

«Watching The World,
The Encyclopedia Of The Now»

an **art** project by

KURT
CAVIEZEL + **zh**
aw School of
Engineering

Abstract:

"WATCHING THE WORLD, The Encyclopedia Of The Now"

This is an **art**, a **photography**, an **exhibition**, an **AI**, a **big data**, a **osint**, an **online** project and uses **open data** sources for this purpose.

It photographs around the clock and around the globe the world in **live** mode by means of publicly accessible **network cameras**, presents the images simultaneously on the project website in different modes and, with the help of **AI**, develops a new way of seeing, a new kind of photography.

"WATCHING THE WORLD" can be viewed as a standalone and **giant** online-camera.

By clicking a feature, the **simultaneous views** of the world can be **curated** by the viewers and used in their own way.

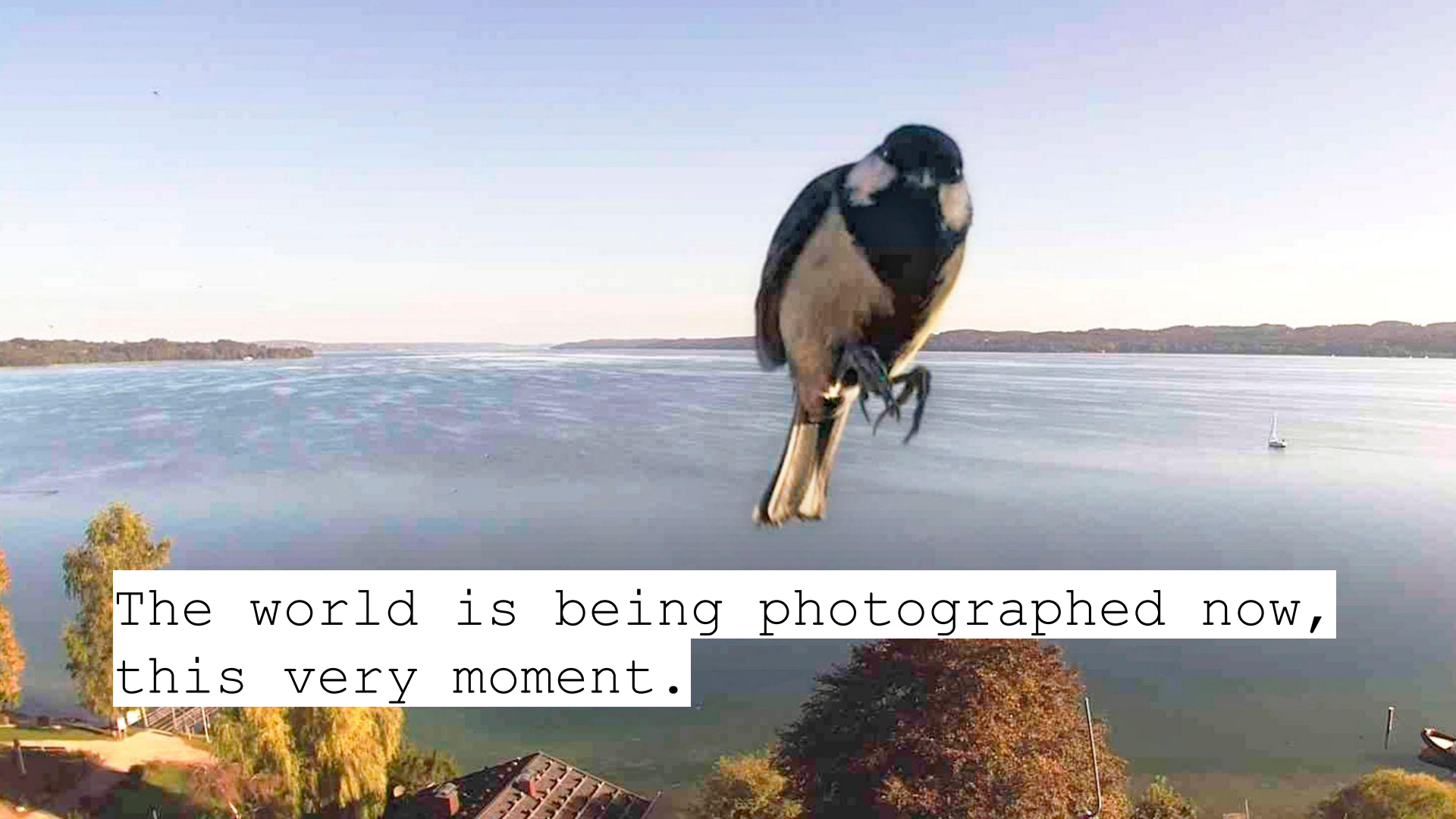
For example, this overwhelming stream of images can be sorted according to various criteria.

The network cameras look at **public** as well as at **private spheres**.

The fact that different cultures value **privacy** differently is just one of the insights we may gain.

What is seen in the pictures, determines the world and at the same time is in the eye of the beholder.

This can be **provocative**.



The world is being photographed now,
this very moment.

About us:

Kurt Caviezel:
Artist, based in Zürich

**ZHAW, Zurich University of Applied
Sciences**

Exhibitions (excerpt):

- International Center of Photography (ICP),
New York (USA)
- Fondation Cartier pour l'art contemporain,
Paris (F)
- Rencontres d'Arles Photographie,
Arles (F)
- Fotostiftung Schweiz, **Winterthur** (CH)
- Museum of Photography, **Lianzhou** (China)
- Foto Colectania, **Barcelona** (ESP)
- NRW Forum, **Düsseldorf** (DE)

School of Engineering:

Institute of Data Analysis and Process Design

- Prof. Dr. **Helmut Grabner**,
Professor of Data Analytics
and Machine Learning
- **Fitim Abdullahu**,
Research focus Data Analysis
and Statistics

WATCHING THE WORLD: about

Network cameras (webcams, surveillance, security, live and IP cameras) are constantly photographing what is happening and feeding the images **live** into the web.

The web is a camera, an incredibly **huge camera**.

The world puts itself in the picture; perhaps entirely in the sense of the established practices of **self-observation** for purposes of self-optimisation. However, net cameras are not only the eyes of the web; they work as **extensions** of our bodies. Because by means of the cameras, we look through the web, back at **the real world, at ourselves**.

This enormous image machine photographs live and simultaneously around the globe. Publicly accessible, these images show up somewhere on the net, photographed automatically, without the scrutinizing eye of an **author**. If we understand the web as a single personal camera system, the network cameras work as **lenses**. The screen becomes the **viewfinder** and the mouse the **shutter release**.

But if we let technology work by itself, an **algorithm** pushes the button. But does an algorithm take the place of the photographer, the author? Does it claim image rights? Is it **responsible** for the content? Or is it the operators, or perhaps even the technicians who installed the cameras and thus selected the image section? A **new mode of authorship** is emerging.

WATCHING THE WORLD: **about**

In the now, the world is photographically available.

The theorem of the **decisive moment**, which is constitutive of classical photographic history and is always bound to a place, is taken ad absurdum here: If this huge camera constantly photographs everything, this one decisive moment no longer exists. Rather, this moment extends spatially around the entire globe, it takes place **simultaneously**.

If we photograph thousands of these moments simultaneously and make them immediately visible online, we create an **encyclopaedia of the now**. Or in other words: we see everything thus assuming an almost God-like position.

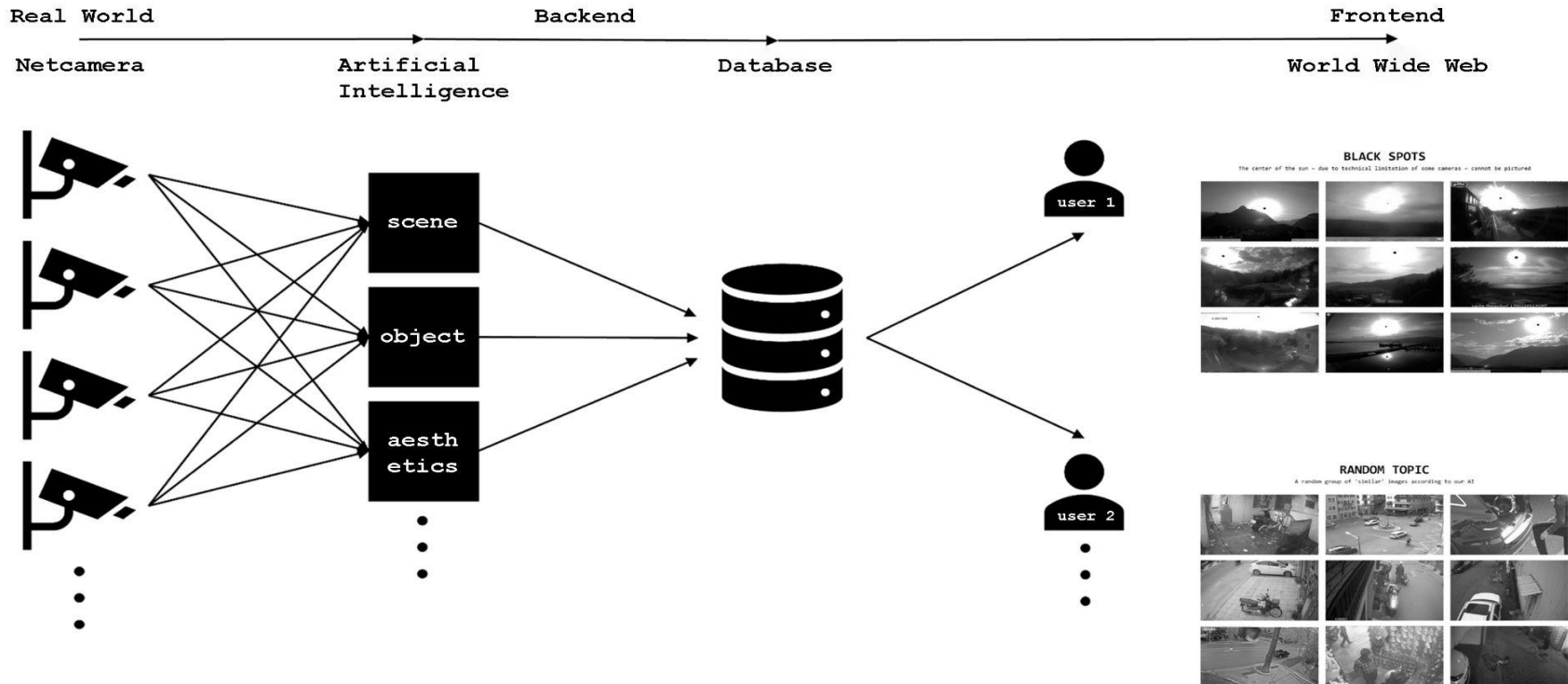
This project is also about manifesting this spatially extended global moment and creating something like a **map of the world**.

Surveillance is only one aspect. What is much more important and powerful here is **observing the world** - and **learning** from it.

For this purpose, technology is required; because as humans, we are trapped in space and time.

Kurt Caviezel and the **ZHAW**, Zurich University of Applied Sciences, as cooperation partners, have jointly developed and programmed this **giant camera**.

WATCHING THE WORLD: about



WATCHING THE WORLD: **about**

Thousands of netcams are recorded in **our system** new ones are added continually. The algorithms download more than **a million images** from the web, every day.

Each image is analyzed by an artificial intelligence (**AI**) and archived in our storage for **48 hours** before being overwritten by the following ones.

As a user, you can now observe the world according to **predefined** criteria or according to **your own categories** by using the text search.

New features are constantly being developed and added to the world's largest camera.



Main page:

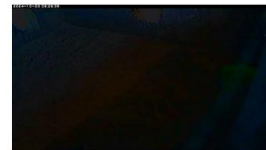
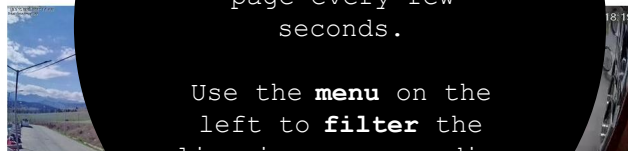
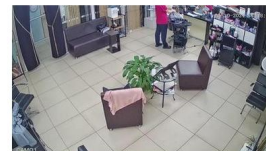
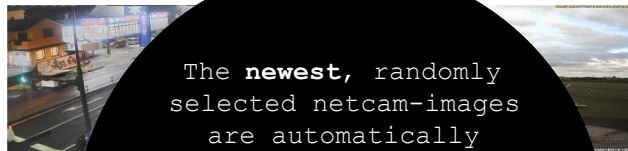


TEXT SEARCH

- >> LIVE
- >> STREAMS ▶
- >> US ELECTIONS
- AFRICA
- AIRPORTS
- AMERICA
- AMERICAN SELFIES
- ANIMALS
- ASIA
- AUSTRALIA
- BEACHES
- BIKES
- BLACK SPOTS
- BOATS
- BRIDGES
- CARS
- CHAIRS
- CHURCHES
- CLICKED
-
- COMPUTERS
- CORRIDORS
- DEAD CAMS
- DOORS
- EMPLOYEES

LIVE

The world at this very moment (9 out of 10231 online cams)



The **newest**, randomly selected netcam-images are automatically displayed on the main page every few seconds.

Use the **menu** on the left to **filter** the live images according to **various criteria**.

Archive page:

KUPT
CARTERS

PAST HOURS

TEXT SEARCH

>> LIVE

>> STREAMS

>> US

ELECTIONS

AFRICA

AIRPORTS

AMERICA

AMERICAN

SELFIES

ANIMALS

ASIA

AUSTRALIA

BEACHES

BIKES

BLACK SPOTS

BOATS

BRIDGES

CARS

CHAIRS

CHURCHES

CLICKED

● ● ● ● ●

COMPUTERS

CORRIDORS

DEAD CAMS

DOORS

EMPLOYEES

EUROPE

FACTORIES

FISHEYES

FOG

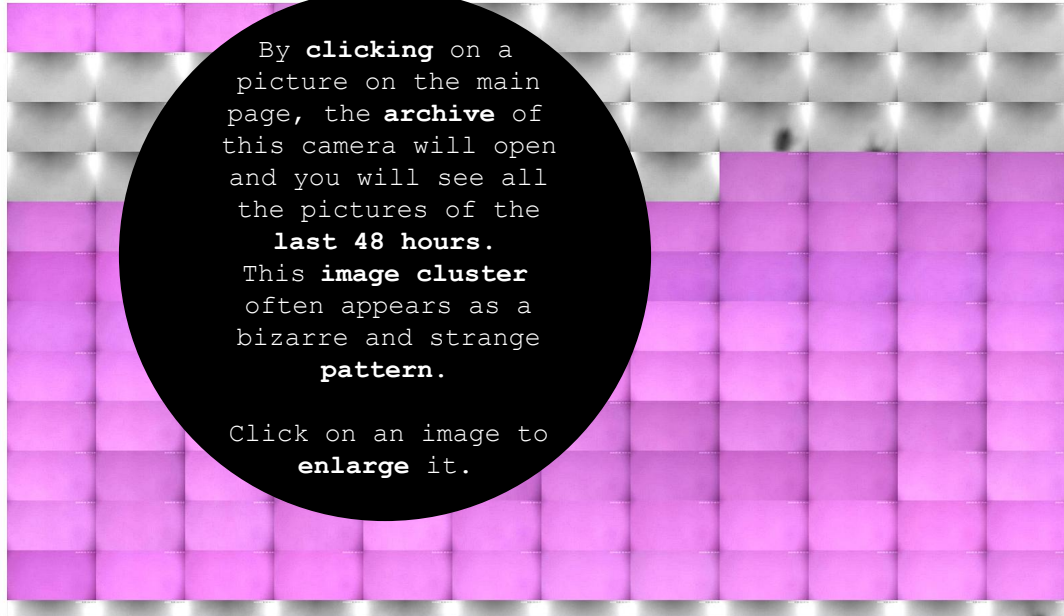
FORESTS

HIDING

By **clicking** on a picture on the main page, the **archive** of this camera will open and you will see all the pictures of the **last 48 hours**.

This **image cluster** often appears as a bizarre and strange **pattern**.

Click on an image to **enlarge** it.



Archive page:

Looking for
patterns:

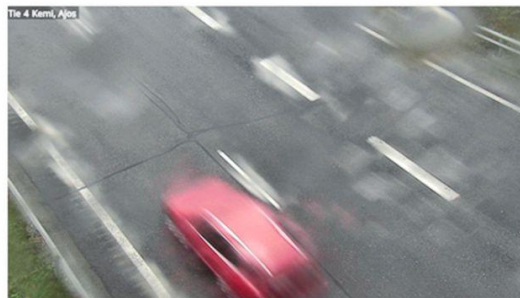
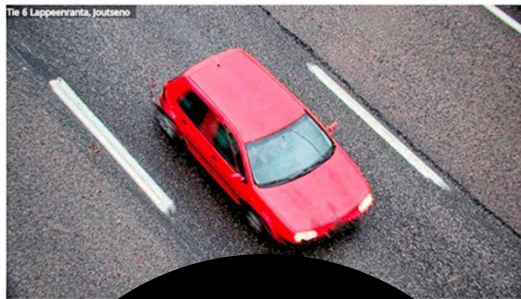
Text search:

TEXT SEARCH

The best match is found right now.

In **addition** to the predefined criteria, you can use the **AI-based text search** to find your **desired pictures** in this constantly flowing stream of images.

Text search:



Looking for
«red cars»:



Big Data:

Time sorted with 1782225 images from 03.10.2024

Random || All colors | Color | Only || **Time** || Photomosaic

Take a look at
all pictures we
have collected
from the last
day at once.

Here for
example:
1'782'225
pictures.

Big Data:

1'790'244 images photographed by the system over 24 hours.

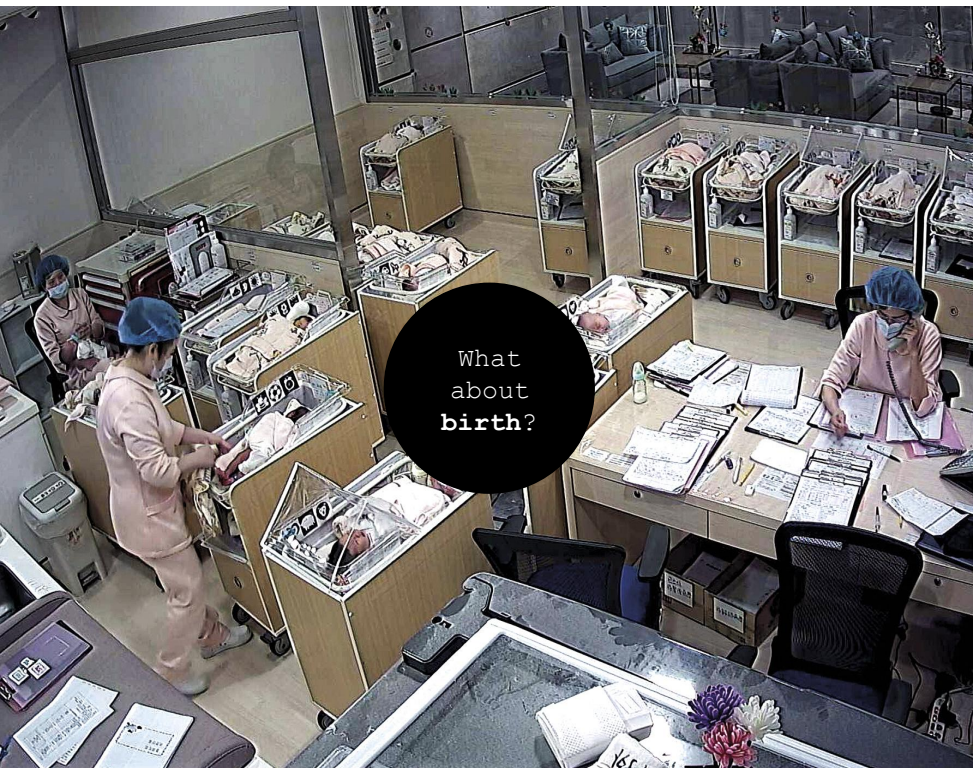


Big Data:

1'790'244 images photographed by the system over 24 hours (part)

Topics:

Topics:



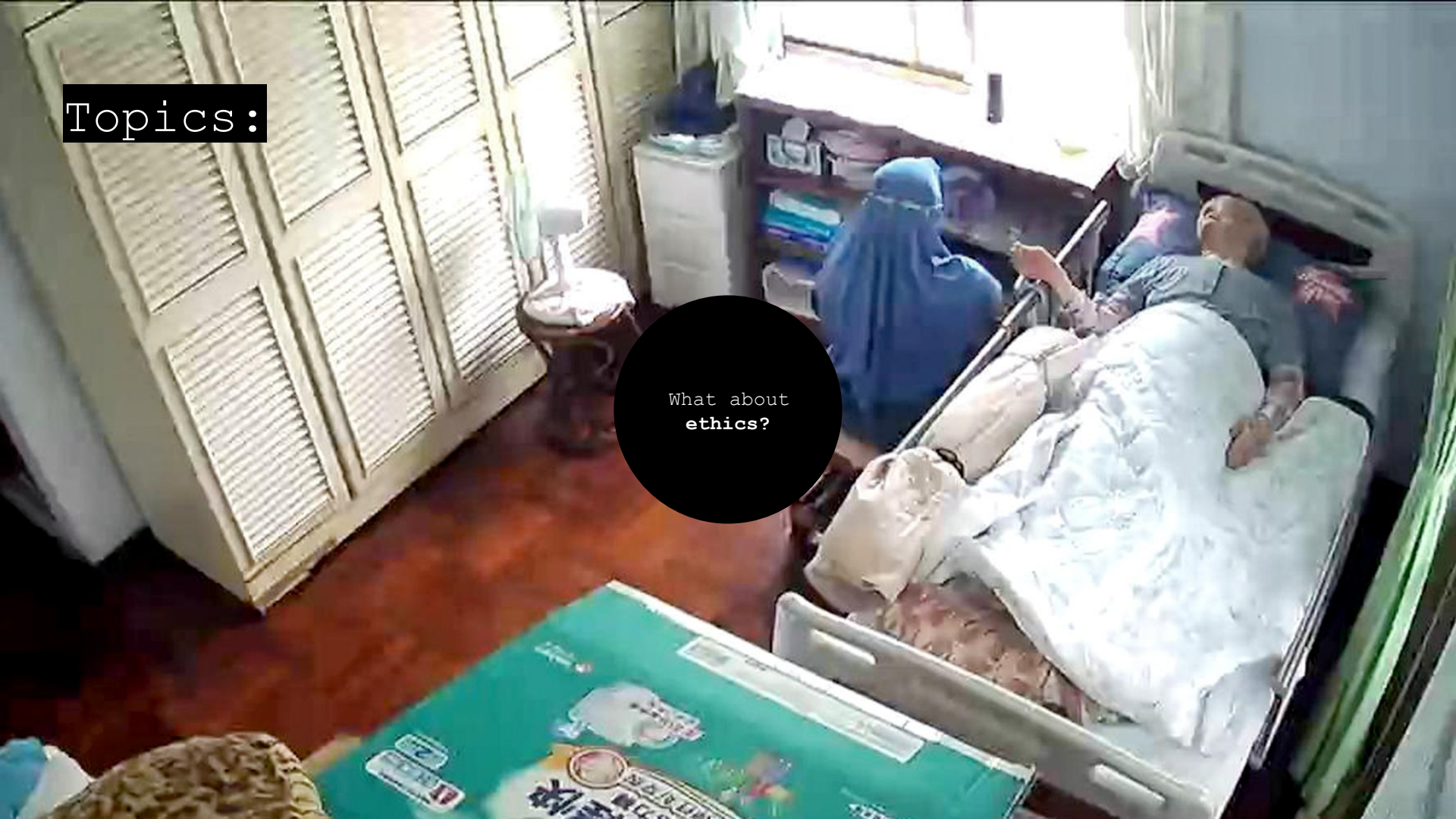
Topics:

What about
privacy?




Topics:

What about
ethics?



Topics:

A wide-angle photograph of a snowy landscape. In the middle ground, a snowman stands with a single stick for an arm and a small crown on its head. In the foreground, two people are standing on the snow; one is wearing a white jacket and the other a grey jacket. A large black circle is overlaid on the image, containing the text 'What about photography?'.

What about
photography?

Topics:

What about
data
protection?



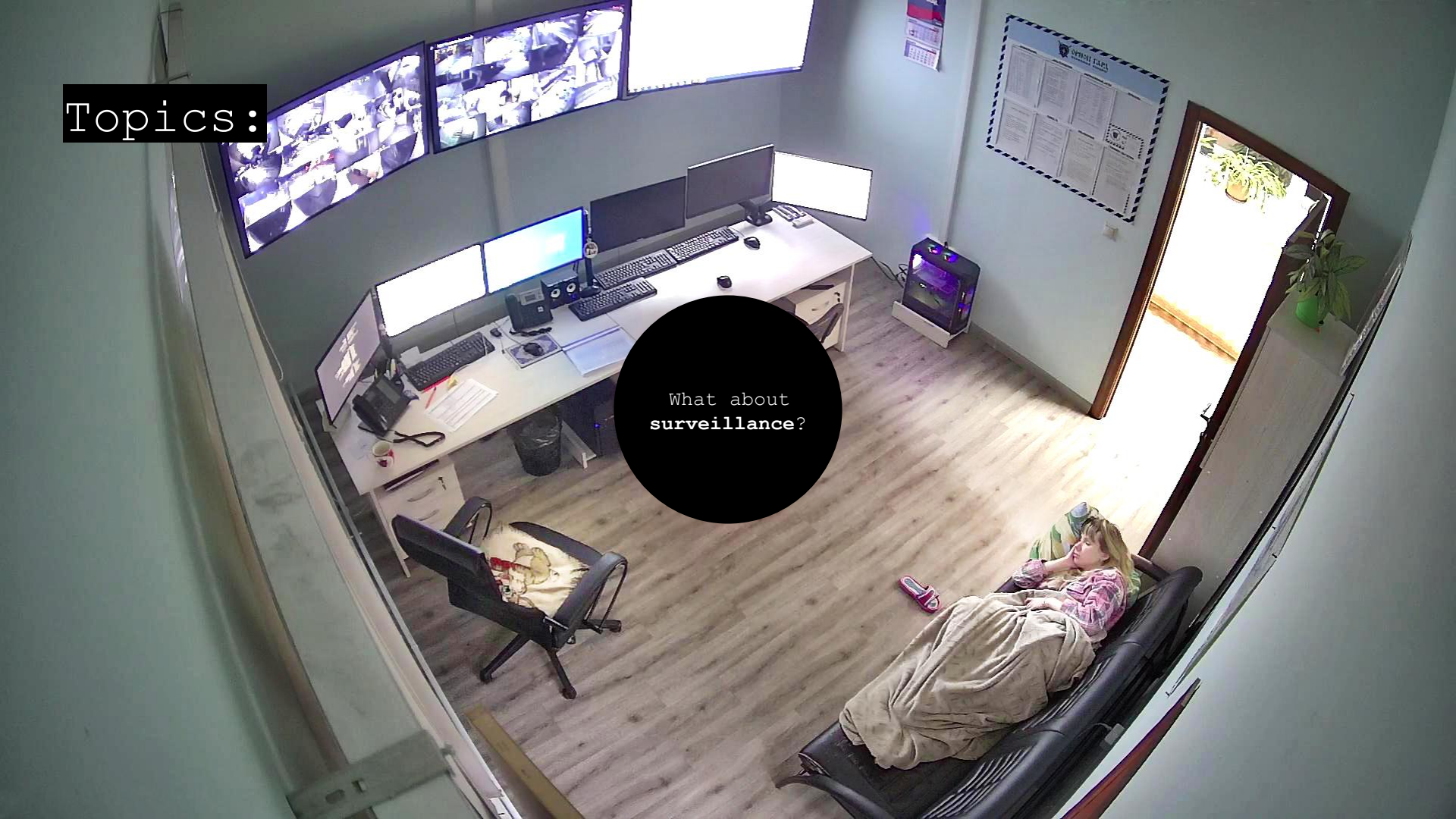
Topics:

What about
work?



Topics:

What about
surveillance?



Topics:

What about
technology?

Topics:

What about
freedom?

Topics:

What the
fuck?



Topics:



What about the
world?

Watching The World is..

- a permanently changing online **exhibition**
- an **ai** playground
- a **research tool** on sociological, ecological, political, philosophical, legal, artistic and all possible aspects of photographic practice
- the **biggest camera** in the world
- a **pattern** generator
- a **big-** and **open-data** project
- a **reportage**
- an **authenticity** monster
- a **television**
- a **streaming** service
- a **surveillance** vehicle
- a cabinet of **curiosities**
- an image **floodgate**
- a **news** portal
- a data **collector**
- a **osint** (open source intelligence) tool
- an **encyclopedia of the now**...etc. etc....

From **single picture** to the **big picture**:

Insights about the world can be gained with "Watching the World" by **shifting the focus** from the single picture to the big picture.

This is done by trying to **read** and analyze the **data streams** and **metadata** of the cameras, their **infrastructure** and their **practices**.

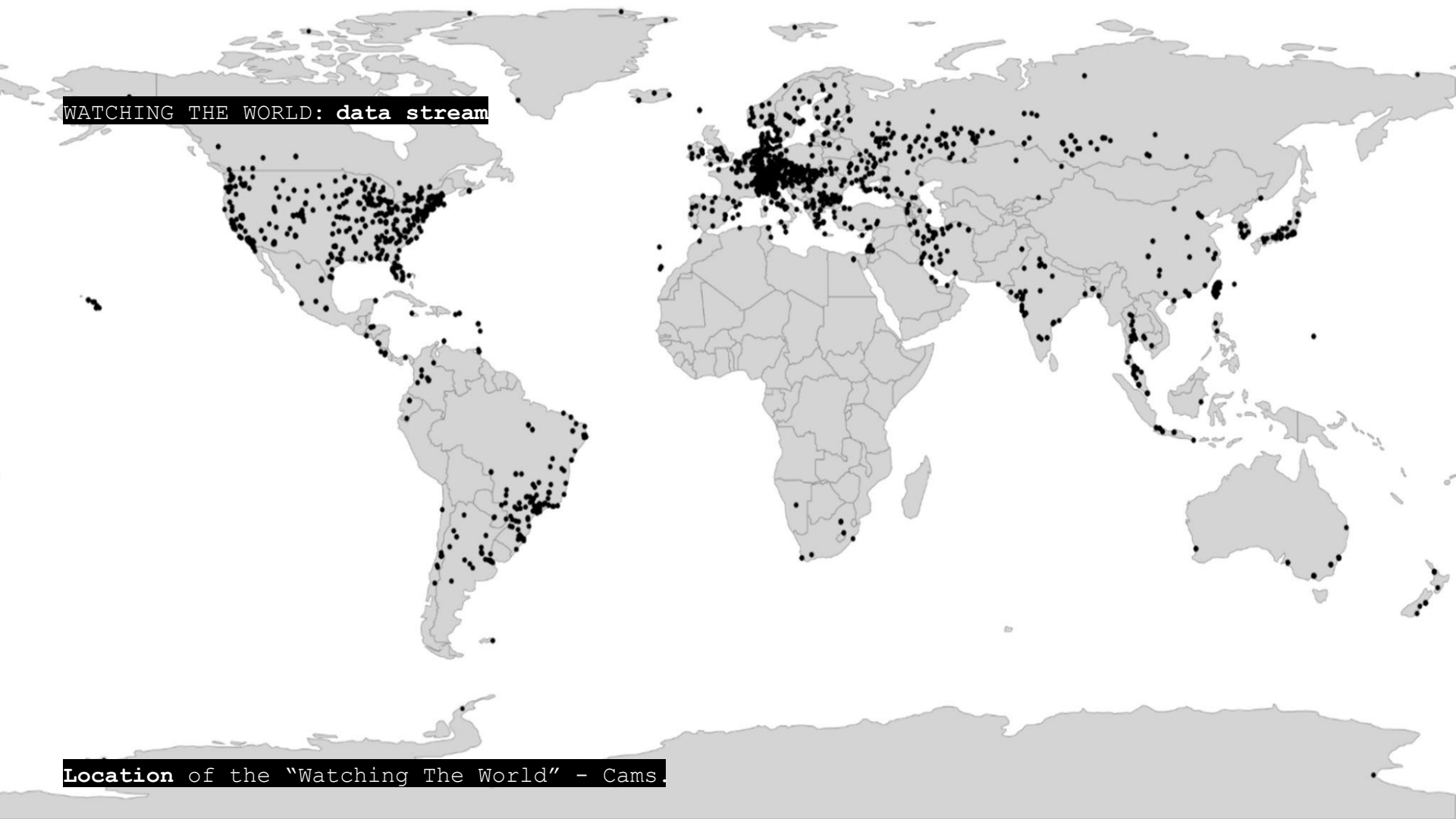
Pattern recognition is also used here.

For example, to investigate

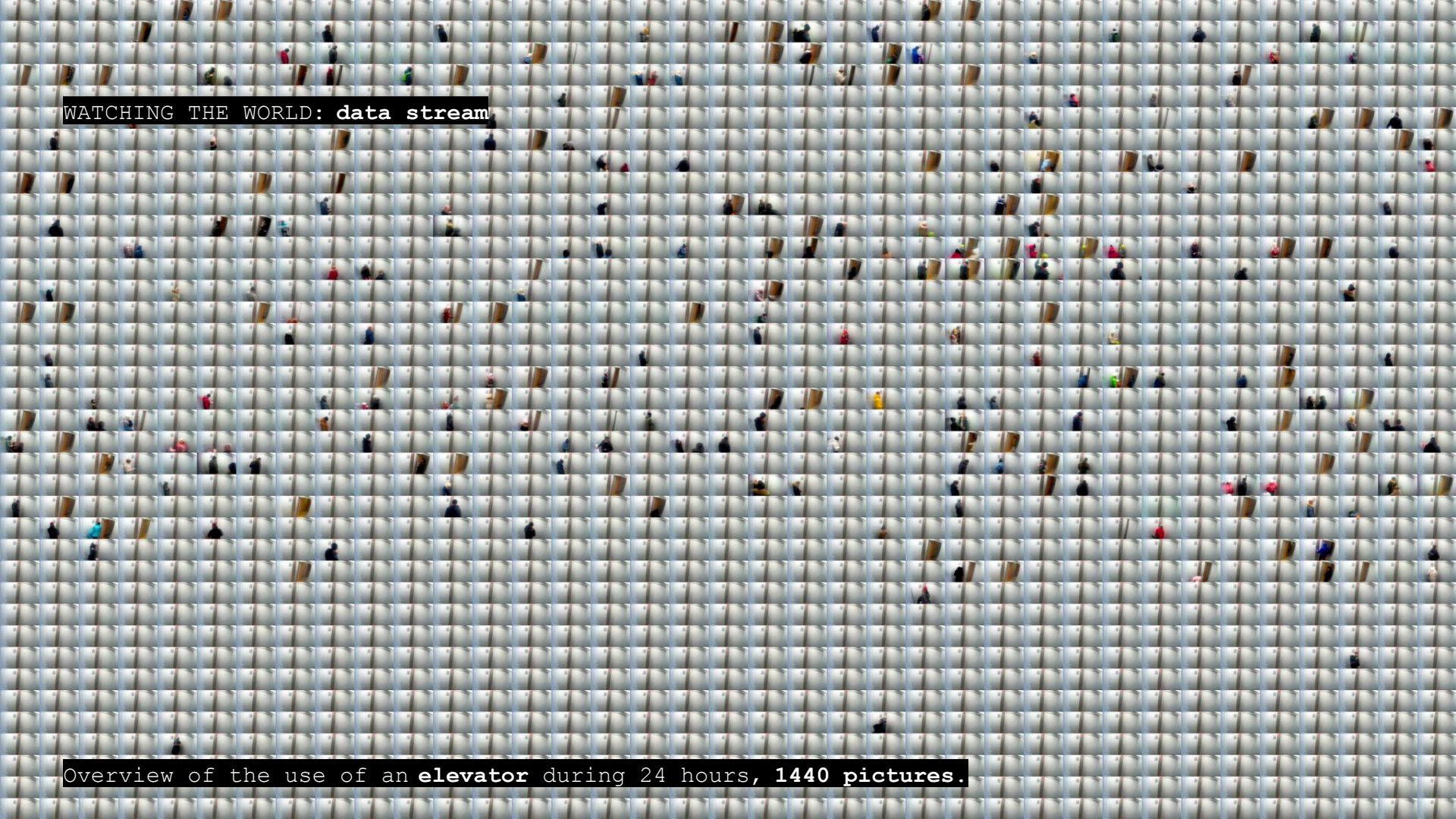
- where cameras are located - and where they are not.
- what kind of camera is used where and why.
- what is shown where - and what is not.
- where new cameras are connected to the network - and where they are switched off.
- what can be recognized in patterns of large image conglomerates.

"WATCHING THE WORLD, The Encyclopedia Of The Now" can in this way also be used as a **trend barometer** for changes and developments in the world, as a **seismograph of world sentiment**.

WATCHING THE WORLD: data stream



Location of the "Watching The World" - Cams.

The image is a dense grid of 1440 small, square photographs arranged in 30 rows and 48 columns. Each photograph captures a different moment of people using an elevator. The scenes are diverse, showing individuals in various poses and activities, such as standing, talking, or looking out. The lighting is consistent across the grid, and the overall composition is a continuous stream of human activity.

WATCHING THE WORLD: **data stream**

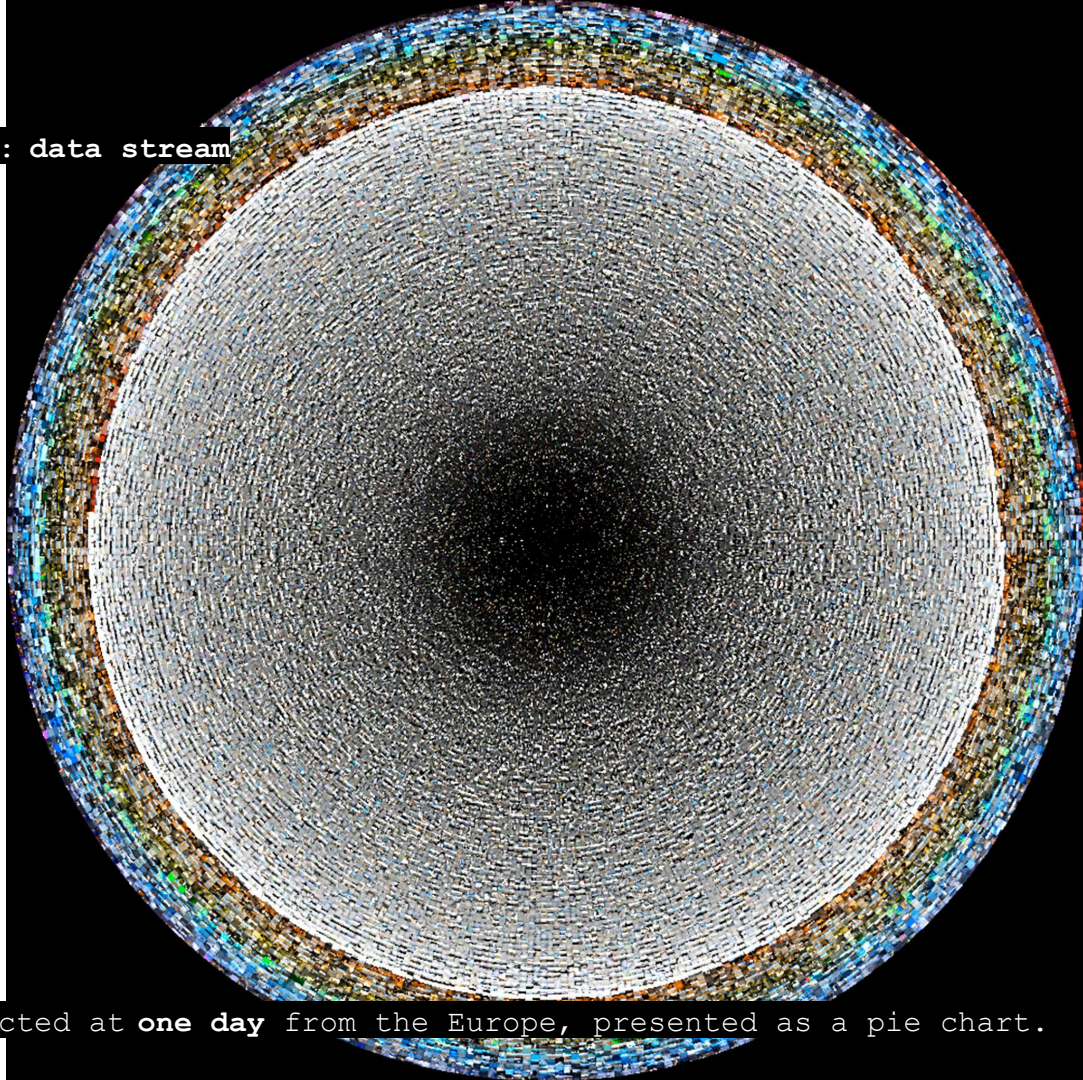
Overview of the use of an **elevator** during 24 hours, **1440 pictures**.



WATCHING THE WORLD: **data stream**

1'008'000 pictures from one single cam, gathered over 700 days

WATCHING THE WORLD: **data stream**



All pictures collected at **one day** from the Europe, presented as a pie chart.

Presentation:

How are all these **images** and **data** displayed?

A wide variety of presentations are possible in **exhibitions** and **installations** - from prints in frames, wallpaper and videos to “big visual data” presentations on screens or as projections.

These image streams can now be made visible. Via our servers, these live images can be bundled in various modes and streamed in real time via the web **directly into the exhibition rooms**.

A Netflix of the real, so to speak.

Hundreds of thousands of images - in different modes - can be shown **simultaneously**.

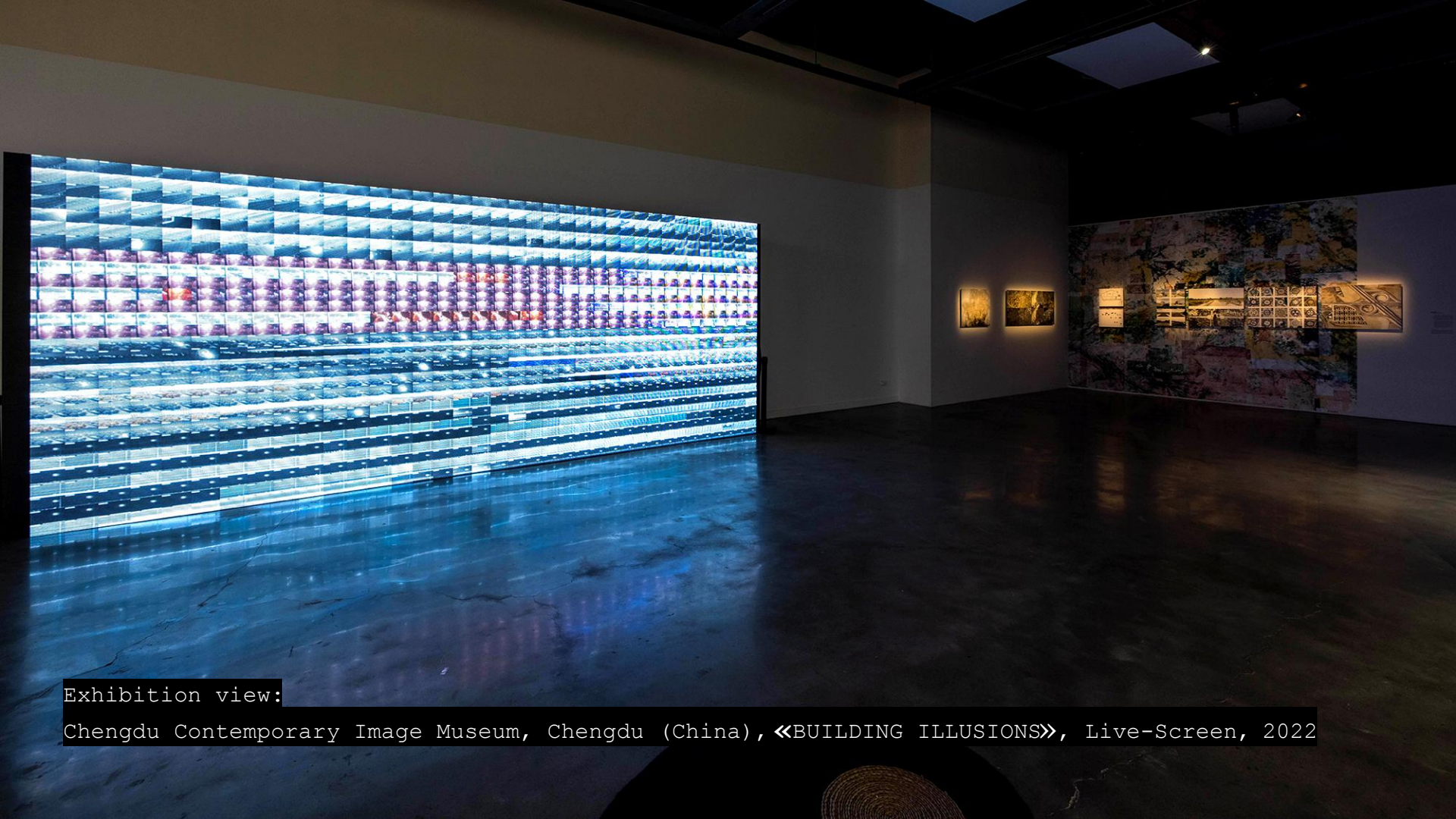
For example: The blanket coverage of an **entire room** with images, including the floor and ceiling. An “all over” concept, so to speak.

In **live-online mode**, every new image added **changes the look** of the whole.



Exhibition view:

Chengdu Contemporary Image Museum, Chengdu (China), «BUILDING ILLUSIONS», Live-Screen, 2022



Exhibition view:

Chengdu Contemporary Image Museum, Chengdu (China), «BUILDING ILLUSIONS», Live-Screen, 2022



Exhibition view:

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One day, 1'368'212 images, 21.10.2024 / Wallpaper.



One day, 338'955 images, all color, 21.10.2024 / Wallpaper.



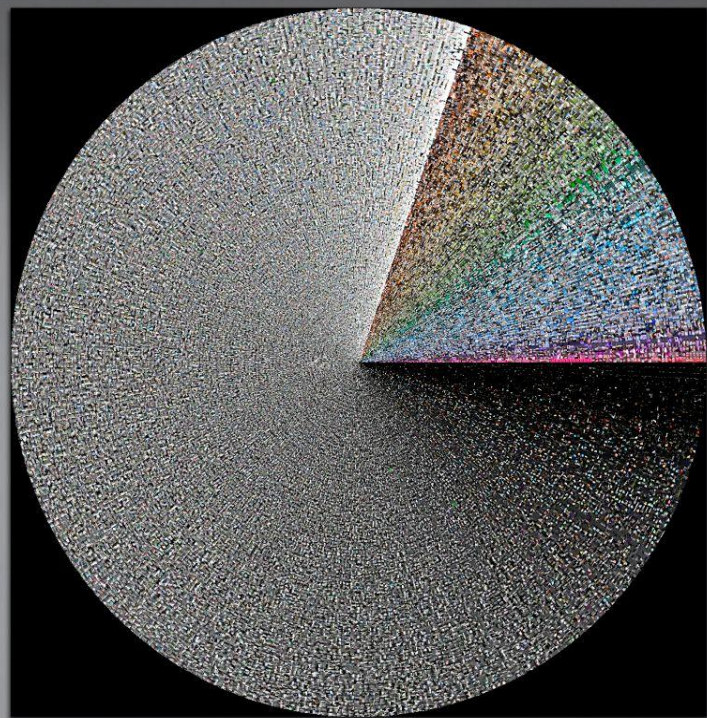
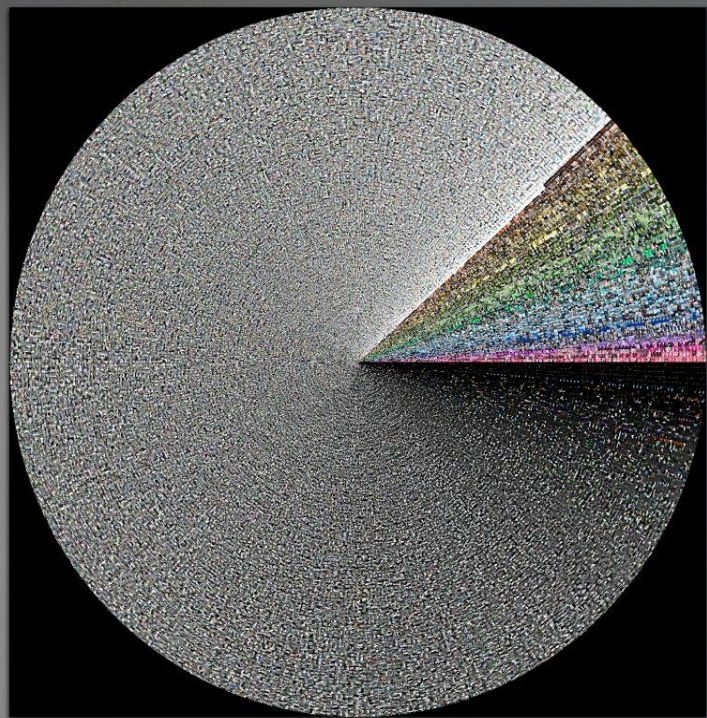
Street surface, live / screens.



Elevator, live / screens.



Pattern, live / 24 screens.



One day Asia, One day America / Wallpaper.

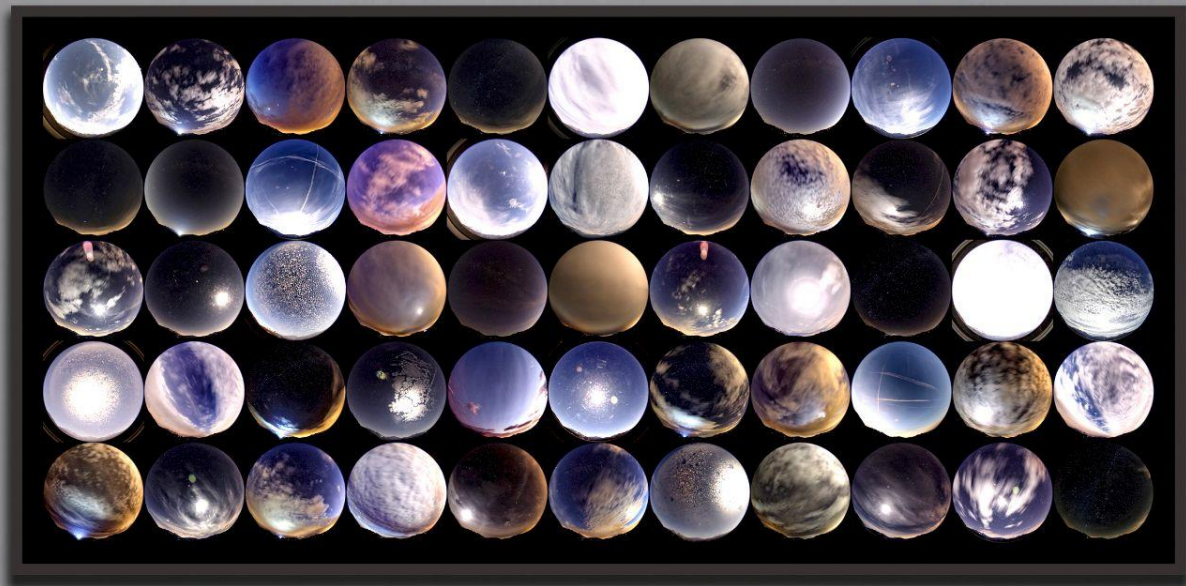


Birds / prints.

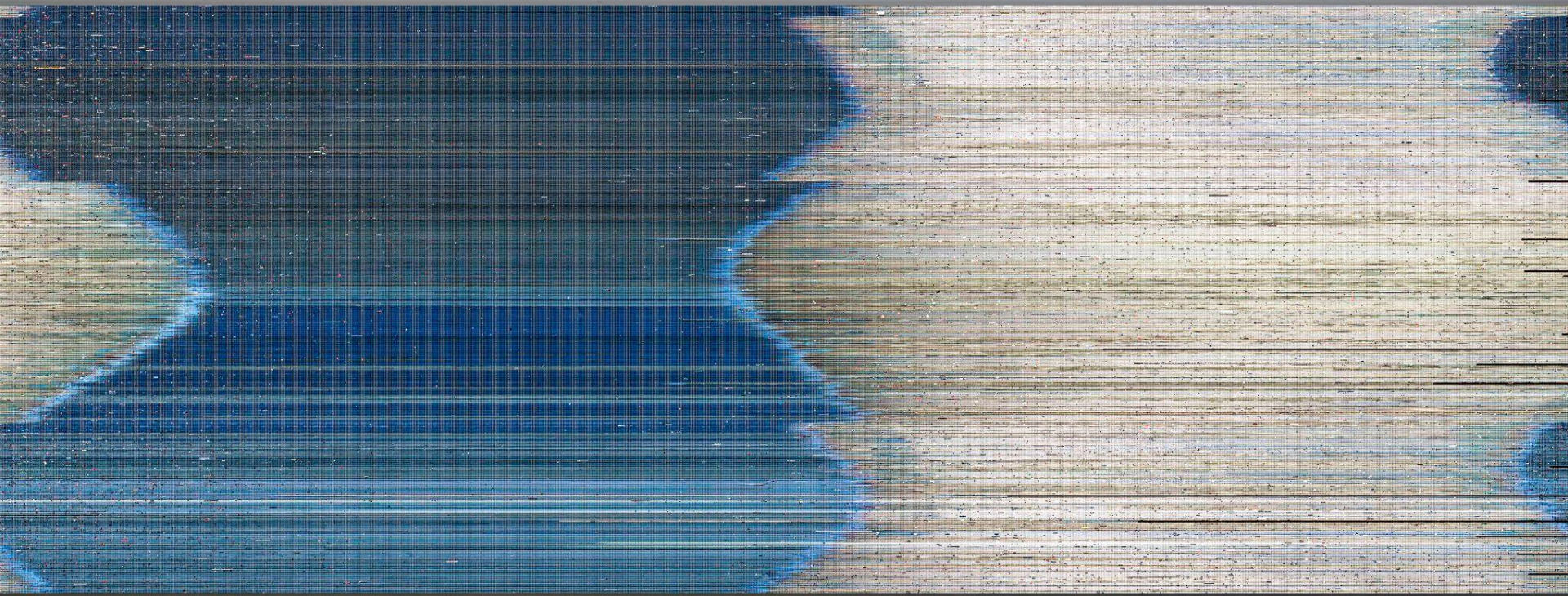


Light Stripes / prints.





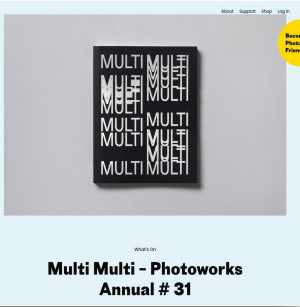
Heaven / print, 150 x 320cm, framed.



The Gatekeeper, 1'008'000 pictures, one cam, 700 days / Wallpaper.

WATCHING THE WORLD: press reviews

Photoworks



LE FIGARO
 Le monde entier se dévoile à travers les images des 12.000 webcams de Kurt Caviezel

Par Paul Fretz
 Publié le 23 juin 2016 à 19h36

Copier l'article

Le site Internet a été mis en place par Kurt Caviezel avec le concours de l'Université de Zurich. Copier le monde: THE ENCYCLOPEDIA OF THE WEB webcam engineering zhaw.ch

L'Encyclopédie du maintenant, du photographe suisse, permet d'accéder à la demi-million d'images collectées et triées grâce à l'intelligence artificielle.

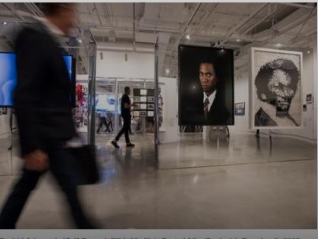
Souriez, vous êtes filmés ! Le travail du photographe suisse Kurt Caviezel dérange autant qu'il éveille. Mais la tenue de son dernier projet en reste pas moins effrayante. Grâce à 12.000 caméras, privées et publiques, installées un peu partout dans le monde, l'artiste de cinquante-six ans décrit le monde, en direct, via son site **L'Encyclopédie du maintenant**, mis en place avec le concours de l'Université de Zurich.

The New York Times

ART REVIEW

Photography's Shifting Identity in an Insta-World

Share full article



KULTUR 1967.59 / wochens 5. Juni Login

Filme & Serien Bücher Musik Klassik Kunst Theater

Startseite Kultur Kunst

Aber: Überfluss von Überwachungskameras
Netzflick des Realen

Der Schweizer Fotograf und Künstler Kurt Caviezel kennt Links zu 100'000 Webcams – und kann ihre Bilderströme lesen.

Das Netz
 19.02.2016, 09:00

Die Überwachungskameras sind überzählig, natürlich auch beim L1-Fahren.
 Foto: Kurt Caviezel

LE TEMPS

Kurt Caviezel et ses 12000 webcams, le monde entier en temps réel

En collaboration avec l'Université de Zurich, Kurt Caviezel a lancé un site Internet connecté en permanence à 12 000 webcams à travers le globe. Révélateur, effrayant et fascinant.

WOZ
 DIE WOCHENZEITUNG

Schweiz International Kultur/Wissen Täglich wobei Le Monde diplomatique Audio Archiv

Nr. 50 - 16. Dezember 2021

Hausmittlungen
Blick auf die Welt

Der Schweizer Künstler Kurt Caviezel versteht das World Wide Web auch als grosse Kamera. Durch sie fotografiert er rund um die Uhr und rund um den Globus die Welt im Livemodus mittels öffentlich zugänglicher Netzwerkkameras. In Zusammenarbeit mit der Zürcher Hochschule für Angewandte Wissenschaften werden die Fotos von einer künstlichen Intelligenz analysiert und auf der Website webcam.engineering.zhaw.ch für 48 Stunden archiviert. So funktionieren die Überwachungskameras als Erweiterung des menschlichen Körpers, durch die der Mensch durch das Netz zurück in die reale Welt und auf sich selbst blickt. Für die WOZ wählt Caviezel jeden Montagmorgen ein aktuelles Bild aus, das jeweils auf der letzten Seite der nächsten Ausgabe abgedruckt wird.

Newsweek

Entertainment Photography Visual Art Museums PhotoLab Museum Surveillance Social Media Andy Warhol

'Public, Private, Secret': This Exhibit Will Make You Think Twice About Your Webcam

Published Jun 28, 2016 at 8:00 AM EDT Updated Jul 05, 2016 at 1:23 PM EDT

111 comments

01 Election 2012: Donald Trump and Kamala Harris
 111 comments

02 How is Mark Zuckerberg's 'Meta'?
 1 comment

03 Tucker Carlson Compares Donald Trump's 'China' to 'Gigamon'

EUROPEAN PHOTOGRAPHY

Kurt Caviezel: Watching the World

Born in 1964 in Chaz, Switzerland, lives in Zurich, Switzerland
 kurtcaviezel.ch, Instagram.com/kurtcaviezel

111 comments

01 Election 2012: Donald Trump and Kamala Harris
 111 comments

02 How is Mark Zuckerberg's 'Meta'?
 1 comment

03 Tucker Carlson Compares Donald Trump's 'China' to 'Gigamon'

Book :

THE ENCYCLOPEDIA OF KURT CAVIEZEL

Author: Kurt Caviezel

Publisher: Rorhof, Bolzano, Italy

Foreword by Joachim Schmid

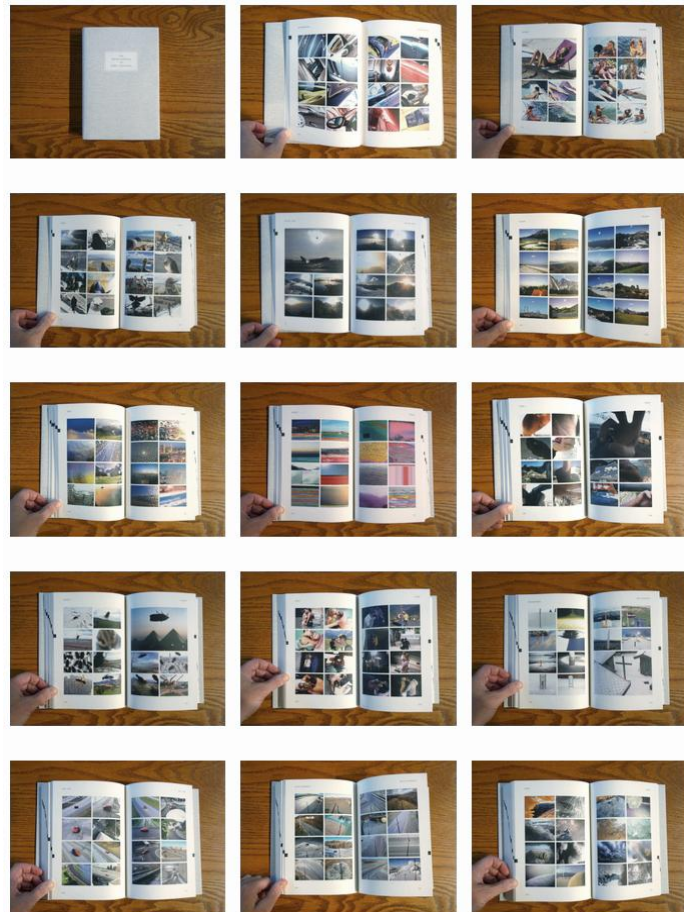
e/i/d

Format: 414 pages, hardcover, 16x24cm

First editions

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Contact :

Kurt Caviezel

info@kurtcaviezel.ch

www.kurtcaviezel.ch

[Watching The World](#)

+41 79 472 67 10



Helmut Grabner - ZHAW

helmut.grabner@zhaw.ch

[Personal ZHAW Site](#)

Fitim Abdullahu - ZHAW

fitim.abdullahu@zhaw.ch

[Personal ZHAW Site](#)

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Go **live** and watch the real cctv-view on our **lives**:

<https://webcamaze.engineering.zhaw.ch/>

