

## RESPONSIBLE INNOVATION: Audiovisual Research in the Digital World

Jeanine Reutemann



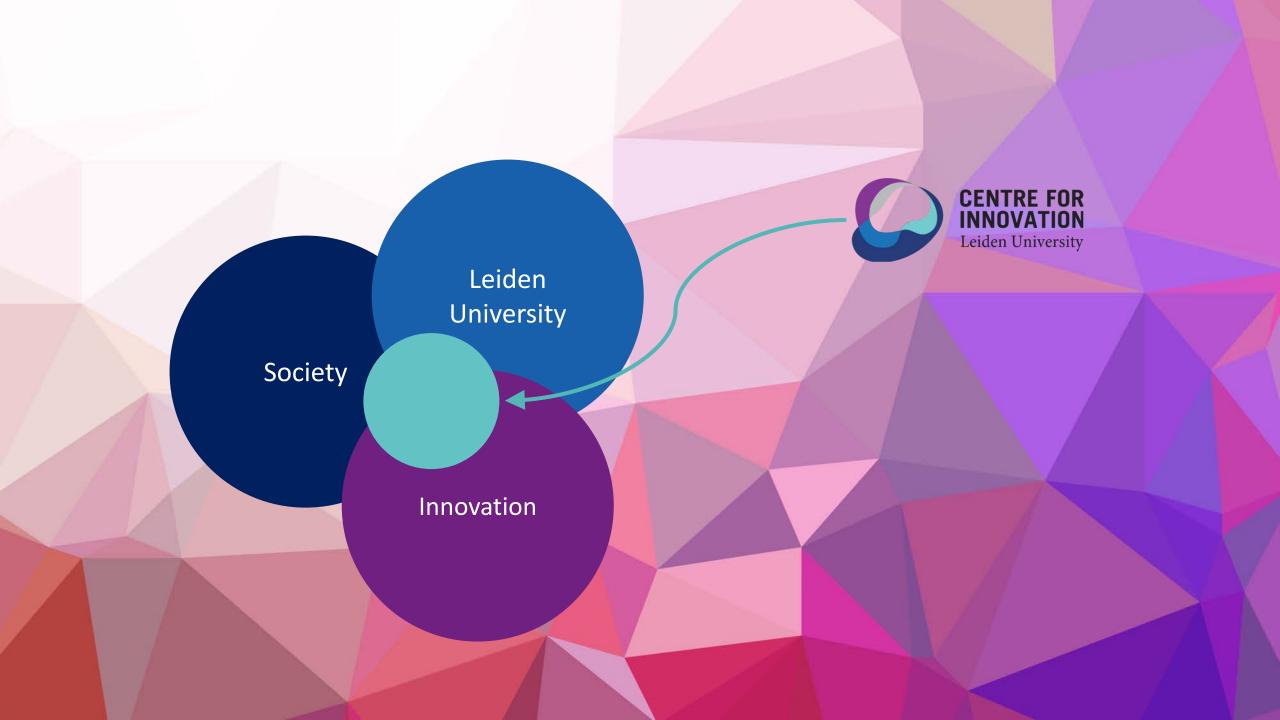
Week 1: A very short introduction into Audiovisual Data – From Cave Paintings to Mixed Reality

## **POST-DOC RESEARCHER**

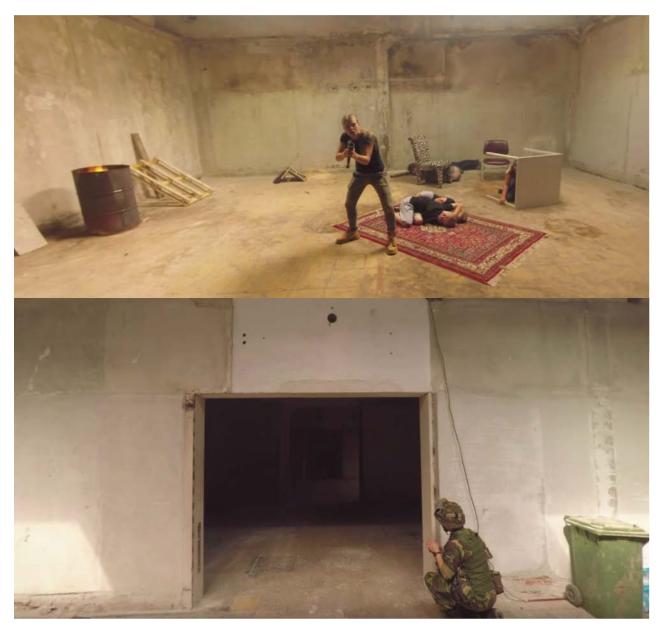
Centre for Innovation, Leiden University, Den Haag Netherlands

## TECHNOLOGY & HUMANITIES – INNOVATION – SOCIETY

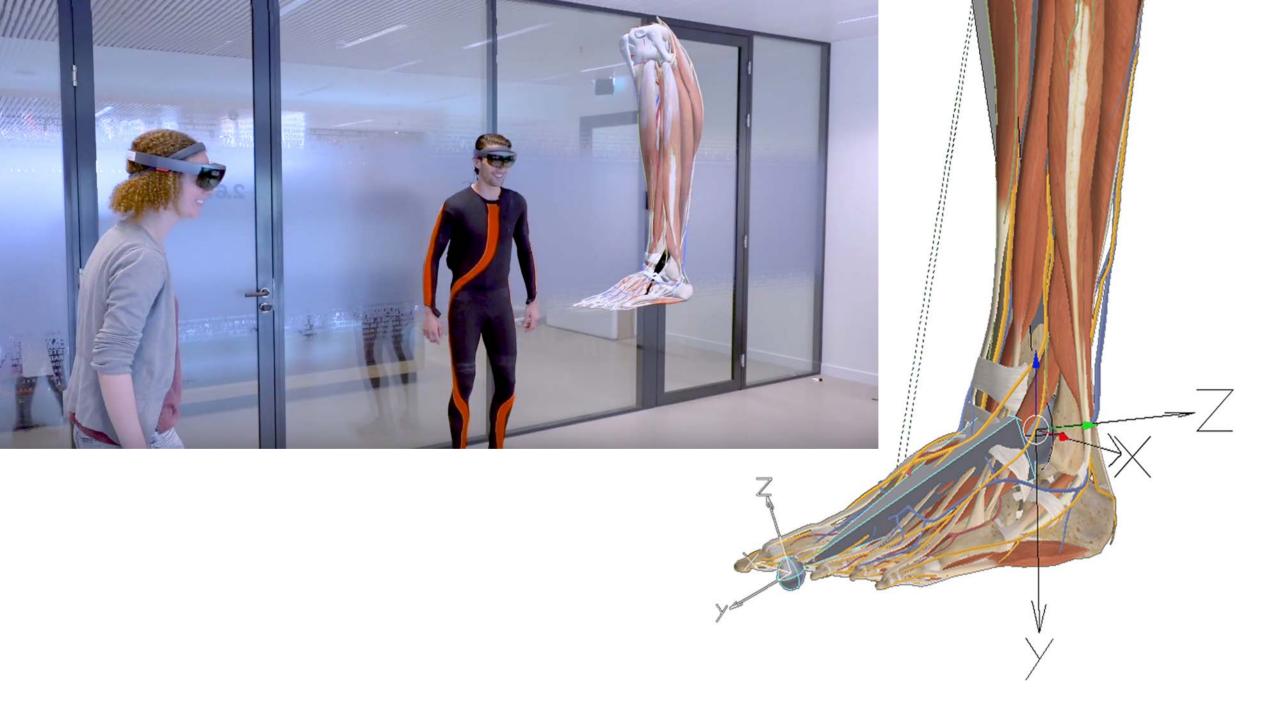












## DIGITAL MEDIA PRODUCER I FILMMAKER

ETH Zurich; EPFL Lausanne; University of Zurich; LMU Munich;















r4d programme ✓ Modules ✓ News & Mec

Homepage > Modules > Social Conflicts

## Modules

Thematically Open Research

### > Social Conflicts

- > Ethnic power relations
- Gender dimensions of social conflicts
- Fostering pluralistic memories
- Employment

Causes of and Solutions to Social Conflicts in Contexts of Weak Public Institutions or State Fragility

The thematic module Social Conflicts puts the emphasis on conflicts that result from particular types of deficiencies of public institutions, state fragility and the different variations of governance capabilities, as well as on ways and means for mitigating such deficiencies and reducing or avoiding conflicts.





# 1. RESPONSIBLE INNOVATION AND AUDIOVISUAL DATA Science meets Arts meets Politics

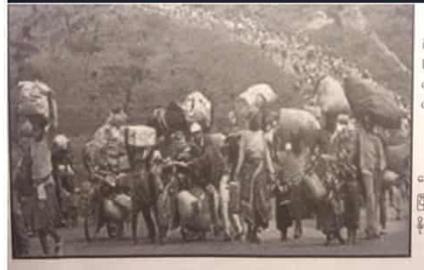
## AUDIOVISUAL DATA BOTH SIDES: CREATORS & CONSUMERS

## FAKE PHOTOGRAPHS / CONTEXTS

https://www.theguardian.c om/world/2018/aug/31/my anmar-army-fakesphotos-and-history-insinister-rewrite-ofrohingya-crisis



Rwandan Hutu refugees with as many possessions as they can carry trudge along a highway near Benuco Junction in Tamania. They had tried to flee further away from Rwanda, into Tamania, but had been turned back by Tamanian soldiers. Several of the refugees said they would walk all the way through Kenya or Malawi just so they could return to Rwanda.



Bengalis intruded into the country after the British Colonialists occupied the lower put of Myanmar.

နယ် ချဲ့အင်္ဂ လိပ်စံ, အောက်မြန်မာပြည်သိမ်းပိုင် ပြီးနောက် ဘင်္ဂါလီများမြန်မ နိုင်ငံအတွင်းဝင်ရောက်လာန်



## Same demographics, different personalities



Female 25-35 Years old AMEX User

Openness	
Conscientiousness	
Extraversion	
Agreeableness	<del></del>
Neuroticism	<u> </u>

People with high openness and extraversion love new experiences they can share with lots of people.



Female 25-35 Years old AMEX User

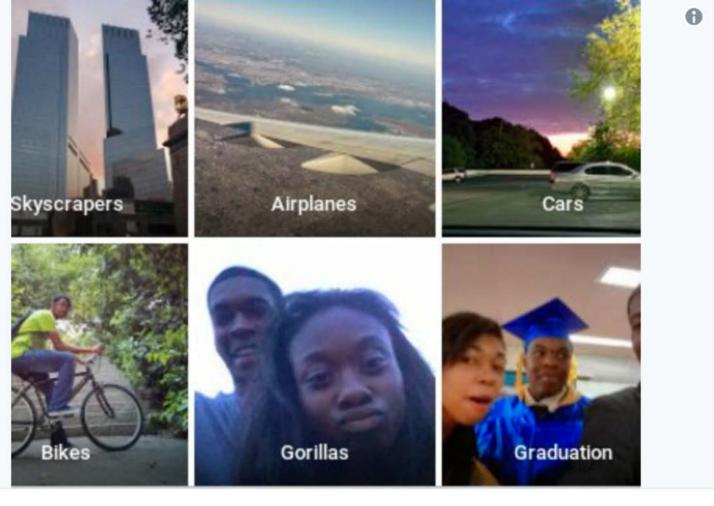
Openness	
Conscientiousness	-
Extraversion	
Agreeableness	-
Neuroticism	

People with low openness and extraversion really value down time spent with their closest friends.











Jacky lives on @jalcine@playvicious.social now. @jackyalcine

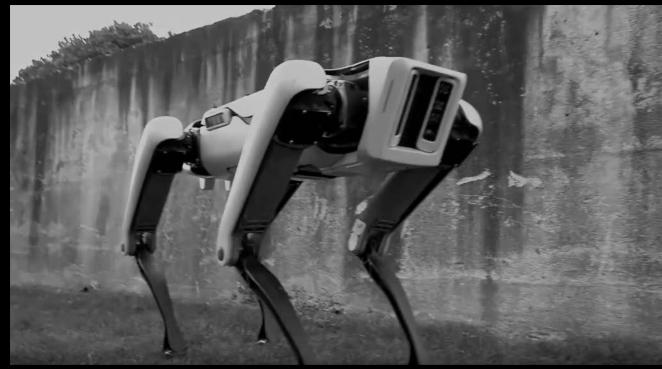


Google Photos, y'all fucked up. My friend's not a gorilla.

3:22 AM - Jun 29, 2015

○ 2,294 ○ 3,543 people are talking about this







## The Guardian







## AUDIOVISUAL DATA CREATES NEW POWERS.

Which new audiovisual data do you find most scary, with the biggest potential for abuse and why?

> Groupwork; 20min; create 1 post-it

# 2. HISTORY OF THE AUDIOVISUAL ICONIC THEORY INTRODUCTION





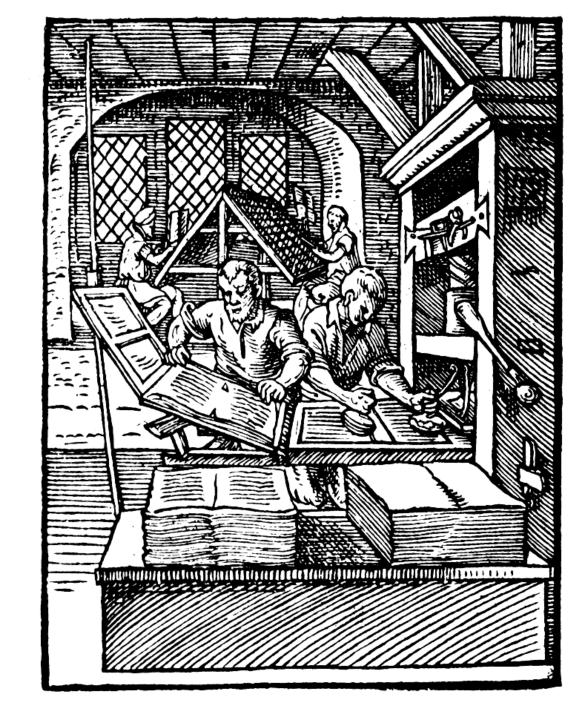
Photograph by Sisse Brimberg





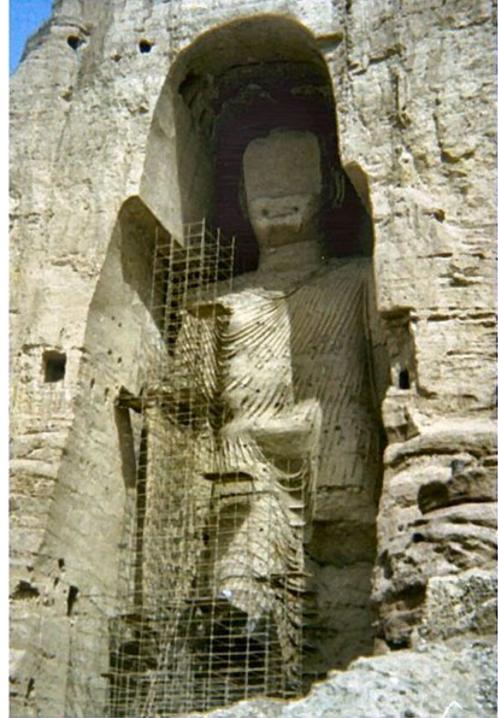


BOOKPRINT Gutenberg Ca. 1400

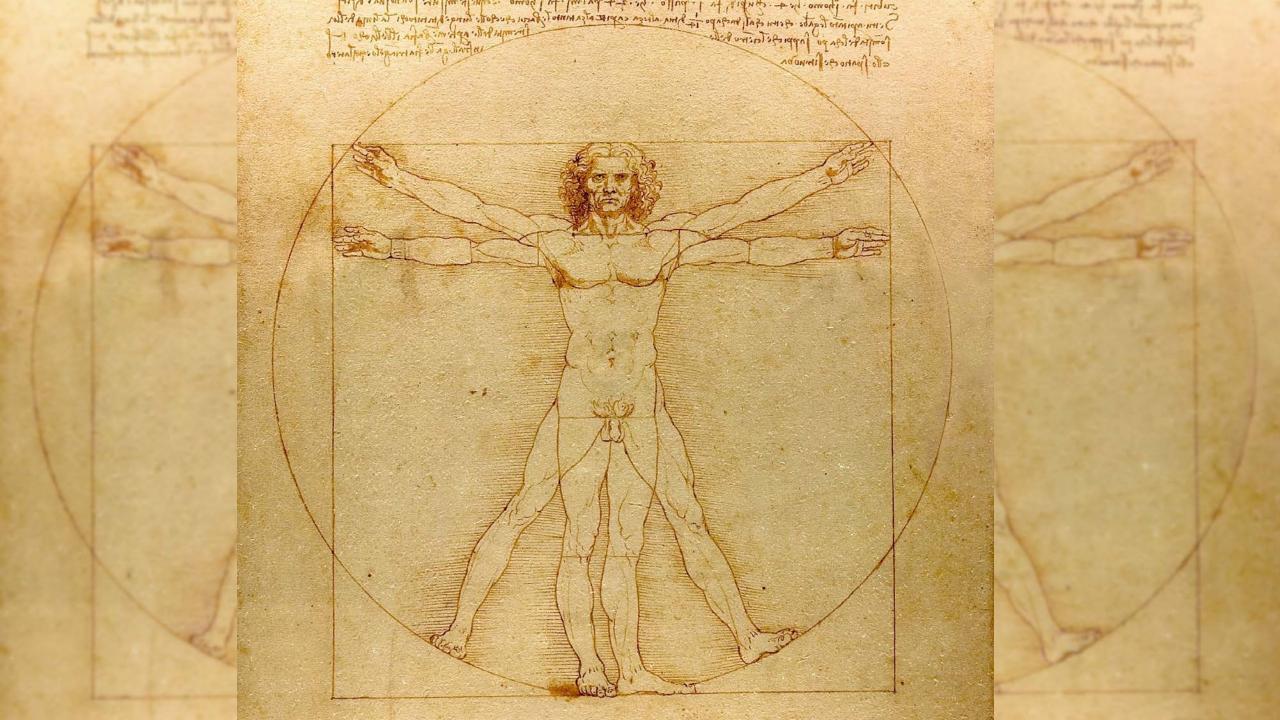


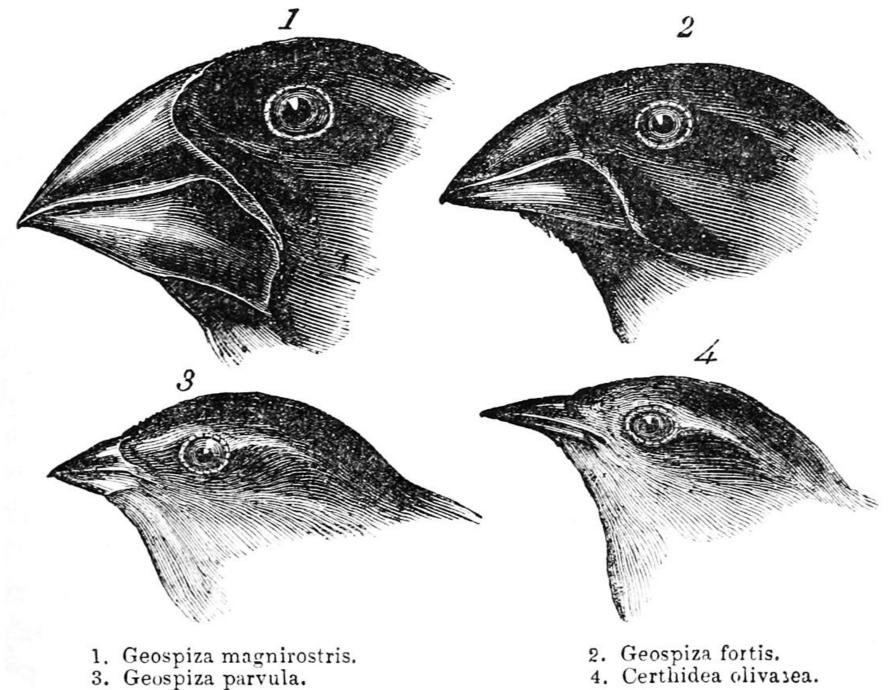
## **ICONOCLASM**





Not only *visualization*, but epistemic qualities of visual & audiovisual data





Geospiza magnirostris.
 Geospiza parvula.

## ANIMAL LOCOMOTION.

AN ELECTRO-PHOTOGRAPHIC INVESTIGATION OF CONSECUTIVE PHASES OF ANIMAL MOVEMENTS.

1872—1885.

BY

EADWEARD MUYBRIDGE.

PUBLISHED UNDER THE AUSPICES OF THE

## UNIVERSITY OF PENNSYLVANIA.

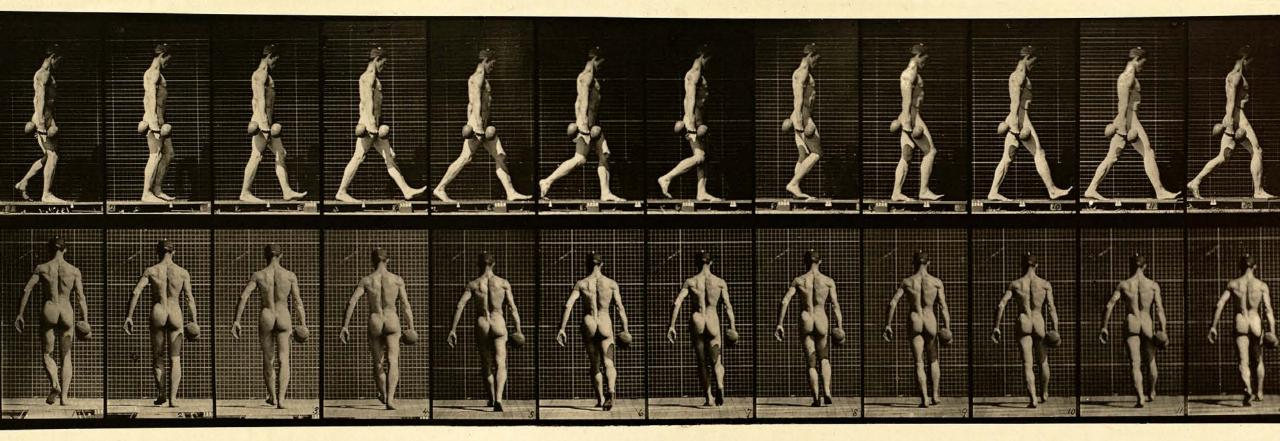
PLATES.—Vol. I.

MALES (NUDE).

THE PLATES PRINTED BY THE PHOTO-GRAVURE COMPANY

PHILADELPHIA:

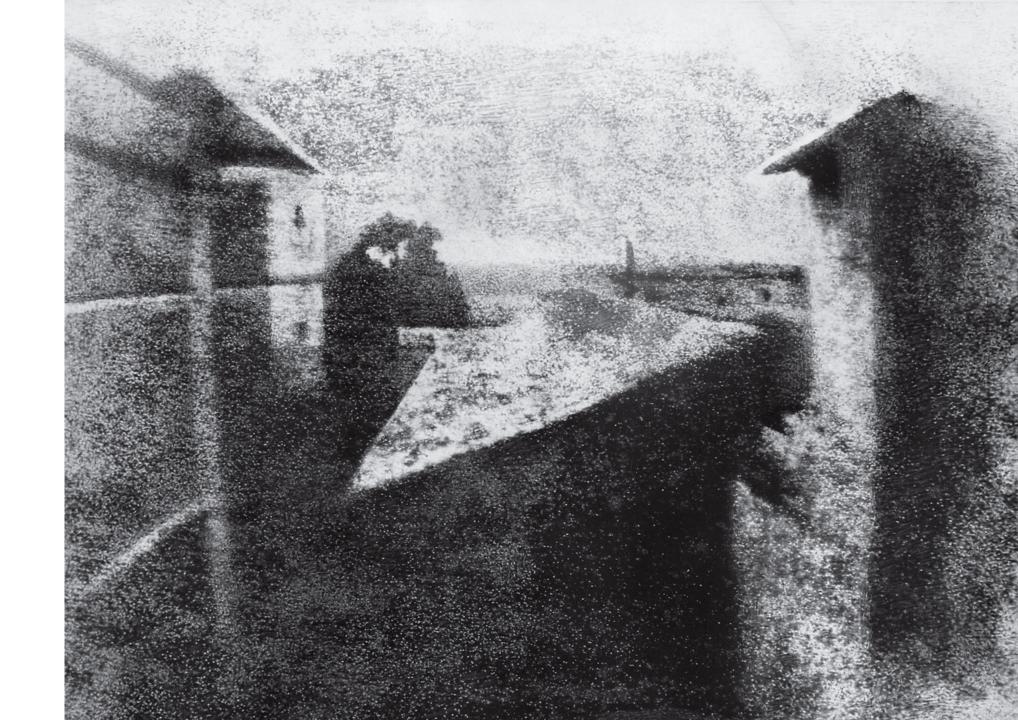
1887.





A LITTLE BIT BEFORE THE INSTAGRAM APP...

Nicéphore Niépce; <u>View from the</u> <u>Window at Le Gras</u> (1826 or 1827), camera obscura.



## A LITTLE BIT BEFORE YOUTUBE...

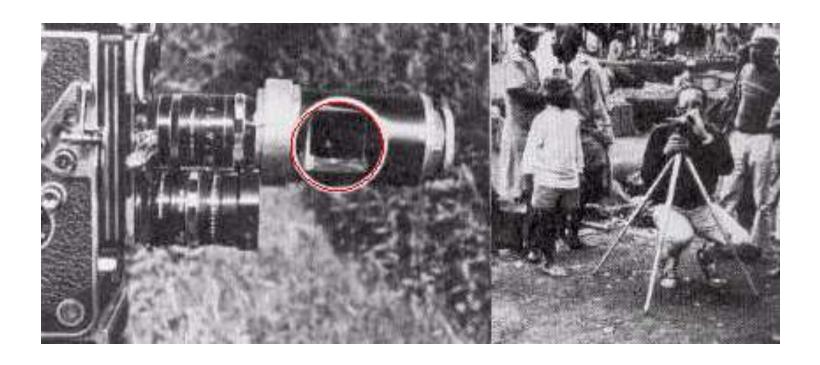
#### ARRIVAL OF A TRAIN AT LA CIOTAT

Lumière No. 653

Arrival of a Train at La Ciotat (The Lumière Brothers, 1895)

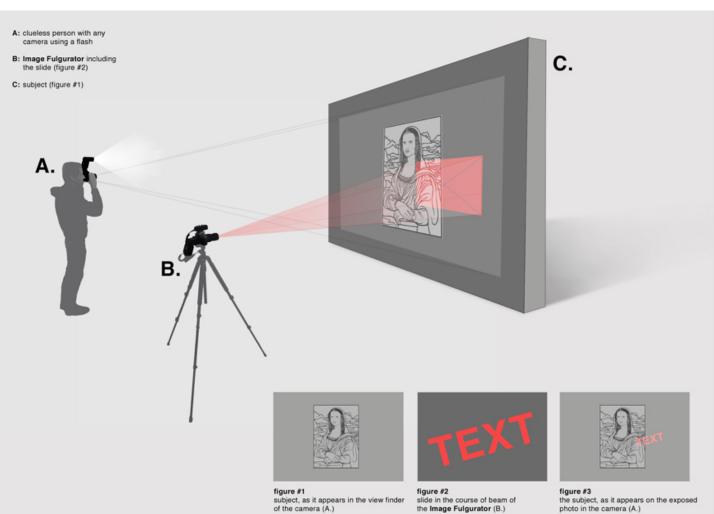


Visual Etnography; non-consensual filming Irenäus Eibl-Eibesfeldt 1960ies



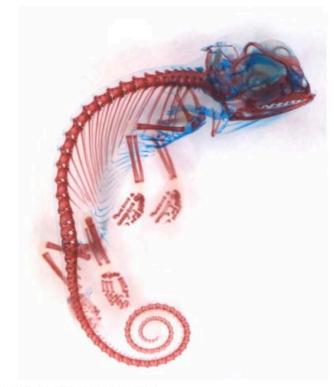




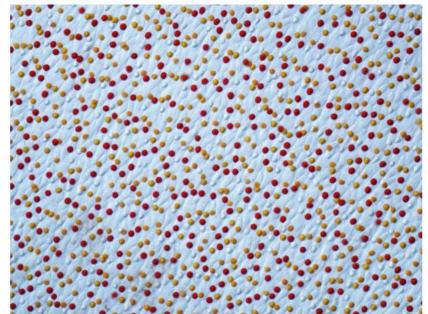


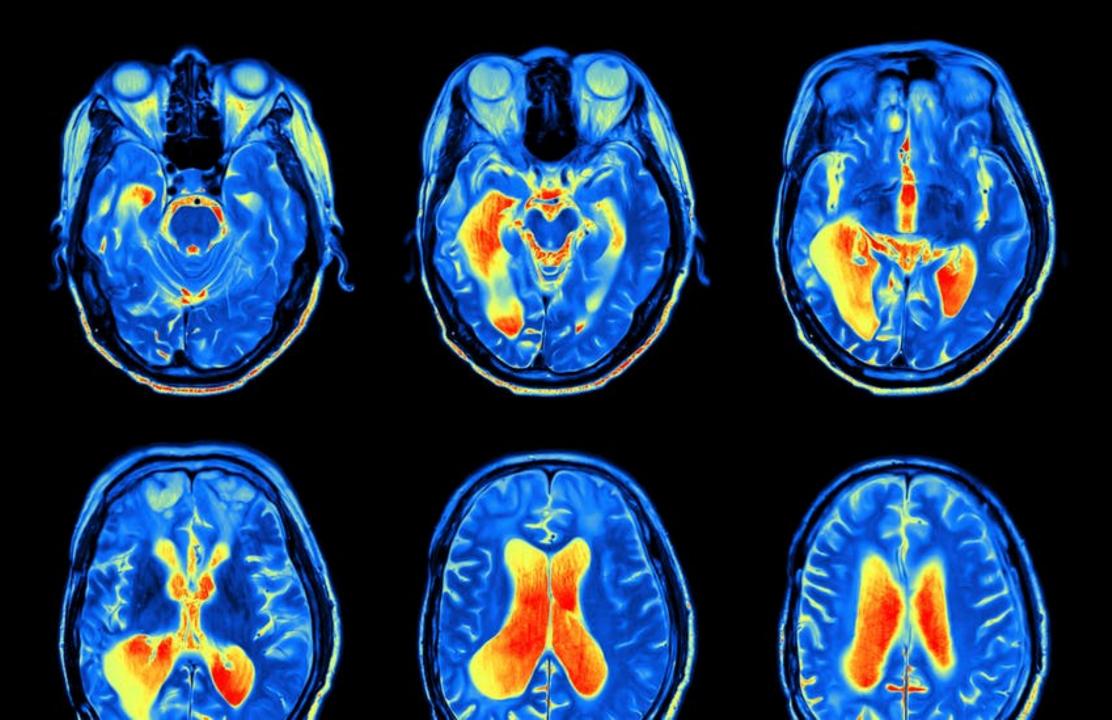
Iconic Pictures
World Trade
Centre 09/11





6. Platz:: Der Embryo eines Chamäleons.





#### **David Attenborough:**

»We were able, for instance, to put together views of living amphibians which no one had been able to see in that range of time ever. No zoo could show you that amount. The visual effect was devastating.»

Nicholas Whapshott: »The perfect teacher, back with animals», in: The Times vom 1. März 1980: 14., cited in: Jean-Bapiste Gouyon: »Science and filmmaking», in: Public Understanding of Science 25.1, 2016: 33.

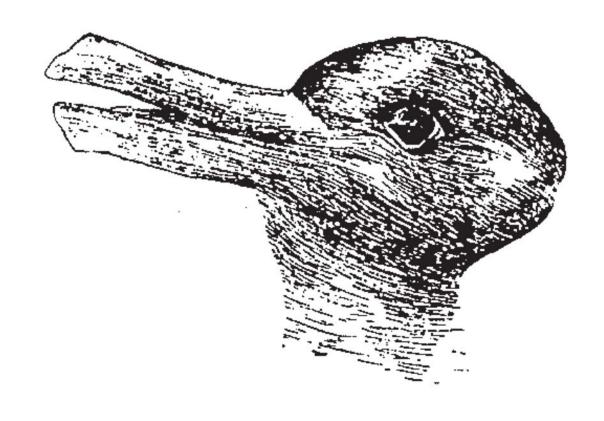


# 3. AUDIOVISUAL PERCEPTION THEORIES

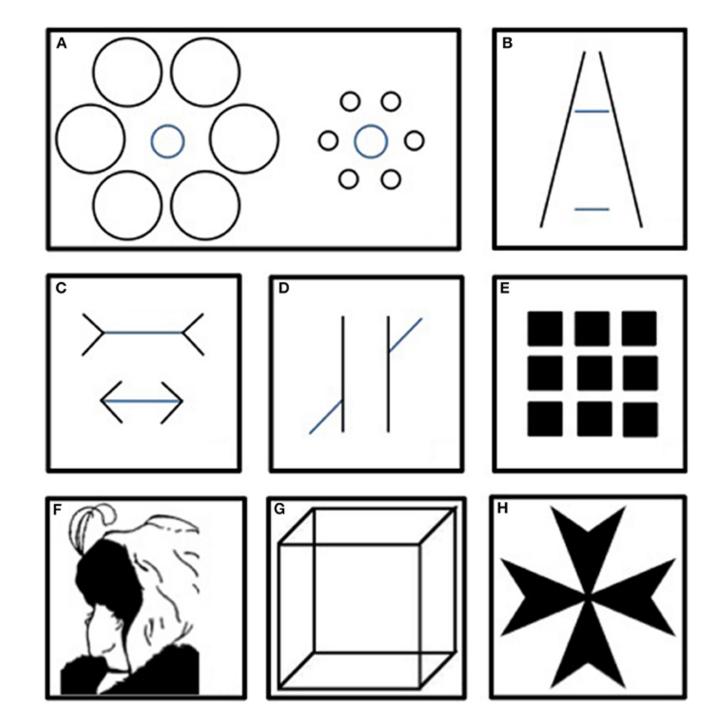
#### PERCEPTION AS CONSTRUCTIVE ACT



# PERCEPTION AS CONSTRUCTIVE ACT Ambiguous Figures



# PERCEPTION AS CONSTRUCTIVE ACT Ambiguous Figures







### CONTEXT OF IMAGES/PICTURES



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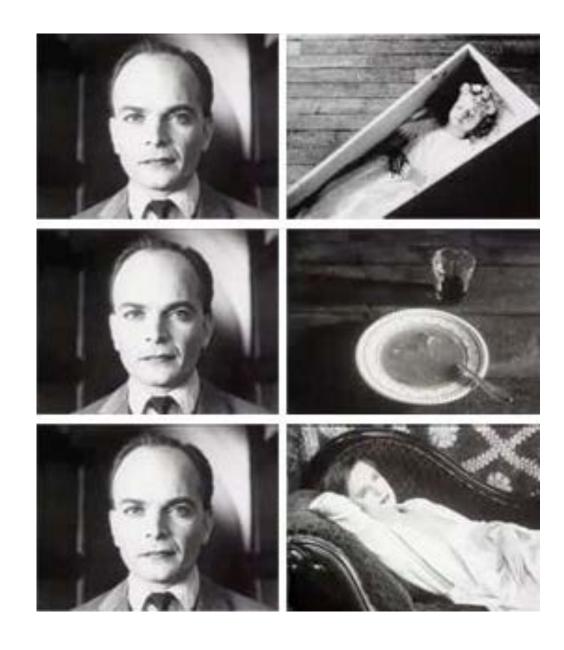
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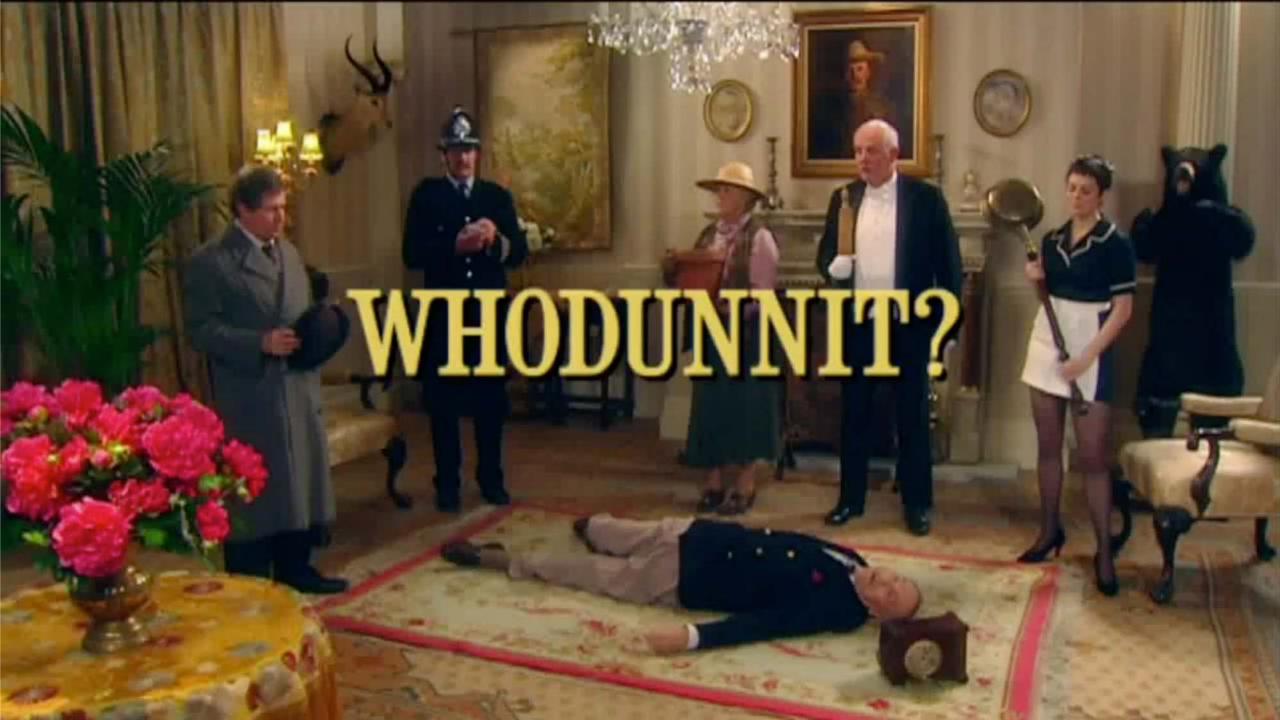


# CONTEXT OF IMAGES/PICTURES «Kuleshov Effect»





### **SELECTIVE ATTENTION**



# PERCEPTION AS CONSTRUCTIVE ACT FAMILIARITY

«Aesthetic preferences are affected by familiarity. Using the 'mere-exposure' paradigm, some studies have found that familiarity through repetition increases the affective preference for a stimulus.»

(KUNST-WILSON & ZAJONC, 1980; ZAJONC, 1968).



# BELIEVE AND VALUES OF IMAGES/PICTURES



**Franz Gertsch** 

# BELIEVE AND VALUES OF IMAGES/PICTURES

LEDER (2001) has shown that familiarity with van Gogh paintings positively correlates with aesthetic judgments. However, when the paintings were introduced as fakes of van Gogh, the correlations were strongly reduced.

Leder, H. (2001). Determinants of preference. When do we like what we know? Empirical Studies of the Arts, 19(2), 201–211.



**Franz Gertsch** 

#### BELIEVE AND VALUES OF IMAGES/PICTURES

...IN THE DIGITAL WORLD

- Authenticity of audiovisual data?
- Copy no original anymore?
- Verification; perfect copy possible?

### **EXAGGERATION**OF OBJECTS

Increase interest in recipient

«Peak-shift effects describe stronger responses to objects that somehow exaggerate the properties of familiar objects. Caricatures and modes of depiction, which stress the essence of an object, are examples.»



WHAT DOES
THIS MEAN
FOR DIGITAL
MEMES?

#### **Evolution of Selfies!**

I wonder what 2018 is holding for us



#### DIGITAL WORLD: ICONS, SYMBOLS = MEANING?

### IMAGE-SOUND RELATION

»We never see the same thing when we also hear; we don't hear the same thing when we see as well.«

MICHEL CHION: «AUDIO-VISION: SOUND ON SCREEN», COLUMBIA UNIVERSITY PRESS, 1994.

### IMAGE-SOUND RELATION

#### **Synchrese:**

«forging of an immediate and necessary relationship between something one sees and something one hears at the same time.»

MICHEL CHION: AUDIO-VISION: SOUND ON SCREEN, 1994.

### **KEY TAKEAWAYS**

- Pictures are one of the very first records from early humans

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- Today, we're all producers and consumers: omnipresence of audiovisual data in digital world

## **KEY TAKEAWAYS**

- Pictures are one of the very first records from early humans
- Today, we're all producers and consumers: omnipresence of audiovisual data in digital world
- Understanding the audiovisual language is crucial for investigating challening and cutting edge innovation regarding their responsibility towards a global society



- 06.09.2018; Week 1: A very short Introduction into Audiovisual Data
  - From Cave Paintings to Mixed Reality
- 13.09.2018; Week 2: Data and Storytelling on Interactive Web-Platforms; Hybridformats; #FakeNews: New Ethical Challenges

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- 20.09.2018; Week 3: Living in a Digital World: Sensitive Audiovisual Data in Mixed Reality (Virtual Reality, Augmented Reality)

20.09.2018; evt. VPRO Tegenlicht Documentary Film Production during our course: «Fake Reality»

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- 04.10.2018; Week 5: The Art of Hacking: Of Deepfakes and Toastercats

05.10.2018; Deadline Essay!

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- 11.10.2018; Week 6: Design Science to Design

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- 18.10.2018; Week 7: The Bigger Picture: From Design to Action

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- 11.10.2018; Week 6: Design Science to Design Methods
- 18.10.2018; Week 7: The Bigger Picture: From Design to Action
- 25.10.2018; Week 8: Wrap-up and A Speculative Design View into the Future of Audiovisual Data

#### **Assessment**

- Essay: write and publish an essay on a chosen subtopic of "Audiovisual Data "(max 2.500 words) from the perspective of speculative design. You will reflect on the importance of data-driven innovations for confronting a complex societal challenge within the domains of academic research, digital media, or media technology (Al-robots, deepfake, VR/AR).
- Peer-feedback on digital blog article
- Video assignment: students will make in a groupwork a 1-3-minute video about a self-chosen subtopic of "Audiovisual Data".
- Participation: be present and engage in all sessions; and give a presentation of your work for a larger audience;

#### **Important Dates / Deadlines**

- 20.09.2018: evt. VPRO Tegenlicht Documentary Team
- 05.10.2018: Deadline «Essay» Assignment; published on medium.com:
  Assess societal and ethical considerations around the use of sensitive
  audiovisual data in digital media; evaluate the risks and harms in using
  audiovisual data from a responsible use and innovation perspective; build
  an argument and present it based on a case of the course in a written essay
  25.10.2018: Deadline «Video» Assignment and Presentation of work:
  produce in a groupwork a short video as a publication, reflecting on both
  the opportunities as well as challenges of one subtopic of the course

#### Note

- Please always bring a laptop/smartphone and headphones to each of our sessions
- Pen & paper, too :)
- All links, papers, videos etc. for homework will be uploaded on: <a href="https://www.audiovisualresearch.org/teachings/audiovisual-data/">https://www.audiovisualresearch.org/teachings/audiovisual-data/</a>







LOGIN

S01E01: Morning Rituals



Who profits from the data we generate every day? Meet the trackers, an industry most people can't see, control or question.

do not track

Can you avoid being tracked?

mozilla

Get Smart On

S01E02 : Breaking Ad



Accepting cookies is a part of our digital life.

If we said no, would the Internet still work? Let's trace the economic origins of online tracking.

do not track

How to survive in a cookie environment

Keep your cookies to vourself

S01E03: Like Mining



A couple of likes on Facebook, that can't say much about you. right? Wrong.

The German blogger and TVpresenter Richard Gutjahr welcomes you to the unbelievable world of onlineprofiling.

Facebook tracks users, even those who don't use it, says privacy report

S01E04: The spy in my pocket



Who you are, where you go, what you do. Your phone is spying on you. Who is it telling?

do not track

How to protect your smartphone

NSA planned to hijack Google App Store to hack smartphones

S01E05 : Big Data: Inside the Algorithm



Did you say Big Data? Discover for yourself how your data is being interpreted by this nev industry, and how they could wrong.

do not track

Categorizing Machine

The minority report: Chicago's new police computer predicts

Woody Allen, «What's up Tiger Lily?» 1966



# WHAT DO YOU EXPECT FROM THIS COURSE?

Create a digital meme...