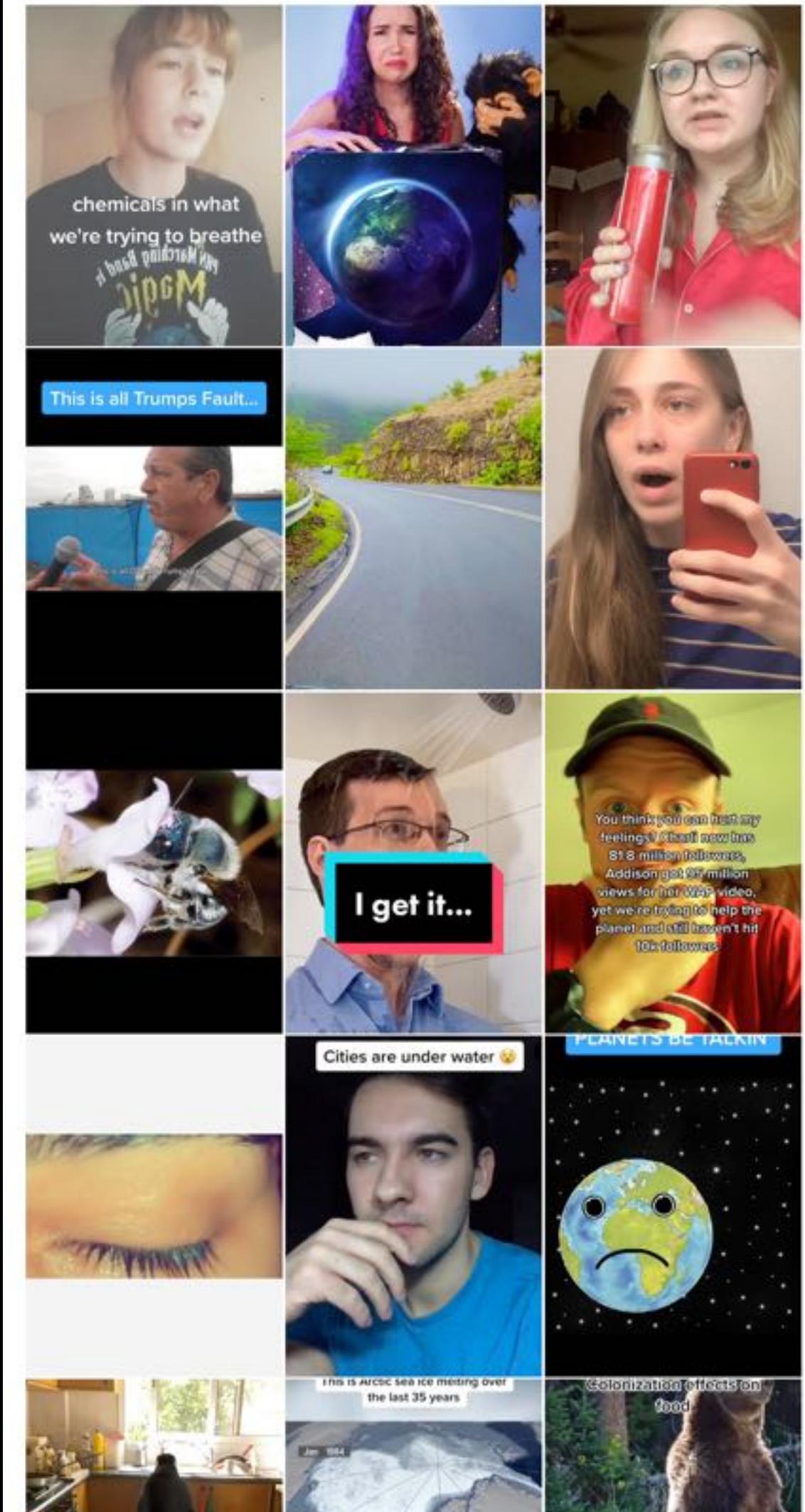


#climatechange

419.8M views



C is for Climate Change...

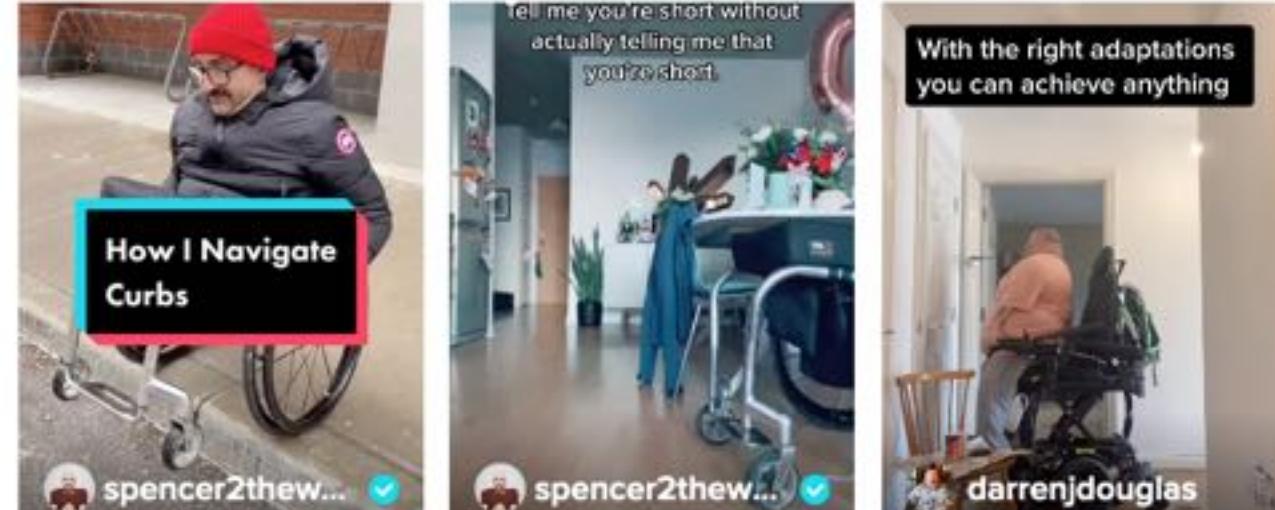


#hashtag-driven
„everyday-politics“

#disabilitytiktok

1.2B Aufrufe

#



How I Navigate Curbs #...

#tellme #tellmechallen...

Attaching a paintbrush ...

Reply to @crysley624 #...

Since y'all alway ask thi...

Accessible Shorts #disa...

What I've learned from having a disability

bring this back for no re...

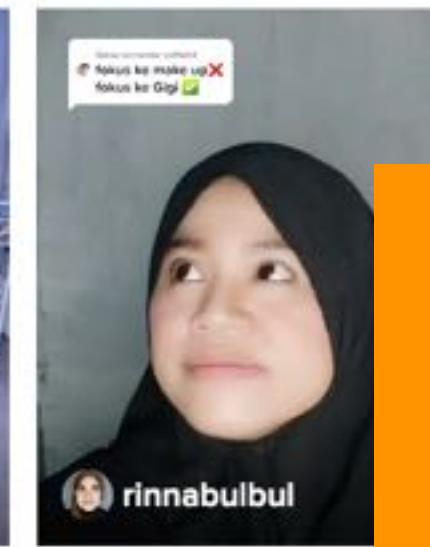
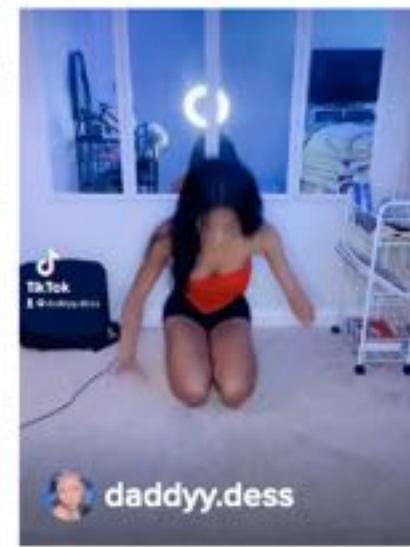
Balas @cofferr3 terim...



No like everytime #for...

bring this back for no re...

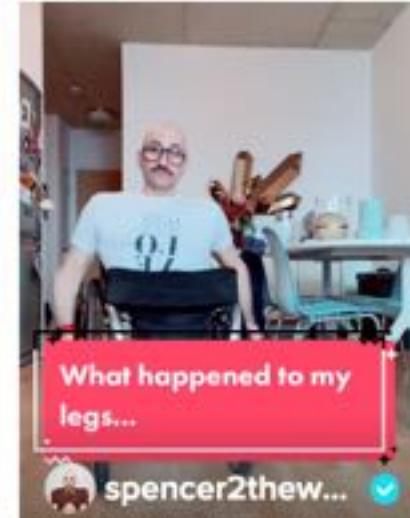
Ce: *crunchy chewing noises*



What happened to my legs...

What happened to my legs...

INCLUSIONE È FELICIT...

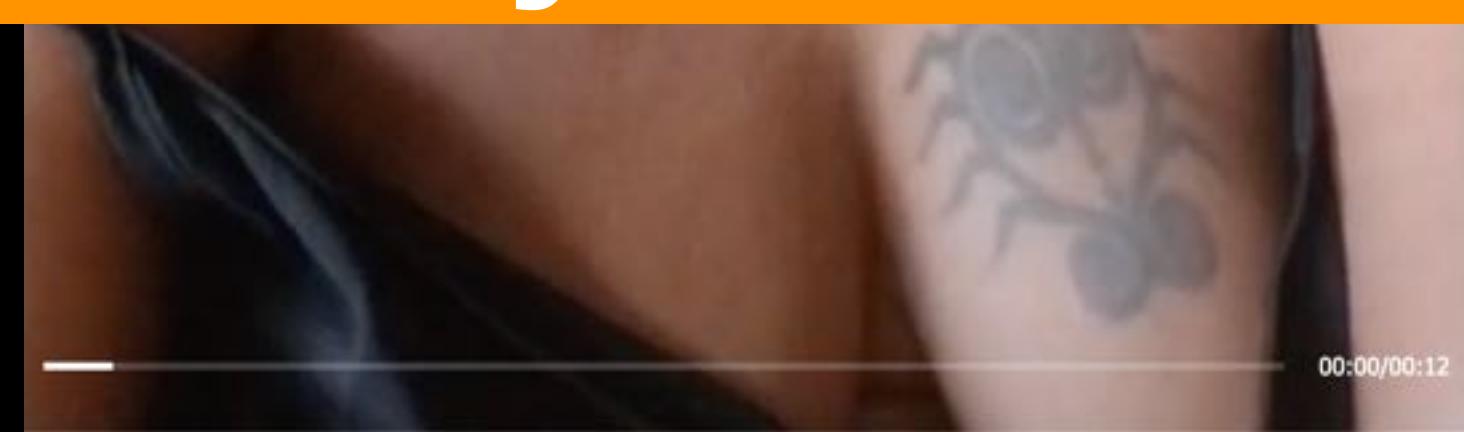


Y'all ever get so hungry...

What happened to my l...

INCLUSIONE È FELICIT...

#hashtag-driven Body Politics



00:00/00:12



#corpolivre

628.1M Aufrufe

Hochladen Anmelden

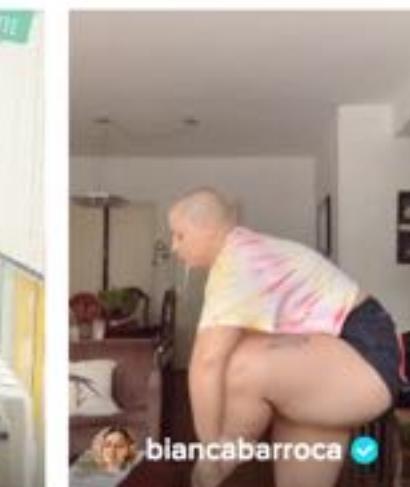
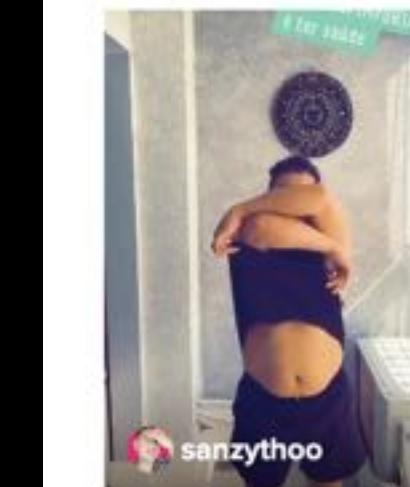
tormato do corpo. Porque amar o proprio corpo é um ato revolucionário! Use a hashtag #CorpoLivre em seus vídeos e navegue por ela pra ver uma rede de pessoas diversas e felizes com seus corpos livres!



Viu que a hashtag #cor...

Bora se amar? #foryou #corpoli...

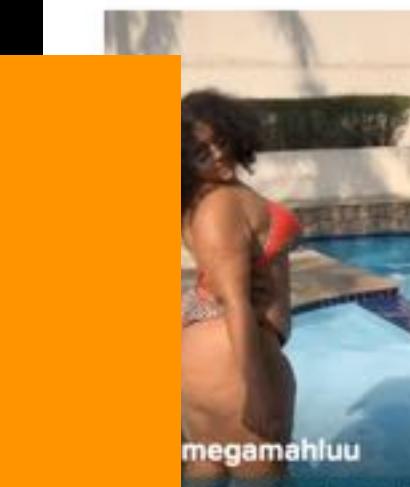
Sério? #foryou #corpoli...



Essa campanha me rep...

Minha cara de quem vai...

Manda esse vídeo pra s...



megamahluu

todebells

josevbertoldo

gamorpróprio #cor...

eu nunca: mulheres gor...

#corpolivre #bodypositi...



Responder a @videos_...

@mcgsoudeverdade #f...

Nada fácil pra mim faze...

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

DiKuJu

(Post-) Digital Cultural Youth Worlds -
Development of new methodological tools to advance research on Arts and Cultural Education in the digital and post-digital world.

(BMBF, 2016-2019)

Susanne Keuchel & Benjamin Jörissen
Anna Carnap, Felix Fischer, Steffen Riske,
Karoline Schröder, Viktoria Flasche
in Kooperation mit Horst Pohlmann,
Akademie der Kulturellen Bildung Remscheid



Youth-„BarCamp“ conducted at the Academy of Arts and Cultural Education in Remscheid, Germany

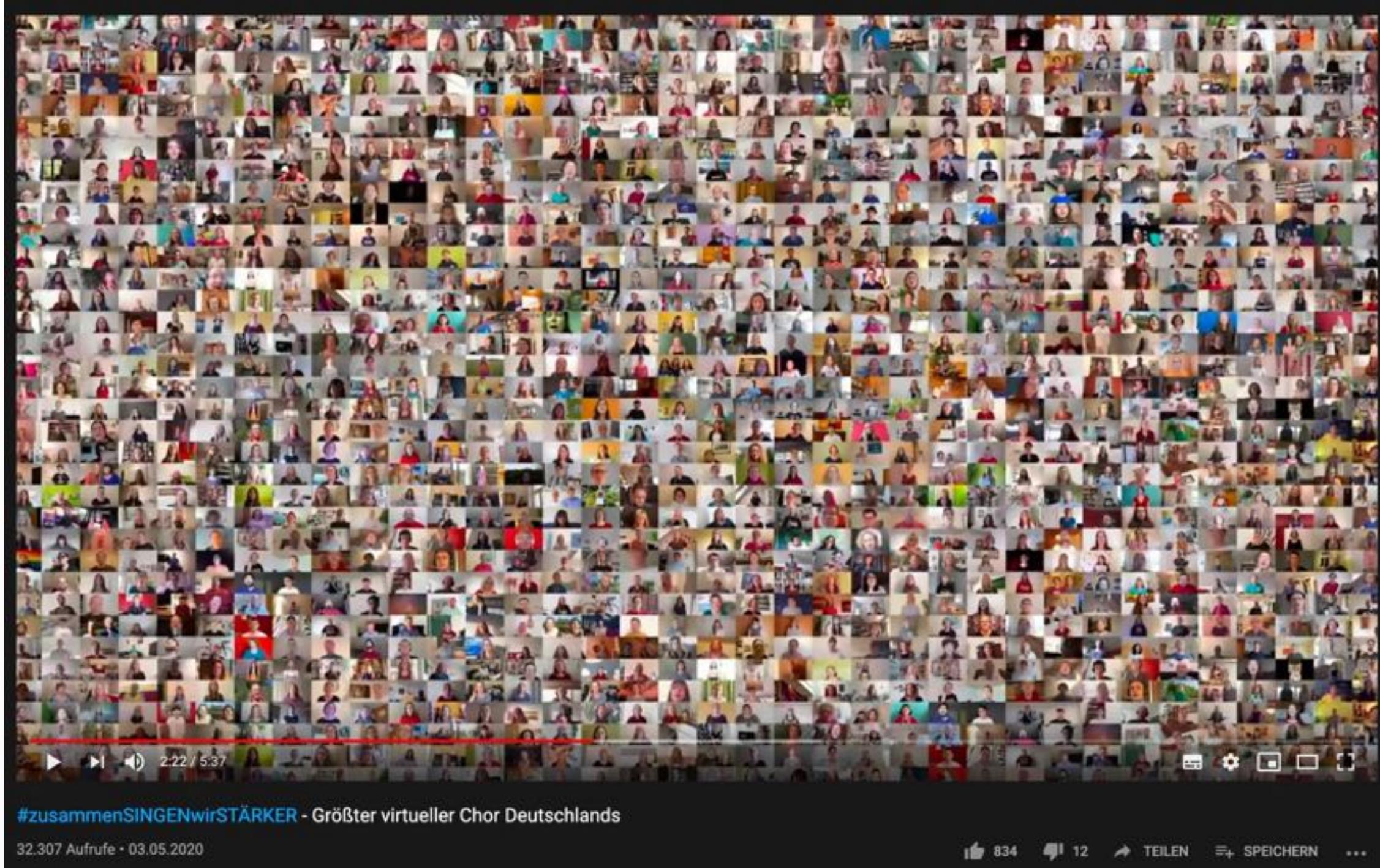
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für Bildung
und Forschung

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

1. Post-digital transformations of (aesthetic/artistic/creative) modes of articulation and experience



1.a Post-digital Transfer of
traditional aesthetic practices
into the digital realm

„Biggest german virtual choir“

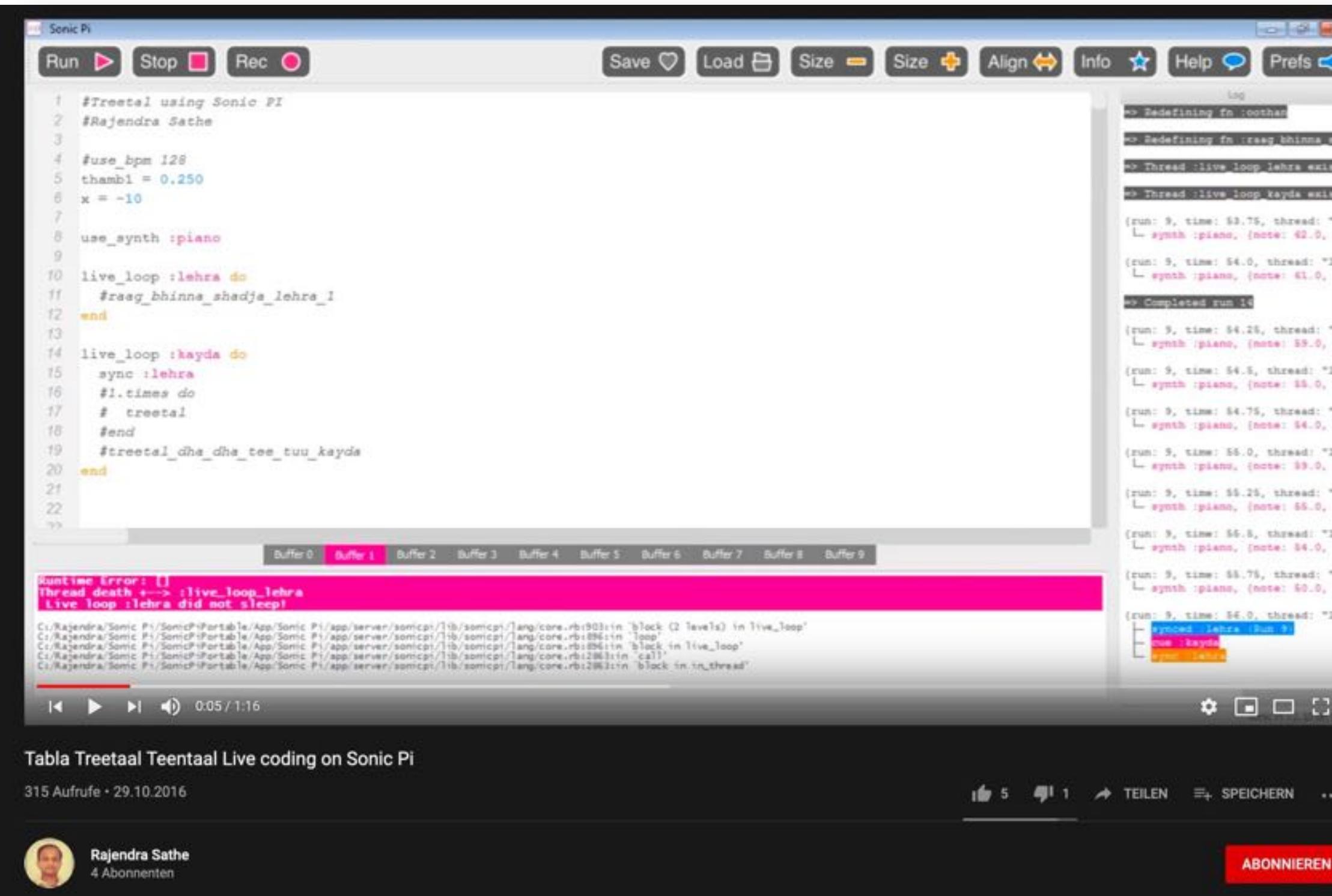
GEFÖRDERT VOM



Bundesministerium
für Bildung
und Forschung

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

1. Post-digital transformations of (aesthetic/artistic/creative) modes of articulation and experience



1.b "Emergence":
appearance of new digital-aesthetic forms of practice

Live music coding using the Sonic Pi platform

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

1. Post-digital transformations of (aesthetic/artistic/creative) modes of articulation and experience



1.c „Revival“: decidedly non-digital practices exhibiting a "retro" character (but staged on internet platforms)

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und Forschung

„Marble machine“ (video series)

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

1. Post-digital transformations of (aesthetic/artistic/creative) modes of articulation and experience

a) Transfer; b) Emergence, c) Revival

2. Post-digital transformations of

- a) modes of communication and
- b) modes of staging:

Abolishing the difference between
on- and offline practices

- a) „Meme“ as a principle of communication
- b) Vlogs, Tutorials, DIY, Hauls, Let’s Play as modes of staging

3. Post-digital transformation at

- a) social forms and
- b) cultural orientations (transculturalization).

- a) unstable/instantaneous networks (e.g. smart mobs)
- b) e.g. furry, quilting, manga, cosplay

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für Bildung
und Forschung

b) Shifts of artistic/creative practices in relation to traditional genres of arts education

DiKuJu

(Post-) Digital Cultural Youth Worlds - Development of new methodological tools to advance research on Arts and Cultural Education in the digital and post-digital world.

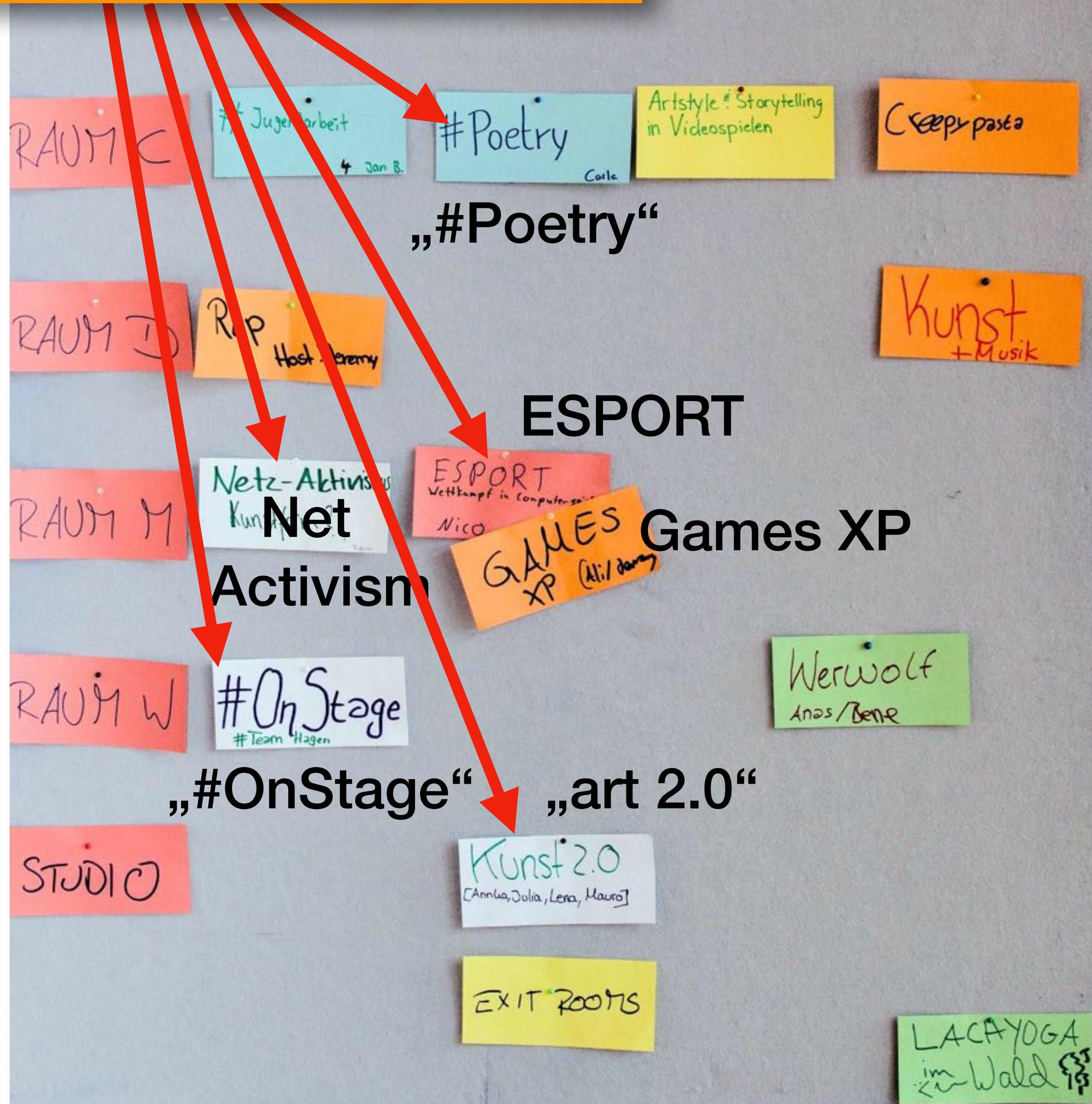
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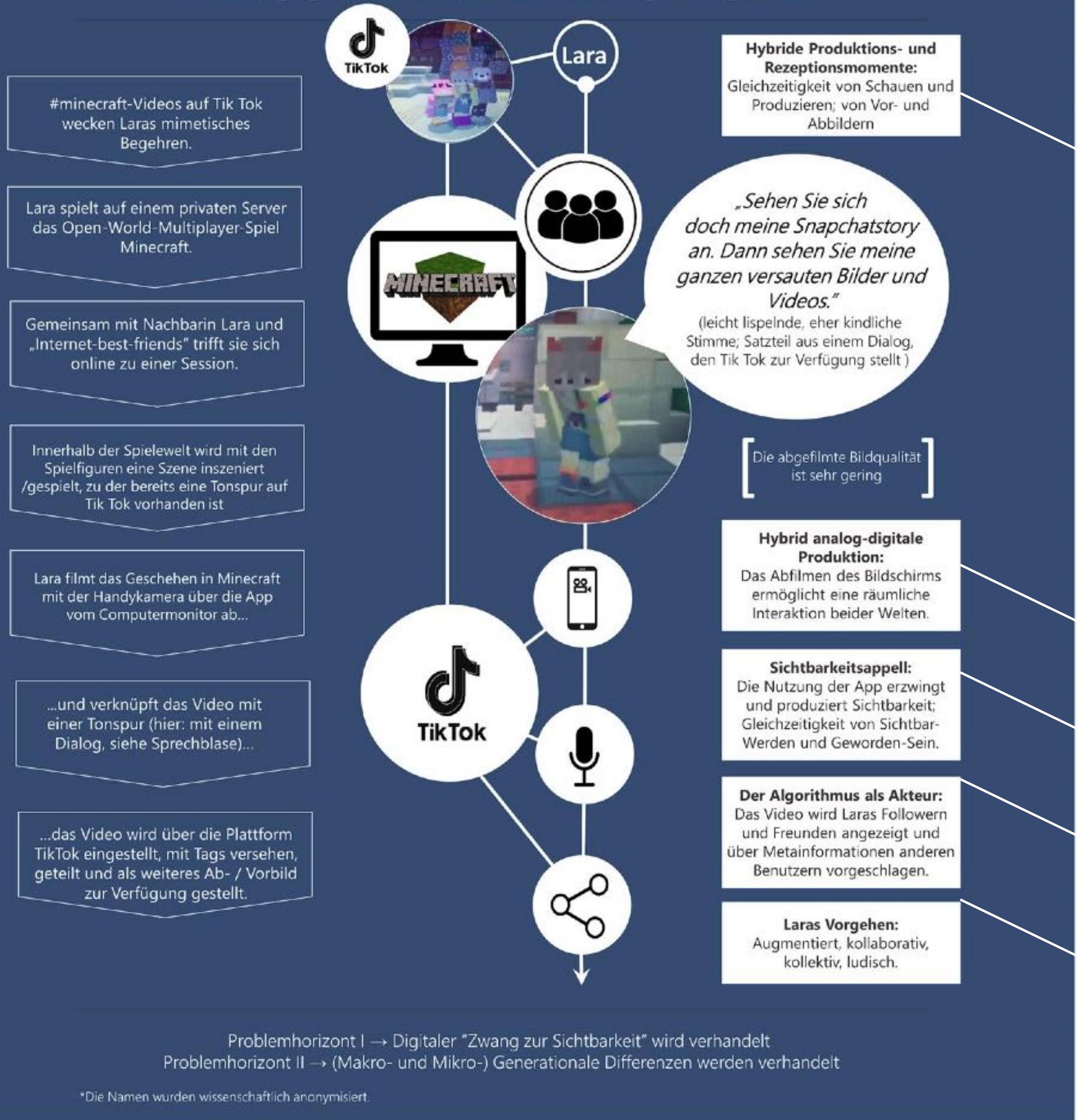


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und Forschung



Digitally Augmented Aesthetic Decision Making: Casestudy „Lara, Lara & Friends making a TikTok Video“

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



c) New hybrid forms of distributed creativity

Production/reception are intertwined

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

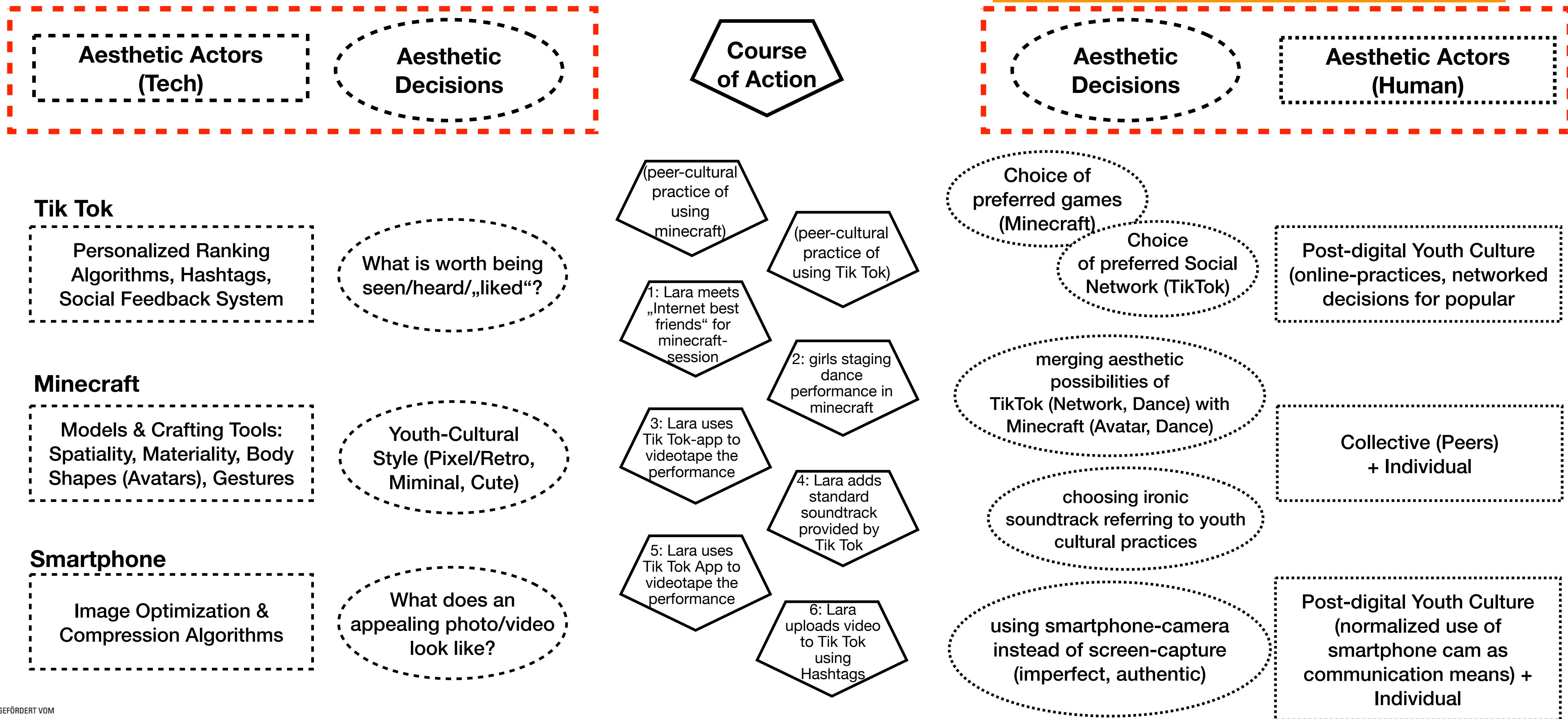
App (TikTok) enforcing non-controlled visibility

Algorithm as actant (networking, ranking)

mode of action: augmented, collaborative, collective

Digitally Augmented Aesthetic Decision Making: Casestudy „Lara, Lara & Friends making a TikTok Video“

c) New hybrid forms of distributed creativity



GEFÖRDERT VOM

>>>

Insights into cultural shifts and
new aesthetic practices of
younger generations are crucial
for an understanding of how arts
education help telling
empowering from undesirable
effects of digitalization.

>>>

Insights into digital technologies and practices may foster a more inclusive arts education and contemporary modes of expression.

>>>

Insights into cultural shifts and new aesthetic practices of younger generations are crucial for an understanding of how arts education may tell empowering from undesirable effects of digitalization.

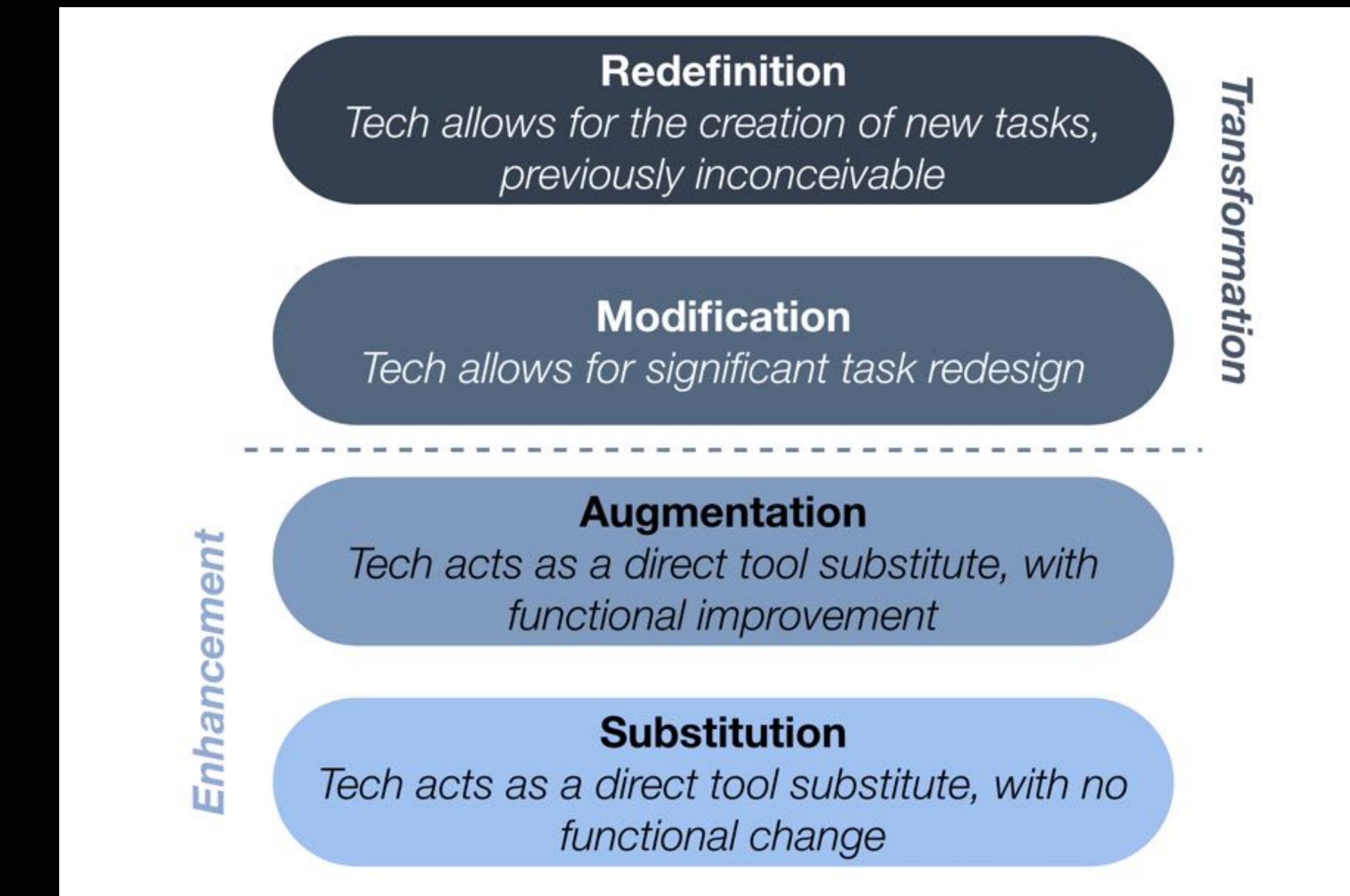
Understanding Digitality

- 1) Care to understand digitality
- 2) Understand (post-) digital culture(s)
- 3) Initiate **transformative organizational and professional learning**

Initiate transformative organizational and professional learning using e.g. the SAMR-Model

achieve this →

avoid this →



Puentedura, R. R. (2013, Mai 29). SAMR: Moving from Enhancement to Transformation. *Proceedings of the 2013 AIS ICT Management and Leadership Conference*. 2013 AIS ICT Management and Leadership Conference, Canberra, Australia.

Thank you!

Presentation slides: <http://joerissen.name>

ISME World Conference

Brisbane/online, 18 July 2022