

**Steve Rood**

Shadow Machine Project

March 2016

Referent projects

Categorisation and keywords

**projects  
&  
practitioners**

A catalogue of referent projects

**keywords**

Categorisation and keyword development

## projects & practitioners

Abraham Palatnik  
Akihiko Miyoshi  
Andreas Nicolas Fischer  
Andreas Nicolas Fischer 2  
Andrew Beck  
Anna Atkins  
ANTIVJ  
Aram Bartholl  
Bálint Bolygó  
Bálint Bolygó\_2  
Benedikt Bitterli  
BIOSCOPE  
Blaise Aguera y Arcas  
Blake Gordon  
Blind Camera  
BlindTool  
Brice Bischoff  
Camera Restricta  
Carlos Cruz-Diez  
123D Catch  
Chris Fraser  
CoeLux  
Daniel Crooks  
Data Physicalization  
Deep Dream  
Democracycam  
Domnitch & Gelfand  
Domnitch & Gelfand\_2  
Doug Aitken  
Drew Nikonowicz  
Ekaggrat Singh Kalsi  
Eno Henze  
f21threadscreen  
FELD  
FELD 2  
Femto Photography  
First TV Image of Mars  
FlipBook  
Francis Galton  
Frank Gilbreth  
Gebhard Sengmüller  
Gebhard Sengmüller 2  
Geoffrey Mann  
Germaine Kruij  
Hiroshi Sugimoto  
Hollis Frampton  
ILSVRC  
Isaac Newton  
James Boock  
James Clerk Maxwell  
James Turrell  
Jason Salavon  
Jean Dupuy  
Jeff Crossman  
Jer Thorp  
Jesper Jonsson  
Jessica Eaton  
Jim Sanborn  
Joachim Sauter  
Joachim Sauter & Dirk Lüsebrink  
Joachim Schmid  
Joachim Schmid/ Ed Ruscha  
Julian Oliver  
Katja Mater  
3D Portrait Sculptures using DNA

Kessels Kramer  
Kimchi and Chips  
LaMem  
Laszlo Moholy Nagy  
Lithophane  
Lithophane Electrotachyscope  
Liz Deschenes  
Loads  
Lori Hepner  
Martin Creed  
Matt Richardson  
Max Frey  
!MEDIENGRUPPE BITNIK  
!MEDIENGRUPPE BITNIK 2  
Niklas Roy  
Olafur Eliasson  
on-broadway.nyc  
onformative  
Otto Piene  
Pablo Garcia  
Paleo Camera  
Penelope Umbrico  
Pete Ashton  
Philo T. Farnsworth  
phototrails  
Pointerpointer  
PolaPi  
Kazu Otani  
Project Oxford  
Rafael Lozano-Hemmer  
random-international  
Robert Irwin  
Robert Seidel  
Robert Wilson  
Ruben van der Vleuten  
Rudolph Koenig  
Scott Hessel  
semiconductor  
Shinichi Maruyama  
Simon Pyle  
Stephan Tillmans  
Tachistoscope  
team-lab  
The Cullinator  
The Slice Histogram  
Thibault Brunet  
Thomas McIntosh  
Thomas Wilfred  
United Visual Artists  
UPI 16-S  
Volumetric Cinema  
Weevmee  
Yang Yongliang

# keywords

Aesthetics  
Amalgamation  
Analogue  
Apparatus  
Architectural  
Archive  
Array  
Art historical  
Artefact  
Artificial intelligence,  
Audio  
Auto-generative art  
Cinematic  
Color-averaged  
Colour  
Computational photography  
Context  
Cultural Analytics  
Data  
Data vis & sim  
Extruded Light  
Grid  
Historical  
Installation  
Interactive  
Kinetic  
Land Art  
Light  
Light Art  
Materiality  
Media  
Media archaeology  
Meta  
Movement  
Network  
Neural networks  
Optical  
Perception  
Physicalisation  
Portraiture  
Pre cinema  
Projection Mapping  
Sound  
Technology  
Time  
Time-based/installation  
Visualisation  
3D

# Abraham Palatnik

## Cinechromatic Machines



name/ date: 'Aparelho Cinecromático  
(cinechromatic machines)', 1964.

### description:

On a plastic screen covering the front of his devices, he projected colors and forms driven by electric motors, creating a luminous effect with its own timing. Using motors and light bulbs, he replaced paint-as a material dimension-with refracted light. The timing of the lighting was controlled from a console with switches for each lamp. The viewer sees only the colored shapes projected onto the front of the cinechromatic device. Inside there were about 600 meters of electric wires in different colors, linking 101 lamps of varying voltages, rotating several cylinders at varying speeds. Light is projected through a set of lenses and shapes and a prism to refract colors.

### notes :

Palatnik's "chromatic plastic dynamism"

### url:

<https://theresponsivei.wordpress.com/2015/06/11/spotlight-on-abraham-palatnik-aparelho-cinecromatico-cinechromatic-machines-1964/>

[http://www.olats.org/pionniers/pp/palatnik/morais\\_en.php](http://www.olats.org/pionniers/pp/palatnik/morais_en.php)

### keywords:

Colour, Light, Kinetic, Light Art, Optical, Perception, Time, Visualisation

# Akihiko Miyoshi

## Color Fields



date: 2012

### description:

The photographs are taken facing a mirror with colored tape adhered to the front of the camera's lens as they attempt to unpack the structural mechanics of photographic representation.

### notes:

Photography internalizes some of the most interesting ontological issues regarding art. The question "Is it art?" haunted photographers throughout its history. Its inability to find alternatives to depiction complicated its entry into the modernist discourse when the other arts were engaged with abstraction.

### url :

<http://people.reed.edu/~miyos/Art/13/ColorField/colorfield13.html>

### keywords:

Apparatus, Analogue, Colour, Light, Light Art, Optical, Visualisation, Perception

# Andreas Nicolas Fischer

## Spectral Density Estimation



date: 2013

description:

Two sound recordings of the first organized tuning were taken at the last 2 orchestra performances of the 2012 / 2013 season. Each recording was analyzed and transformed into a spatial arrangement of the audio frequencies over time. The resulting geometry was then carved into a block of wood from a cedar tree, that had fallen outside the museum.

notes :

url:

<http://anf.nu/spectral-density-estimation/>

keywords:

Artefact , Auto-generative art, Audio, Data vis & sim, Materiality, Sound, Technology, Visualisation

# Andreas Nicolas Fischer

## Lichtzeichnungen II



date: 2008

description:  
Series of 12 generative drawings

notes :

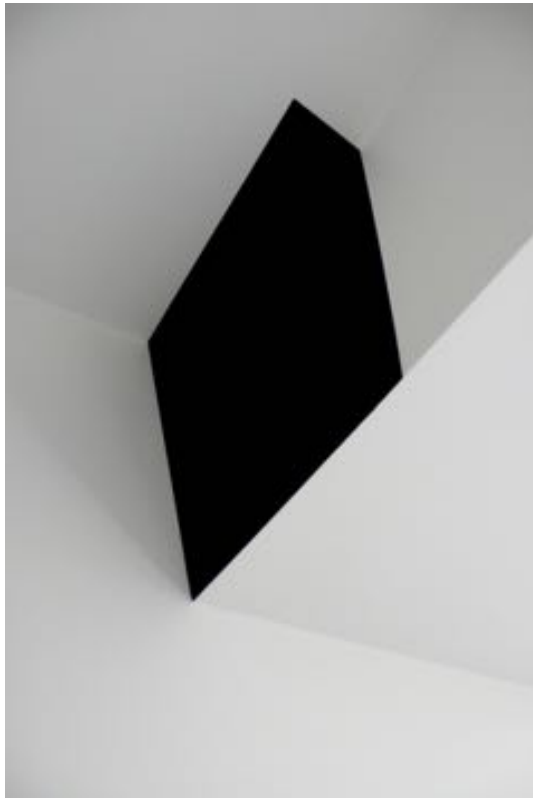
url:  
<http://anf.nu/lichtzeichnungen-ii/>

keywords:  
Light, Light Art, Data vis & sim, Technology, Visualisation



# Andrew Beck

## Column Antumbra



date: 2012

description:

Column Antumbra (shadow drawing), 2012  
wall drawing in oil

notes:

Andrew Beck has explored time-sensitive phenomena, basing his works on the movement of light and shadow across the surface of the gallery wall,  
<http://eyecontactsite.com/2013/10/beck-in-berlin>

url :

[http://hamishmckay.co.nz/artists/Andrew\\_Beck/7](http://hamishmckay.co.nz/artists/Andrew_Beck/7)

keywords:

Aesthetics, Analogue, Context, Extruded Light, Light Art, Perception, Physicalisation, Projection Mapping, Time-based/ installation, Visualisation

# Anna Atkins

## Photographs of British Algae: Cyanotype Impressions



date: 1843

description:

cyanotype photograms that were contact printed[1] "by placing the unmounted dried-algae original directly on the cyanotype paper."

notes:

Sir John Herschel, a friend of Atkins and Children, invented the cyanotype photographic process in 1842

url :

[https://en.wikipedia.org/wiki/Anna\\_Atkins](https://en.wikipedia.org/wiki/Anna_Atkins)

keywords:

Analogue, Art historical, Artefact , Auto-generative art, Light, Optical, Visualisation

# AntiVJ

## drylights



date : Xavier Chassaing, 2015

description:

This experimental film lies somewhere between a site-specific installation and a performance, where choreographed lights meet organic landscapes

notes :

ANTIVJ is a visual label initiated by a group of European artists whose work is focused on the use of projected light and its influence on our perception.

url:

<http://www.antivj.com>

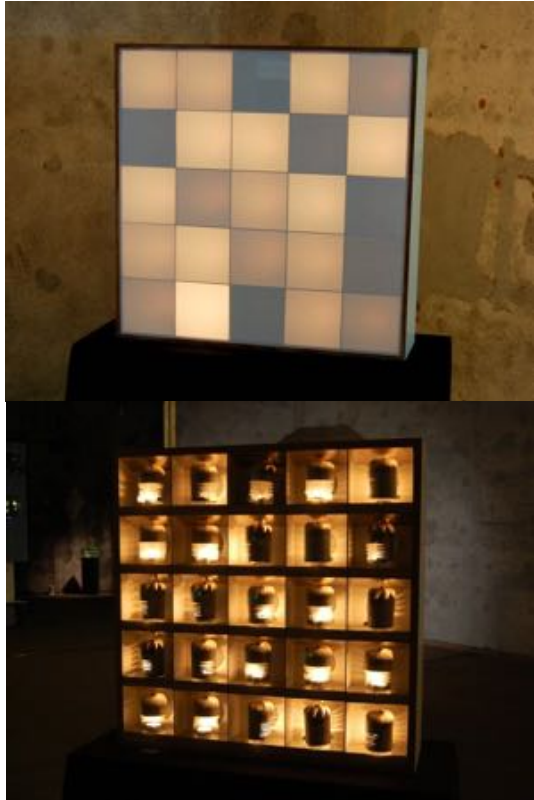
<http://www.antivj.com/drylights/>

keywords:

Computational photography, Extruded Light, Light Art, Movement, Time-based/installation, Visualisation

# Aram Bartholl

## Random Screen



name /date: 2005

description:

A mechanical thermodynamic screen that the user can't control and that functions without any electricity. Conventional tea candles illuminate and generate the changes on the 5x5 pixel screen.

url:

<http://www.datenform.de/rscreeneng.html>

keywords :

Analogue, Apparatus, Installation, Kinetic, Light Art, Physicalisation, Technology

# Bálint Bolygó

## Algorithm X and Y



date: 2007

description:

This light projecting mechanism responds to the movement of people around the object and moves large Petri dishes of coloured pigments along the X and Y axis. The movement is generated by nitinol wire and the resulting image in the Petri dish is projected onto the ceiling of the exhibition space. The object resembles early scientific apparatus and alludes to the relationship between the microscopic and gargantuan images within the universe.

url:

<http://balintbolygo.com/algorithm-x-and-y>

notes :

Analogue, Apparatus, Light, Light Art, Installation, Materiality, Technology, Visualisation

# Bálint Bolygó

## Trace (Self Portrait)



date: 2008

description:

Trace is a sculptural device that alludes to scientific discoveries and pseudoscientific concepts such as phrenology, physiognomy, and craniometry. A revolving plaster cast of the artist's head is slowly deconstructed into a mathematical diagram that changes as time passes. The peculiarities of the human face that as humans, we attach so much importance to, is dematerialised into a changing drawing that embodies the differential undulations of the human anatomy. Trace questions our notion of self and how through technology we have found different visual representations for the individual. DNA profiling, retina scans and the fingerprint are all things that are conjured up by the meticulous mechanical process of the work. The topographical images are turned into a new form of three-dimensional representation that draws our attention to the space within.

notes :

{useful methodology}

url:

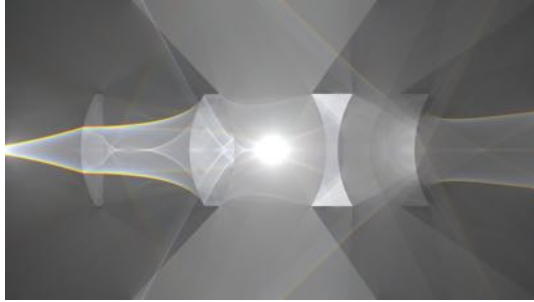
<http://balintbolygo.com/trace-self-portrait>

keywords:

Analogue, Apparatus, Installation, Kinetic, Materiality, Technology, Physicalisation, Visualisation

# Benedikt Bitterli

## Chronocyclegraph



date: 2014

description:

a light transport simulation using the same mathematical tools used in academic and movie production renderers, but in a simplified 2D setting

notes :

Physically Based Rendering and Physically Based Simulation.

The main motivation of this project was to build a tool that allowed us to visualize the "hidden" behavior of light that is normally obscured in 3D light transport.

url:

<https://benedikt-bitterli.me/tantalum/>

keywords:

Art historical, Colour, Computational photography, Extruded Light, Light, Light Art, Technology, Visualisation

## V2\_Lab

### BIOSCOPE



date: 2012

description:

Inspired by an early movie projector of the same name, the Bioscope is a medium to experience memories in relative time. It consists of a hand-held device, to be viewed with one eye, which resembles an old film camera. By rotating the handle, the digital (or digitized home) movie is animated frame by frame, forward or in reverse, relative to the speed and direction that is used to turn the dial.

notes :

synthesizes the intrinsic qualities of the digital and the analogue, such as appropriation and remixing seen in digital culture

url:

<http://v2.nl/archive/works/bioscope>

keywords:

Apparatus, Analogue, Art historical, Cinematic, Historical, Interactive, Kinetic, Pre cinema, Technology



# Blaise Aguera y Arcas

## PhotoSynth



date: 2010

### description:

analyzes digital photographs and generates a three-dimensional model of the photos and a point cloud of a photographed object

### notes:

Pattern recognition components compare portions of images to create points, which are then compared to convert the image into a model.

Users are able to view and generate their own models using a software tool available for download at the

url :

<https://photosynth.net/>

### keywords:

Array, Artificial intelligence, Computational photography, Cultural Analytics, Data vis & sim, Meta, Network, Technology, Visualisation

# Blake Gordon

## Cloud Projections



date: 2009

description:

the geometric effects of light pollution in Austin, Texas, capturing thinly defined shapes in the clouds, projected upward from the tops of buildings.

notes :

I'm instantly reminded of Paul Virilio's War and Cinema – where Virilio memorably describes the Nazi use of searchlights as a form of temporary light-architecture, creating a “space” of monumental vaults and upward-projected walls to help define their night rallies.

url:

<http://www.bldgblog.com/2009/01/sky-tv/>

keywords:

Light Art, Time-based/installation, Time, Installation, Light, Visualisation

# A Blind Camera

Taking a photo means  
making a memory



date: 2014

description:

Whenever you click the shutter button, the cellphone pings Flickr and downloads an image that has the same timestamp as your shutter press.

notes :

it is a camera that - using a mobile communication device - takes other's photos.

cameras become networked buttons that create a link between two people through the simple fact that they did the same thing simultaneously: pressing a button.

The cameras create a visual trace of it, with time as a reference.

url:

[http://www.blinksandbuttons.net/buttons\\_en.html](http://www.blinksandbuttons.net/buttons_en.html)

keywords:

Apparatus, Computational photography, Data vis & sim, Interactive, Meta, Network, Technology

# Joseph Paul Cohen

## BlindTool



description:

is a free Android app that helps the blind and visually impaired navigate the world. Using computer vision technology — a robot analogue of human vision, in which computers analyze visual information on video — it identifies objects it “sees” through the camera lens and describes them in robotic monotone. If you point your phone at a chair, it says “chair;” if you point at a banana, it says “banana.”

notes :

“It takes things completely out of context and will tell you what an object statistically looks like.”

url:

<http://hyperallergic.com/266586/a-new-app-attempts-to-see-for-the-blind/>

<https://www.kickstarter.com/projects/2114076460/blindtool-v2>

keywords:

Neural networks

# Brice Bischoff

## Bronson Caves



date: 2012

description:

I performed actions for the camera with massive sheets of colored paper. Since a long-exposure photograph was produced rather than a motion picture, the papers were recorded as voluminous, glowing colors.

notes:

In the series of photographs titled Bronson Caves, I am attempting to photograph the caves's extensive cinematic history in one moment, collapsing space and time.

url :

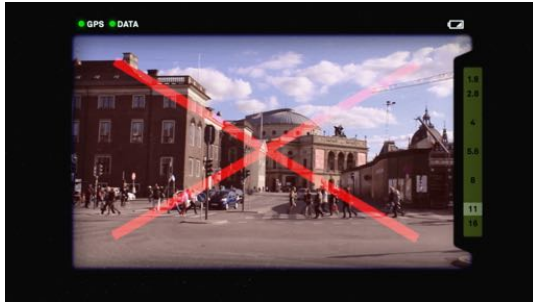
[http://www.bricebischoff.com/bronson\\_caves.html](http://www.bricebischoff.com/bronson_caves.html)

keywords:

Apparatus, Analogue, Colour, Light, Light Art, Optical, Perception, Visualisation

# Philipp Schmitt

## Camera Restricta



date: 2014

description:

It locates itself via GPS and searches online for photos that have been geotagged nearby.

If the camera decides that too many photos have been taken at your location, it retracts the shutter and blocks the viewfinder

notes :

A disobedient tool for taking unique photographs

The camera scans an area of roughly 35x35 meters around its exact location for geotagged photos

url:

<http://philippschmitt.com/projects/camera-restricta>

see also:

Location-based Light Painting - Mapping Geotagged Photos in Public Spaces

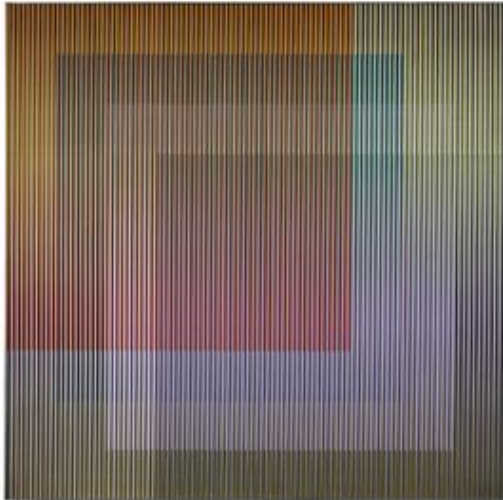
<http://philippschmitt.com/projects/lightpainting>

keywords:

Apparatus, Artificial intelligence, Computational photography, Context, Interactive, Speculative design, Network, Technology

# Carlos Cruz-Diez

## Couleur Additive



date: 1983

description:

This investigation is based on the radiation of color. When one plane color touches another, a darker vertical line appears at the point of contact. This virtual line in fact contributes a third color that is not in the support.

notes :

A contemporary theorist of color whose artistic proposal is based on four chromatic conditions: subtractive, additive, inductive and reflected color.

url:

<http://www.cruz-diez.com/work/couleur-additive/>

keywords:

Colour, Light Art, Optical, Perception, Physicalisation, Visualisation

# 123D Catch



name /date:  
1913 Kodak 3D Model  
goldsteina2014

description:  
123D Catch is a free app that lets you create 3D scans of virtually any object.

notes:  
image -> 3d model -> 3d print

urls:  
<http://www.123dapp.com/catch>

keywords:  
Materiality, Visualisation, Physicalisation, 3D render



# Chris Fraser

## Center



date: Center (for Emmanuelle), 2013 | Glass microspheres,  
aluminum, LED fixture

description:

Open one eye and light becomes image;  
open the other and it becomes space

notes :

The pinhole does not create an Image, but reveals a portion of  
the complex order that makes up our luminous environment.

<http://www.chrisfraserstudio.com/incandescent/>

url:

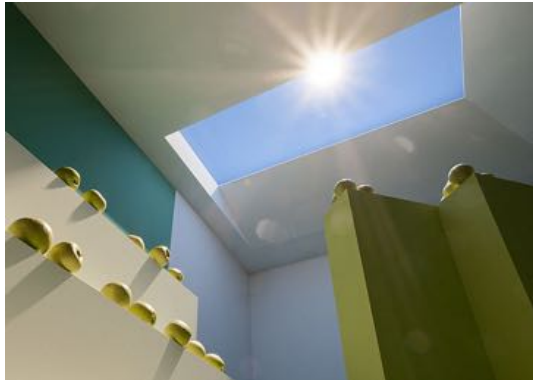
[http://www.chrisfraserstudio.com/in-stereo/  
foim9i38nqbfhiosut76kpxf11xonc](http://www.chrisfraserstudio.com/in-stereo/foim9i38nqbfhiosut76kpxf11xonc)

keywords:

Optical, Light Art, Perception, Technology

# CoeLux

## LED Sunlight



date: 2015

description:

The light itself is an LED projector that emits white light in a spectrum that mimics the sun's output. A "sophisticated optical system" (but with few details provided) creates the sensation of the distance between the sky and the sun.

notes :

Buyers can even choose from one of three different types of sunlight: tropical, Mediterranean and Nordic. Each setting is a different color temperature, and the sun shines through at a different angle.

url:

<http://blogs.discovermagazine.com/d-brief/2015/02/17/led-skylight-authentically-recreates-suns-rays/#.VoXNXcB97RZ>

keywords:

Installation, Light Art, Light, Movement, Perception, Visualisation

# Daniel Crooks

## Truths Unveiled by Time



name /date:Static No.12 (still) 2009–2010

### description:

Explore the mysterious fourth dimension: time. He uses video to create moving image compositions in which time appears to be a physical material that can be manipulated at will: sliced, diced, stretched and compressed.

### notes:

Working across digital video, photography and now sculpture, his practice explores the elasticity of movement in time and space. Best known for his 'time slice' video technique – slicing ribbons of varying thicknesses into a video stream to create a lyrical displacement of time and space

### url :

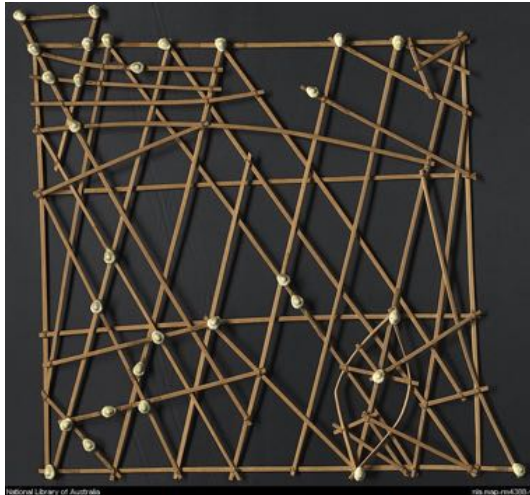
<http://artguide.com.au/articles-page/show/daniel-crooks-4/>

### keywords:

Apparatus, Movement, Perception, Time, Time-based/  
installation, Technology

# Data Physicalization

## Marshall Islands Stick Charts



date : 1862

description:

This is a chronological list of physical visualizations

Data physicalization aims to help people explore, understand, and communicate data using computer-supported physical data representations. We call these representations physicalizations, analogously to visualizations – their purely visual counterpart.

notes :

Physical representations of data have existed for thousands of years. Now, with advances in digital fabrication, actuated tangible interfaces, and shape-changing displays, a new area of research is emerging: data physicalization.

url:

<http://dataphys.org/list/>

keywords:

Art historical, Cultural Analytics, Data, Data vis & sim, Technology, Physicalisation, Visualisation

# Deep Dream

machine dreaming software



date: 2015

description:

With simple words you give to an AI program a couple of images and let it know what those images contain ( what objects - dogs, cats, mountains, bicycles, ... ) and give it a random image and ask it what objects it can find in this image.

notes :

"The techniques presented here help us understand and visualize how neural networks are able to carry out difficult classification tasks, improve network architecture, and check what the network has learned during training," engineers wrote at the time.

ImageNet Large-Scale Visual Recognition Challenge

url:

<http://deepdreamgenerator.com/>

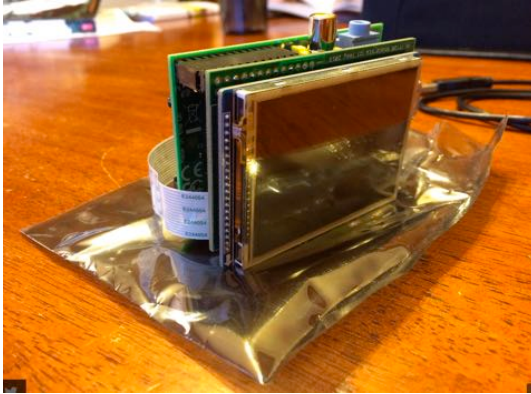
<http://www.telegraph.co.uk/technology/google/11712495/Google-unleashes-machine-dreaming-software-on-the-public-nightmarish-images-flood-the-internet.html>

keywords:

Artificial intelligence, Computational photography, Media, Neural networks, Network, Technology, Visualisation

jason.gullickson

## Democracycam



date: 2014

description:

An oppression-proof image acquisition device

notes :

The current iteration of Democracycam is designed to opportunistically join a shared open WiFi network with other Democracycams and automatically distribute any photos taken across the network as soon as they are captured.

url:

<https://hackaday.io/project/165/gallery#6299fa949ada6f547137ebd66d158f8a>

[hackaday.io](https://hackaday.io)

81 Projects tagged with "camera"

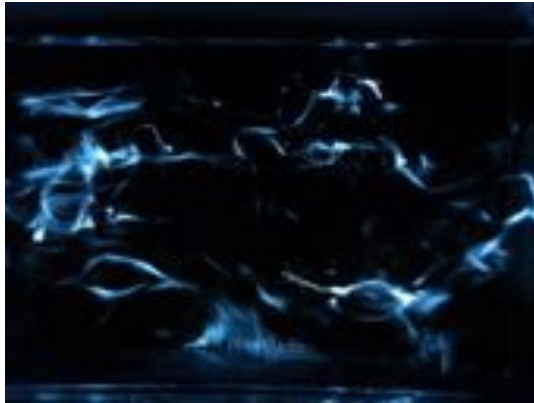
<https://hackaday.io/projects/tag/camera>

keywords:

Apparatus, Artefact , Computational photography, Context, Cultural Analytics, Media, Meta, Technology

# Domnitch & Gelfand

## CAMERA LUCIDA



name/ date: CAMERA LUCIDA | 2003 | installation

description:

a 3-dimensional sonic observatory that directly transforms sound into light by employing a phenomenon known as sonoluminescence: ultrasound, propagating within a liquid, triggers the formation and implosion of micro-bubbles that reach temperatures as high as are found on the Sun, and emit light in the shape of sound waves.

notes :

could it be considered an 'objective' type of music visualization?

url:

[http://portablepalace.com/camera\\_lucida.html](http://portablepalace.com/camera_lucida.html)

[http://www.lineimprint.com/editions/dvd/line\\_030/](http://www.lineimprint.com/editions/dvd/line_030/)

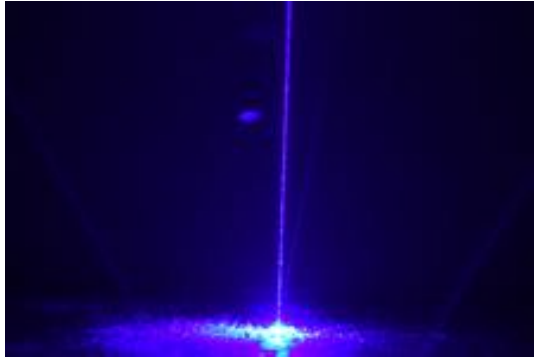
<http://io9.gizmodo.com/5553121/sonoluminescence-when-sound-makes-light>

keywords:

Analogue, Apparatus, Audio, Sound, Light, Light Art, Physicalisation, Visualisation

# Domnitch & Gelfand

## PHOTONIC WIND



name/ date:

PHOTONIC WIND | 2013 | installation

description:

Shining into a vacuum chamber, a laser beam levitates and propels diamond micropowder. Forming starry jets and languorous vortical clouds, the diamond dust evokes light's pervasive flow, insuppressibly transforming everything in its wake. Photophoresis (light-induced migration of matter) has recently been proposed as the phenomenon responsible for planet formation: light-propelled rotation of cosmic dust gradually snowballs into a planetesimal, the seed of a planet. Simultaneously revealing the slow motion birth of a planet and the rapid dynamics of photo-molecular interactions, Photonic Wind decisively extends the viewer's sense of spatial and temporal scale.

notes :

Our initial experiments followed in the footsteps of Ehrenhaft, however, substituting focused sun light with a powerful laser beam. For the next series of experiments, instead of silver, we levitated diamond micropowder, which was much easier to propel, attract, trap and guide along optical vortices. Depending on the laser's angle and proximity, the diamond dust would alternate between surging starry jets and languorous vortical clouds

url:

[http://www.portablepalace.com/photonic\\_wind.html](http://www.portablepalace.com/photonic_wind.html)

<https://vimeo.com/78432849>

keywords:

Apparatus, Light, Analogue, Light Art, Physicalisation, Visualisation



# Doug Aitken

## LIGHTHOUSE



date: 2007(?)

description:

Lighthouse is a site-specific earthwork located in Upstate New York, which wraps the exterior of a house with moving images of the surrounding landscape.

notes :

Footage filmed over four seasons captures the transformation of the environment surrounding the location. When projected onto the structure's façade, this footage merges architecture and landscape while drawing on both micro and macro views. Lighthouse connects with the living environment to explore ideas of disappearance and transformation.

[house as camera obscura/ inverted]

url:

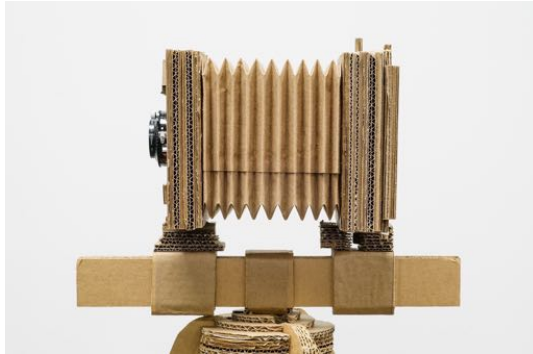
<https://vimeo.com/145663139>

keywords:

Aesthetics, Apparatus, Architectural, Land Art, Light Art, Optical, Projection Mapping, Time-based/installation, Visualisation

# Drew Nikonowicz

## cardboard camera



date: 2015

description:

his work employs computer simulations as well as analog photographic processes to deal with landscape and exploration in contemporary photography.

url:

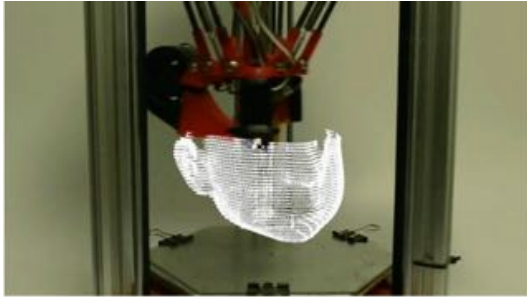
[http://www.nikonowicz.com/index.php/project/cardboard-camera/\\_DSC0204.jpg](http://www.nikonowicz.com/index.php/project/cardboard-camera/_DSC0204.jpg)

keywords:

Analogue, Apparatus, Installation, Materiality, Physicalisation, Technology

# Ekaggrat Singh Kalsi

## Modded 3D Printer Paint with Light



date: 2015

description:

a 3D printer mod that can "print" light patterns in full color.

notes:

Time lapse / photography / video

url:

[http://thecreatorsproject.vice.com/blog/watch-a-modded-3d-printer-paint-with-light?utm\\_source=tcpfbus](http://thecreatorsproject.vice.com/blog/watch-a-modded-3d-printer-paint-with-light?utm_source=tcpfbus)

keywords:

Apparatus, Computational photography, Extruded Light, Light Art, Perception, Time-based/installation, Visualisation

# Eno Henze

“Tomorrow will be like today”



date: Field 1, 2010

description:

Laser drawing on foto paper, mounted.

notes :

'how machines transform aesthetic reasoning and notions of the human'.

'oscillate between human and machine origin'.

url:

<http://enohenze.de/tomorrow-will-be-like-today/>

keywords:

Aesthetics, Analogue, Light Art, Light, Physicalisation, Visualisation

**breakfastny**

f21threadscreen



date: 2015

description:

The F21 Thread Screen is a 2,000 pound machine that uses 6,400 mechanical spools of thread to display Instagrams hashtagged with #F21ThreadScreen.

notes :

It's comprised of 200,000+ parts - over 8 times what you'd find in your car. Every component, from the thousands of motors and gears, to the 600 pounds of milled aluminum, to the turned wooden spools - all have been custom designed, engineered, and manufactured from scratch. Despite the massive complexities living under the hood, the result is a beautiful and simple looking display that is mesmerizing to watch.

url:

<http://f21threadscreen.com/>

see also

real-time flip-dot display\_

<http://breakfastny.com/dot-screen>

Ponts - Directional Sign

<https://www.youtube.com/watch?v=mEvc0RjghbY>

keywords:

Analogue, Apparatus, Kinetic, Installation, Data vis & sim, Materiality, Network, Physicalisation, Visualisation

# FELD

## extracts of local distance



date: Barcelona Pavilion, 2009

### description:

Countless fragments of existing architectural photography are merged into multilayered shapes. The resulting collages introduce a third abstract point of view next to the original ones of architect and photographer.

### notes :

Using the extracted image segments, it is now possible to form collages of originally different pictures with a new common perspective. In order to compose a collage, a perspective-grid is defined and a lining of matching image segments is being applied. The segments are not altered to match the frame but fitting ones are chosen from the sheer mass of possible pieces. By defining additional keywords which describe the content of the original photographs, the selection of segments used for the final composition can be influenced. Thus a contextual layer is added through the semantic linking with the source material.

### url:

<http://www.localdistance.org/index.php>

### keywords:

Architectural, Computational photography, Optical, Perception, Technology, Visualisation

# FELD

## Kinetic Light Sculpture



date: Spectra-3

description:

A physical-digital sculpture that tells three stories of communication through a choreography of movement, animated lights and spatialised sound.

notes :

A 3m tall technological artefact, drawing the audience into a playful dialogue, and a sensory experience of light as matter and energy.

url:

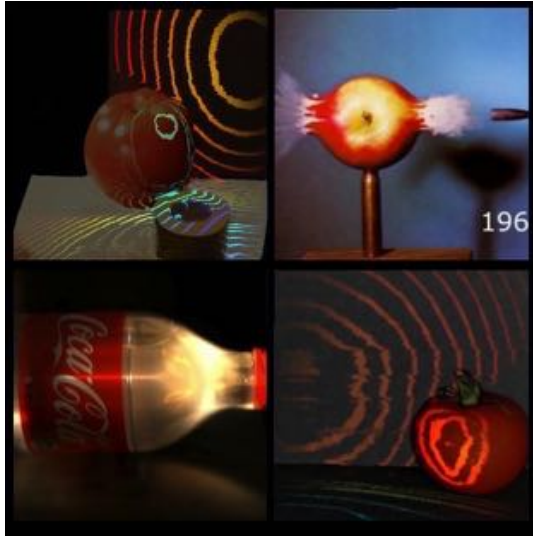
<https://www.field.io/project/spectra-3/>

keywords:

Apparatus, Extruded Light, Installation, Kinetic, Light Art, Movement, Optical, Physicalisation, Visualisation

# Ramesh Raskar

## Femto Photography



date: 2014

description:

High-speed video at a trillion frames per second

notes:

So, what can you see when you take a picture every 13 nanoseconds? You can watch how photons interact with matter; the way photons are absorbed, the way they are reflected, even their physical affect on water as these photons cause little ripples to scatter about.

urls:

<http://futurism.com/femto-photography-light-in-motion/>

<http://hackaday.com/2012/08/17/femto-photography-taking-pictures-of-bullets-made-of-light>

keywords:

Apparatus, Light, Movement, Optical, Technology, Time, Visualisation



# NASA

## First TV Image of Mars



date: 1967

description:

A 'real-time data translator' machine converted a Mariner 4 digital image data into numbers printed on strips of paper. Too anxious to wait for the official processed image, employees from the Voyager Telecommunications Section at NASA's Jet Propulsion Laboratory, attached these strips side by side to a display panel and hand colored the numbers like a paint-by-numbers picture. (1967)

notes :

[Digital photography developed from the need to transmit imagery from space missions]

url:

[http://www.nasa.gov/multimedia/imagegallery/image\\_feature\\_1982.html](http://www.nasa.gov/multimedia/imagegallery/image_feature_1982.html)

keywords:

Analogue, Data vis & sim, Installation, Media archaeology, Technology, Time, Visualisation

# FlipBook

## DIY Flipbook



date: current

description:

DIY kit that allows anyone to make either a manual or motorized flip book from a video or set of photographs.

notes :

zoopraxiscope

mutoscope

url:

<http://flipbookit.com/>

keywords:

Analogue, Apparatus, Installation, Kinetic, Time-based/  
installation, Historical, Perception

# Francis Galton

## Rapid-viewing device



date: 1882

description:

"The most wonderful antics that ever a nightmare invented to puzzle the brain."

notes :

A celebration of the 19th-century spinning, twirling, optical "philosophical" toys that demonstrated the complexity of motion perception, entertained generations, and still have the power to cause wonder and delight.

<http://www.stephenherbert.co.uk/wheelHOME.htm>

Reasoned and Unreasoned Images

url:

[https://books.google.co.nz/books?id=De5u\\_Y-9YawC&pg=PA101&dq=Galtons+rapid+viewer&hl=en&sa=X&ved=0CBwQ6AEwAGoVChMIju\\_G1cCRxwIV5R-mCh0ZQQ5d#v=onepage&q=Galtons%20rapid%20viewer&f=false](https://books.google.co.nz/books?id=De5u_Y-9YawC&pg=PA101&dq=Galtons+rapid+viewer&hl=en&sa=X&ved=0CBwQ6AEwAGoVChMIju_G1cCRxwIV5R-mCh0ZQQ5d#v=onepage&q=Galtons%20rapid%20viewer&f=false)

keywords:

Analogue, Apparatus, Art historical, Interactive, Historical, Optical, Perception, Time, Visualisation

# Frank Gilbreth

## Chronocyclegraph



date: 1914

description:

In the year 1914 Frank Gilbreth, along with his wife Lillian Moller Gilbreth, used small lights and the open shutter of a camera to track the motion of manufacturing and clerical workers.

notes :

Studying what they called “work simplification”. The Gilbreth’s were working on developing ways to increase employee output and simplify their jobs.

url:

<http://lightpaintingphotography.com/light-painting-history/>

keywords:

Analogue, Art historical, Auto-generative art, Light, Movement, Optical, Time, Visualisation

# Gebhard Sengmüller

## A Parallel Image



date: 2010

description:

"A Parallel Image" is an electronic camera obscura. This media-archaeological, interactive sculpture is based on the fictive assumption that the currently still valid principle of electronically transmitting moving images, namely by breaking them down into single images and image lines, was never discovered.

notes :

By reduplicating and demonstrating this apparatus in its original "simple" form, I hope to aid people in understanding this complex instrument, which has made instant visual communication possible."

url:

[http://www.gebseng.com/08\\_a\\_parallel\\_image/graphic\\_generator\\_luedenscheid\\_2010-10/index.shtml](http://www.gebseng.com/08_a_parallel_image/graphic_generator_luedenscheid_2010-10/index.shtml)

keywords:

Apparatus, Artefact , Media archaeology, Auto-generative art, Computational photography, Materiality, Physicalisation, Technology, Visualisation

# Gebhard Sengmüller

## VSSTV - Very Slow Scan Television



date: 2004

description:

VSSTV uses broadcasts from this historic public domain television system - available anytime over freely accessible frequencies - to construct an analogy: it recreates a cathode ray tube (CRT) with regular bubble wrap taking the role of the aperture mask. Just as a CRT mixes the three primary colors to create various hues, VSSTV will use the surprisingly similar yet magnified structure of bubble wrap, commonly used as a packing material.

url:

[http://www.gebseng.com/02\\_vsstv/](http://www.gebseng.com/02_vsstv/)

keywords:

Media archaeology, Auto-generative art, Apparatus, Artefact , Computational photography, Materiality, Physicalisation, Technology, Visualisation

# Geoffrey Mann

## Attracted to Light



date: 2005

description:

“Attracted to Light narrates the erratic behavior of a moth upon the stimulus of light,” Mann has explained. The insect’s path through the air is captured using cinematic technology and materialized through rapid prototyping (also called 3D printing). The design is part of Mann’s Long Exposure series, which also features lamps based on the trajectories of a bird in flight, taking off, and landing.”

url:

<http://www.moma.org/collection/works/110458>

keywords:

3D render, Analogue, Art historical, Cinematic, Extruded Light, Installation, Materiality, Movement, Physicalisation, Visualisation

# Germaine Kruip

## The Wavering Skies



date: 2008

description:

A slow moving shadow is created by 300 computer-controlled halogen lamps hung above a translucent fabric ceiling.

url:

<http://www.brokencitylab.org/blog/the-wavering-skies/>

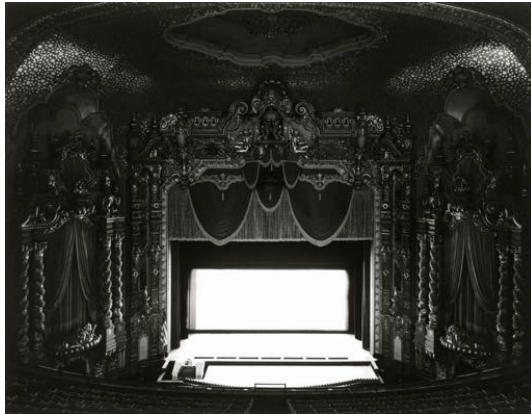
keywords:

Architectural, Auto-generative art, Computational photography, Light Art, Physicalisation, Installation, Time, Technology



# Hiroshi Sugimoto

## Theaters



name /date:  
Movie Theatre,Canton Palace, Ohio, 1980

description:  
Suppose you shoot a whole movie in a single frame?

notes:  
In discussing his own work, David Hockney once posed the question "When is the present? When did the past end and the present occur, and when does the future start? ... Ordinary photography has one way of seeing only, which is fixed, as if there is a kind of objective reality, which simply cannot be. Picasso ... knew that every time you look there's something different. There is so much there, but we're not seeing it, that's the problem." [5] Hockney's artistic response to his question is most clearly seen in his "joiner" photographs: images in which prints are collaged together to create a piece which is both the sum of its parts, and a series of individual photographs. These assemblages represent Hockney's conviction, informed equally by his interest in Japanese scrolls and Cubist painting, that a means for presenting a sense of time in photography can be achieved by depicting different perspectives within the same piece.  
<http://www.phhfineart.com/articles/sugimoto.html>

urs:  
<http://www.sugimotohiroshi.com/theater.html>

keywords:  
Architectural, Analogue, Apparatus, Art historical, Context, Extruded Light, Historical, Light Art, Optical, Perception, Time, Visualisation

# Hollis Frampton

## Lemon



date: 1969

description:

examines the nature of vision, illusion, spatiality, and film. Unlike Frampton's *Nostalgia*, *Lemon* is silent. It is a minimalist movie, in which a single static shot of a lemon continually changing in appearance as the light on screen changes.

notes:

"As a voluptuous lemon is devoured by the same light that reveals it, its image passes from the spatial rhetoric of illusion into the spatial grammar of the graphic arts."

urls:

<http://filmslie.com/hollis-frampton-lemon-analysis-film-vision>

<https://www.youtube.com/watch?v=6gnz1ply6l4>

keywords:

Analogue, Art historical, Context, Light Art, Perception, Pointless, Time-based/installation

# ILSVRC - Google Research

## Building a deeper understanding of images



date: 2014

description:

The **ImageNet large-scale visual recognition challenge** (ILSVRC) is the largest academic challenge in computer vision,

notes :

The competition has three tracks: classification, classification with localization, and detection.

Superior performance in the detection challenge requires pushing beyond annotating an image with a “bag of labels” -- a model must be able to describe a complex scene by accurately locating and identifying many objects in it.

url:

<http://googleresearch.blogspot.co.nz/2014/09/building-deeper-understanding-of-images.html#uds-search-results>

keywords:

Artificial intelligence, Neural networks, Computational photography, Media, Network, Technology, Visualisation

# Isaac Newton

## Identifies Additive Color Theory



date: 1866

description:

Light refracted with a prism splits white light into its basic component colors: red, orange, yellow, green, blue and violet.

url:

<https://www.tes.com/lessons/fhBII8h96rfxPA/history-of-color-photography?redirect-bs=1>

keywords:

Analogue, Apparatus, Light, Installation, Kinetic, Historical, Materiality, Perception, Colour, Technology, Visualisation

# James Boock

## Sound Revival



date: 201-

description:

Sound Revival is a range of objects and custom 3-Way sound system for a musician to use as tools for sound effects when performing.

The objects use the analogue means of materials and mechanical movements to manipulate sound.

notes:

Sound Revival aims to create a greater understanding of how sound effects are generated and gives visual identity to something unseen as a result of digital technology. Objectifying these effects brings intrigue back into the DJ performance and brings listeners and performer together.

“making the unseeable seeable.”

url:

[http://www.wired.com/2015/07/colorful-contraptions-show-musicians-make-sound-effects/?mbid=social\\_fb#slide-5](http://www.wired.com/2015/07/colorful-contraptions-show-musicians-make-sound-effects/?mbid=social_fb#slide-5)

See also :

<http://jamesboock.com/Strand-Lamp>

keywords:

Aesthetics, Analogue, Apparatus, Artefact , Audio, Interactive, Kinetic, Sound, Technology

# James Clerk Maxwell

## The first permanent color photograph



date: 1861

description:

The first permanent color photograph was taken in 1861 by physicist James Clerk Maxwell who used what is known as the 'color separation' method, shooting three separate black and white photos using three filters: red, green, and blue. He then projected the three images registered with their corresponding filters overlapping them to create a color image.

notes :



url:

<https://www.tes.com/lessons/fhBII8h96rfxPA/history-of-color-photography?redirect-bs=1>

keywords:

Analogue, Apparatus, Colour, Historical, Installation, Kinetic, Light, Technology, Perception, Visualisation

# James Turrell

## Roden Crater



date:  
ongoing / uncompleted

description:  
A controlled environment for the experiencing and contemplation of light.

notes:  
"It is a volcanic crater located in an area of exposed geology, the Painted Desert, an area where you feel geologic time. You have a strong feeling of standing on the surface of the planet."

urls:  
<http://rodencrater.com/>

keywords:  
Installation, Land art, Light Art, Perception, Physicalisation, Time

# Jason Salavon

## Still Life II (Glassware)



date: 2007

description:

Custom software and industrial LCD panel.

notes :

Jason Salavon generates and reconfigures masses of communal material to present new perspectives on the familiar.

see also :

The Smith-Jones Checkerboard 2011

A simple project containing 64 anonymous head-shots, of people with the surname of either Smith or Jones, arranged in a checkerboard pattern.

<http://salavon.com/work/smith-jones-checkerboard/>

<http://salavon.com/work/one-week-skin/>

url:

<http://salavon.com/work/Glassware/>

keywords:

Amalgamation, Auto-generative art, Computational photography, Optical, Time-based/installation, Perception, Visualisation



# Jean Dupuy

## Heart Beats Dust



name /date: Heart Beats Dust – Cone Pyramid, 1968

description:

In a black rectangular box, a window at eye level opens onto a 24' cube which houses the sculpture. The form is created by thrusting dust up into a cone of light. The dust is Lithol Rubine, a brilliant red pigment chosen for its ability to remain suspended in air for long periods. The thrust is achieved by amplified heart-beats from an attached stethoscope or a continuous loop tape recording of heartbeats played on a speaker mounted directly under a tightly stretched rubber membrane upon which the dust sits.

url:

<http://www.medienkunstnetz.de/works/hearts-beats-dust/>

keywords:

Analogue, Apparatus, Archive, Art historical, Colour, Extruded Light, Kinetic, Light Art, Perception, Technology

# Jeff Crossman

## Industrial Light Painting



date: 201-

description:

Industrial Light Painting aims to create high fidelity three-dimensional light paintings of real people. This is done by combining the precision of a computer controlled industrial arm and a RGB LED with a Kinect camera to capture and recreate portraits in depth and color.

notes:

Time lapse / photography / video

url:

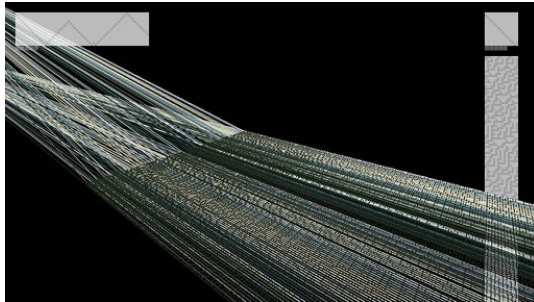
<http://www.jeffcrossman.com/industriallightpainting/>

keywords:

Apparatus, Computational photography, Extruded Light, Light Art, Optical, Perception, Time-based/installation, Visualisation

**Jer Thorp**

## INFINITE WEFT



date:2012

description:

When text becomes data it opens up a phenomenal amount of possibility for insight and creative exploration. The problem is that most Natural Language Processing (NLP) tools are hard to use

notes :

How can a textile function as a digital object?

“data as a verb.”

url:

<http://blog.blprnt.com/blog/blprnt/infinite-weft-exploring-the-old-aesthetic>

keywords:

Array, Data, Data vis & sim, Light, Light Art, Visualisation

# Jesper Jonsson

## Movement of a Moment



date: 2012

description:

I've been working with a dynamic light concept that shows traces of time. A subtle change in the movement of the light shows the presence of time. The luminaire explores how you can show time without the regular context of numbers and not focusing on minutes and hours. The movement is slow and barely visible, but you will experience the change after a while and get a visual reference of the time passing.

notes :

url:

<http://www.jesperj.se/work/movementofamoment/>

keywords:

Perception, Time-based/installation, Time, Light Art, Installation, Light, Movement, Visualisation

# Jessica Eaton

## Cubes for Albers and LeWitt



date: 2011

description:

images are generally composed and colored in-camera on sheets of 4x5 film, through the use of multiple exposures, color separation filters and custom-made masks

notes:

Eaton photographed square wooden blocks of various sizes painted black, white and two shades of gray against similarly mono-chrome backgrounds

<http://www.artinamericamagazine.com/reviews/jessica-eaton/>

"I'm basically exploiting the interior of the camera,"

<http://au.phaidon.com/agenda/art/articles/2014/february/11/a-digital-free-photo-tribute-to-albers-and-lewitt/>

url:

<http://www.artinamericamagazine.com/reviews/jessica-eaton/>

keywords:

Analogue, Color-averaged, Colour, Light Art, Optical, Perception, Visualisation

# Jim Sanborn

## Topographic Projections



date: Notom, Utah, 1995

description:

These images were produced by direct, large format, light projection.

see also :

The Penetrating Radiation Series

since the 1950s, depleted uranium has been used in certain types of artillery shells.

url:

<http://jimsanborn.net/main.html#photo>

keywords:

Analogue, Installation, Land Art, Light Art, Optical, Projection Mapping, Technology, Visualisation

# Joachim Sauter

## Reflective Kinematronic II - Mobility



date: 2010

description:

A grid of one hundred white prosthetic hands actuated by stepper motors, enabling them to rotate around their own axis are mounted on a wall. Each hand is holding a small mirror in a precisely calculated alignment. adjacently positioned bright light source shines on this matrix covering approximately 4 square meters, causing the turning mirrors to cast small moving light spots across the space. What initially seemed like an asynchronous, chaotic pattern of movement soon revealed itself as a complex, computational choreography:

notes :

The installation references a form of communication that has almost been consigned to oblivion: the use of a mirror and sunlight to exchange information over long distances.

see also :

RGBCMYKinetic I 2015

url:

<http://www.joachimsauter.com/en/work/mobility.html>

keywords:

Apparatus, Array, Extruded Light, Kinetic, Light, Light Art, Installation, Physicalisation, Technology

# Joachim Sauter & Dirk Lüsebrink

## The invisible shape of things past



date: 1995

### description:

The Invisible Shapes of Things Past are parametric translations of movies into space. Single frames from a film sequence are lined up in space, according to the camera movement with which they were shot. Through this translation of single frames consisting of single pixels (picture elements) into space, objects of voxels (volume elements) are generated.

### notes:

"Screen based application (1995):

In a virtual representation of a city these film objects are positioned according to the place and time they had been shot in the real city.

Augmented architectural model (1999):

With the help of a Pepper's ghost technique (semi-transparent mirror projection), a film object was augmented onto a physical architectural model.

Film based sculptures (2006):

With the advent of 3D printers making it possible to print virtual objects as material ones, these immaterial film objects left hard drives and screens and are presented as physical sculptures."

### url:

<https://artcom.de/en/project/the-invisible-shape-of-things-past/>

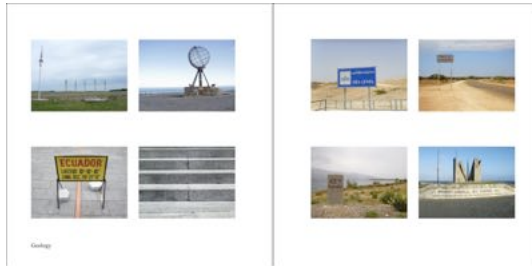
### keywords:

Architectural, Cinematic, Data, Data vis & sim, Materiality, Movement, Physicalisation, Technology, Visualisation



# Joachim Schmid

## Other People's Photographs



date: 2011

description:

Assembled between 2008 and 2011, this series of ninety-six books explores the themes and visual patterns presented by modern everyday, amateur photographers. Images found on photo sharing sites such as Flickr have been gathered and ordered in a way to form a library of contemporary vernacular photography in the age of digital technology and online photo hosting.

notes:

The series Other People's Photographs includes these titles: Airline Meals · Airports · Another Self · Apparel · At Work · Bags · Big Fish · Bird's Eyes · Black Bulls · Blue · Bread · Buddies · Cash · Cheques · Cleavage · Coffee · Collections · Colour · Commodities · Contents · Currywurst · Damage · Digits · Documents · Dogs · Drinks · Encounters · Evidence · Eyes · Faces in Holes · Fauna · Feet · First Shots · Fish · Flashing · Food · Fridge Doors · Gathered Together · Gender · Geology · Hands · Happy Birthday · Hotel Rooms · Images · Impact · In Motion · Indexes · Information · Interaction · Kisses for Me · Lego · Looking · Maps · Mickey · Models · More Things · Mugshots · News · Nothing Wrong · November 5th, 2008 · Objects in Mirror · On the Road · Parking Lots · Pictures · Pizza · Plush · Portraits · Postcards · Purple · Pyramids · Real Estate · Red · Room with a View · Self · Sex · Shadow · Shirts · Shoes · Silvercup · Sites · Size Matters · Space-Time · Statues · Sunset · Surface · Targets · Television · The Other Picture · The Picture · Things · Trophies · Tropic of Capricorn · Various Accidents · Wanted · Writings · You Are Here.

urls:

<https://otherpeoplesphotographs.wordpress.com/>

keywords:

Aesthetics, Array, Context, Media archaeology, Network, Technology, Meta

# Joachim Schmid/ Ed Ruscha

## Other People's Photographs



name /date:

"Twentysix Gasoline Stations, Every Building on the Sunset Strip, Thirtyfour Parking Lots, Nine Swimming Pools, A Few Palm Trees, No Small Fires"

2010

description:

a modern remake of some of Ruscha's famous books, all grouped in one volume. Unlike the original books it relates to, this work was made entirely at my Berlin studio. I didn't visit Los Angeles to make the book and I didn't use a camera either. The camera is out there."

notes:

The camera is out there.

url:

<http://www.foto8.com/live/joachim-schmid-ed-ruscha-joachim-schmid/>

keywords:

Aesthetics, Analogue, Art historical, Context, Historical, Media archaeology, Network, Meta

# Julian Oliver

## Steganography



date: 2014

description:

Using a method known as as steganography, the volatile data is embedded into images matching 'island getaway' and 'beach paradise', a comforting counter-balance to the bleakness and anxiety enshrouding the NSA and GCHQ leaks

notes :

Referred to by computer scientists as a 'cover file', the photograph containing the data payload is not visibly altered, allowing for it to be distributed as tasteful work-and-family-safe material, used as desktop backgrounds or uploaded back to Flickr. At any given point along its journey leaks can be conveniently and privately extracted from images onto a personal computer, using a simple, cross-platform program.

url:

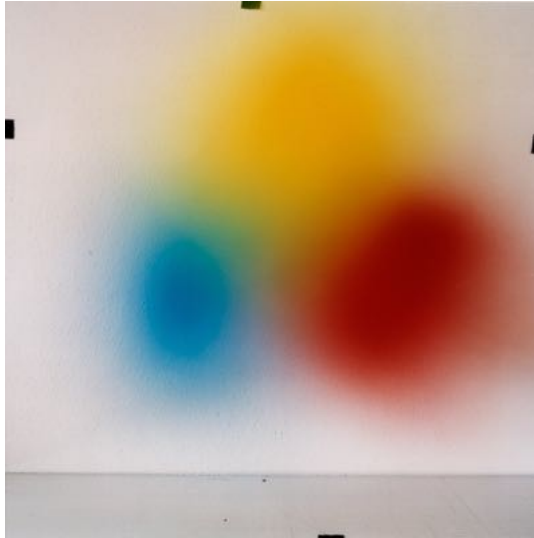
<https://julianoliver.com/cover-me/#8>

keywords:

Context, Media, Network, Neural networks, Technology

# Katja Mater

## Celebrating RGB Colour Space



date: 2008

description:

create stretched exposures while colored object are photographed while being made to move.

notes:

The emphasis is no longer on the catching of a moment, but on the construction of an image during the time the shutter is open.

url:

<http://www.katjamater.com/project/celebrating-rgb-colour-space/work/>

keywords:

Analogue, Colour, Color-averaged, Light Art, Optical, Perception

# Heather Dewey-Hagborg

## 3D Portrait Sculptures using DNA Samples from Strangers



date: 2015

description:

3D portrait sculptures using DNA samples and 3D printer

"Working with the traces strangers unwittingly leave behind, Dewey-Hagborg calls attention to the impulse toward genetic determinism and the potential for a culture of genetic surveillance",

notes:

In Stranger Visions, Dewey-Hagborg creates portrait sculptures from unknown random people: from analyses of genetic material collected in public places, restaurants, bus stops, shops etc. She uses random traces left behind by strangers, hairs, cigarette butts, to construct facial features according to their genetic profile.

urls:

<http://www.3ders.org/articles/20130129-create-3d-portrait-sculptures-using-dna-samples-and-3d-printer.html>

<http://deweyhagborg.com>

keywords:

Materiality, Physicalisation, Portraiture, 3D render

# Kessels Kramer

## USEFUL PHOTOGRAPHY



date: unknown

description:

Photography from sales catalogues, instruction manuals, packaging, brochures and textbooks. Anonymous, because what photographer expects to create a furore with a chicken breast photo? As soon as the images are taken out of their original context and placed in a new one, they can produce interesting results.

notes:

The fourteenth edition of Erik Kessels' found photography series presents a semi-nude detective story: who chopped the heads off all the sunbathers?

url:

<http://www.kesselskramerpublishing.com/useful-photography/>

keywords:

Archive, Context, Historical, Media archaeology, Network, Physicalisation

# Kimchi and Chips

## 483 Lines



date: untitled, 2014

### description:

The artwork 483 lines magnifies this analogue video picture until it is 16 meters wide, and then folds this image several times so that it fits vertically into the gallery space, therein adding oscillations of depth into the image which can be activated by 'tuning' the projected video to match these waves.

### notes:

From World War II up until the recent end of analogue broadcasts, decades of living imagery had been constructed using the NTSC standard. This standard represents a moving image frame as 483 lines of modulated light stacked from the top to the bottom of a television screen, within each line there is an analogue continuum, like the groove on a record player. From Nam Jun Paik to the moon landings, pictures were being represented, archived and seen within this format, until the line made way for the pixel and the digital video revolution.

### url:

<http://www.kimchiandchips.com/#483lines>

### keywords:

Analogue, Apparatus, Array, Computational photography, Grid, Installation, Kinetic, Light Art, Materiality, Optical, Physicalisation, Time-based/installation

# LaMem

## Large-scale Image Memorability



date: 2015

description:

This work demonstrates that one can now robustly estimate the memorability of images from many different classes, positioning memorability and deep memorability features as prime candidates to estimate the utility of information for cognitive systems.

notes:

we introduce a novel experimental procedure to objectively measure human memory, allowing us to build LaMem, the largest annotated image memorability dataset to date (containing 60,000 images from diverse sources).

url :

<http://memorability.csail.mit.edu/index.html>

keywords:

Archive, Context, Cultural Analytics, Data, Data vis & sim, Perception, Technology, Visualisation



# Laszlo Moholy Nagy

## Light space modulator



name /date: 1922-30

### description:

Three moveable metal and/or glass structures arranged on a rotating disc form the core of the Light-Space Modulator. However, it only develops its impact in a darkened space, such as the “cubic box” envisioned by Moholy-Nagy, where it produces spectacular shadow formations in an interplay with coloured and white light.

### notes:

A piece of lighting equipment can be used to arrive at countless optical conclusions, and it seems correct to me that the development of these attempts be continued as planned, as a way to approach the designing of light and movement.

<http://www.medienkunstnetz.de/works/licht-raum-modulator/>

### url:

<http://bauhaus-online.de/en/atlas/werke/light-space-modulator>

### keywords:

Analogue, Apparatus, Art historical, Artefact , Kinetic, Light Art, Media archaeology, Perception, Physicalisation, Pointless, Technology, Time-based/installation

# Lithophane



date:

description:

A lithophane is an etched or molded artwork in thin very translucent porcelain that can only be seen clearly when back lit with a light source. It is a design or scene in intaglio that appears “en grisaille” (in gray) tones.

notes :

3d printable

url:

<https://en.wikipedia.org/wiki/Lithophane>

keywords:

Analogue, Apparatus, Artefact , Art historical, Historical, Light, Media archaeology, Physicalisation

# Nichola Kinch

## Lithophane Electrotachyscope



date: 2014

description:

Machine designed to animate simple loop of illuminated lithophanes.

Animation is water spiraling down the drain Installation shot of "Down the Drain".

notes :

My creative practice revolves around the use of historical and contemporary technologies to explore image and image production as finite and concrete occurrences.

This overarching principle propels a research agenda that spans pre-photographic practices to computer aided design

url:

<http://nicholakinch.com/Lithophane-Electrotachyscope>

keywords:

Analogue, Apparatus, Artefact , Art historical, Historical, Installation, Light, Materiality, Physicalisation

# Liz Deschenes

## ‘Stereographs #1-4 (Rise/Fall)’



date: 2014

description:

Four elongated photograms made at night by exposing photographic paper to moonlight are mounted on Dibond and hung on the walls

notes:

Liz Deschenes takes the medium of photography itself as the subject of her work. Described as “self-reflexive” or “concrete photography,” Deschenes’ practice makes visible the materials, properties, and chemical processes of photography, rather than representing the external world.

urls:

[http://www.nytimes.com/2014/05/16/arts/design/liz-deschenes-stereographs-1-4-rise-fall.html?\\_r=0](http://www.nytimes.com/2014/05/16/arts/design/liz-deschenes-stereographs-1-4-rise-fall.html?_r=0)

<http://massmoca.org/event/liz-deschenes-gallery-4-1-1/?id=960>

keywords:

Analogue, Apparatus, Land art, Materiality, Physicalisation, Time, Visualisation

# Feld + Patrick Bedarf

## Loads



date : 2013

### description:

A kinetic installation that investigates the way we read and understand physical phenomena of embodiment in interaction of space and matter.

Kinetic installation by Feld + Patrick Bedarf is a moving ceiling-mounted screen that supports a moving object, altering the composition of lighting:

### notes :

The installation investigates the way we read and understand physical phenomena of embodiment in interaction of space and matter. Consequently, the audience enters an immersive force field balancing between equilibrium and singularity conditions which enables a narrative loop among observer, volume and physicality.

### url:

<http://www.bedarf.cc/>

<http://prostheticknowledge.tumblr.com/>

### keywords:

Aesthetics, Apparatus, Architectural, Installation, Kinetic, Light Art, Physicalisation, Visualisations:

**Lori Hepner**

**#Crowdsourced #Landscapes**



date: 2002-present

description:

The work is a series of experimental landscapes generated by LEDs that “play” the landscape images over time while I re-photograph them in a different place: my studio. A 6’ column of LEDs re-visualizes my landscape images and allows me to move the LEDs fluidly over long exposures in front of a static camera to freeze traces of the world in new relationships to themselves, as if from a future memory.

notes :

the experiences of future climate change, our perception of the future landscape

url:

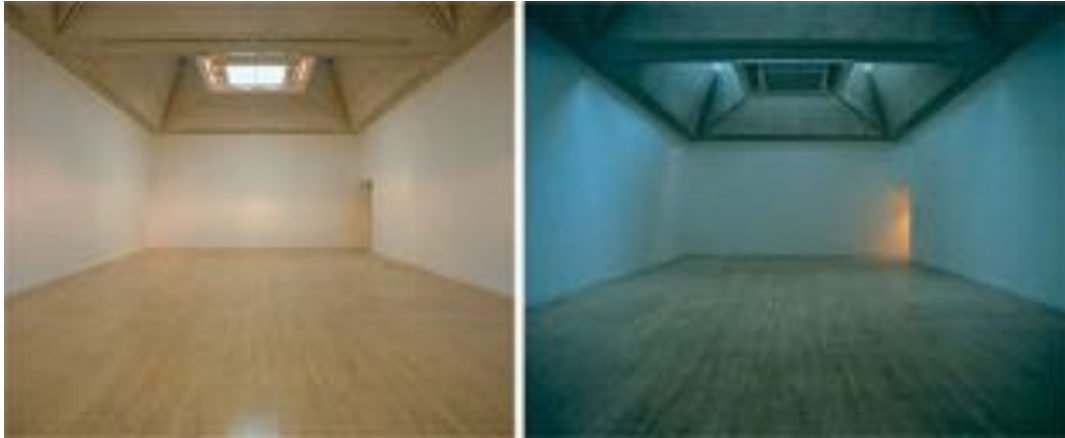
<http://www.lorihepner.com/>

keywords:

Analogue, Colour, Light Art, Movement, Optical, Time, Visualisation

## Martin Creed

### Work No. 227: The Lights Going On And Off



date: 2011

description:

an empty room which is filled with light for five seconds and then plunged into darkness for five seconds.

url:

[www.martincreed.z/site/words/work-no-227-the-lights-going-on-and-off](http://www.martincreed.z/site/words/work-no-227-the-lights-going-on-and-off)

keywords:

Aesthetics, Analogue, Context, Installation, Light Art, Optical, Time-based/installation, Physicalisation, Visualisation

# Matt Richardson

## Descriptive Camera



date: 2012

description:

The basic premise is that you take a photo and the camera spits out a textual description of what it sees. The technology at the core of the Descriptive Camera is Amazon's Mechanical Turk API.

url :

<http://mattrichardson.com/Descriptive-Camera/>

keywords:

Apparatus, Computational photography, Data, Installation, Interactive, Network, Physicalisation, Technology



**Max Frey**

Rotor d/200



date: 2007

description:

Aluminum plate, circuit board, motor,  
LED lamps

notes :

url:

<http://maxfrey.net/index.php/rotor-d200-2006.html>

keywords:

Apparatus, Analogue, Light Art, Colour, Optical, Visualisation

# !MEDIENGRUPPE BITNIK

## OPERA CALLING



date: 2007

description:

«Opera Calling» was an artistic intervention into the cultural system of the Zurich Opera. By means of audio bugs placed within the auditorium of the local opera house, the outside public is given access to the performances on stage. The performances are retransmitted to the public not through broadcasting, but by telephoning each person individually.

notes :

From March 9th to May 26th 2007, audio bugs, hidden in the auditorium, transmitted the performances of the Zurich Opera to randomly selected telephone land-lines in the city of Zurich. In proper style of a home-delivery-service, anyone that picked up their telephone, was able to listen to the on-going opera performances for as long as s/he wanted through a live connection with the audio bug signal. As soon as the listener would hang up, the telephone machine would call the next random number.

url:

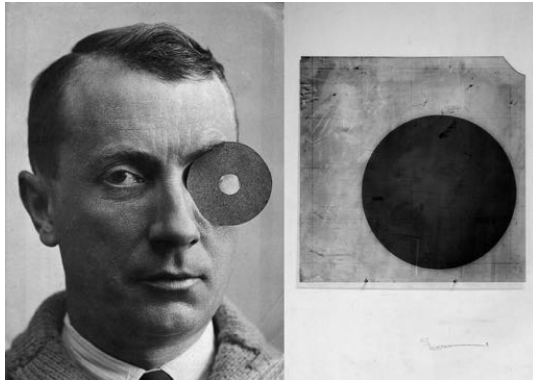
<https://www.bitnik.org/o/>

keywords:

Context, Data, Installation, Interactive, Media, Network

# !MEDIENGRUPPE BITNIK

## SAME SAME



date: 2015

description:

WATCHING ALGORITHMS - CABARET VOLTAIRE EDITION

«Same Same» is an online performance on the online presence of the Cabaret Voltaire, birthplace of Dada in Switzerland. A software bot replaces all images on the website with algorithmically similar images.

notes :

«Same Same» counterposes contemporary surveillance technologies with historic Dada art works. It shows contemporary image recognition at work, making the algorithm, which is becoming more and more constitutive for what and the way we see, observable.

url:

<https://www.bitnik.org/samesame/>

keywords:

Art historical, Context, Media, Network, Media archaeology, Technology

# Niklas Roy

## Electronic Instant Camera



date: 2011

description:

My 'Electronic Instant Camera', is a combination of an analog b/w videocamera and a thermal receipt printer.

notes :

The camera doesn't store the pictures on film or digital medium, but prints a photo directly on a roll of cheap receipt paper while it is taking it. As this all happens very slow, people have to stay still for about three minutes until a full portrait photo is taken.

url:

[http://www.niklasroy.com/project/103/electronic\\_instant\\_camera](http://www.niklasroy.com/project/103/electronic_instant_camera)

keywords:

Analogue, Apparatus, Artificial intelligence, Computational photography, Interactive, Technology, Visualisation

# Olafur Eliasson

## Beauty



date: 1993

description:

A punctured hose sprays a curtain of fine mist from the ceiling of a darkened space. Set at an oblique angle, a spotlight shines through the water droplets. From specific locations, depending on the height and position of the viewer, a rainbow is visible. It grows and fades in intensity as the viewer moves towards and away from the falling water.

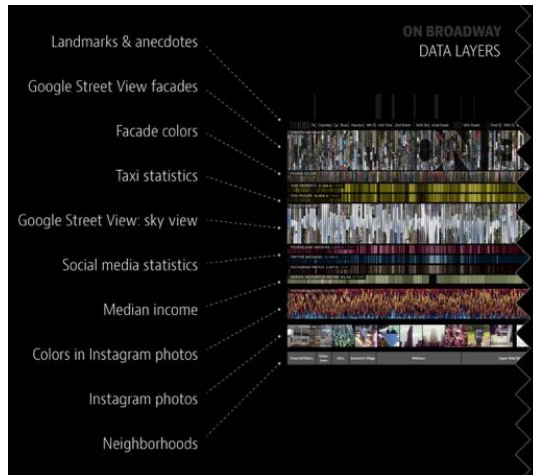
<http://olafureliasson.net/archive/artwork/WEK101824/beauty>

keywords:

Analogue, Apparatus, Light, Installation, Kinetic, Materiality, Technology, Physicalisation, Visualisation

# on-broadway.nyc

Daniel Goddemeyer, Moritz Stefaner,  
Dominikus Baur, and Lev Manovich.



date: 2016

description:

The interactive installation ON BROADWAY represents life in the 21st century city through a compilation of images and data collected along the 13 miles of Broadway that span Manhattan.

Many cities make available datasets and sponsor hackathons to encourage creation of useful apps using their data. Locals and tourists post messages and media which include their locations on Twitter, Instagram, and other social networks. How can we use these new information sources to represent the 21st century city?

notes :

The artwork which directly inspired our project is Every Building on the Sunset Strip by Edward Ruscha (1966). It is an artist book which unfolds to 25 feet (8.33 meters) to show continuous photographic views of both sides of a 1.5 mile section of Sunset Boulevard.

url:

<http://on-broadway.nyc/>

keywords:

Amalgamation, Array, Cultural Analytics, Data vis & sim, Grid, Media, Network, Neural networks, Visualisation

# onformative

## Google Faces



date : 2013

description:  
searching for faces on earth

An algorithmic robot hovering over the world to spot portraits hidden in the topography on planet earth. The custom application works autonomously to process vast amounts of satellite images through Google Maps by using a face detection algorithm. This endless cycle produces interesting results for reflection on the natural world.

notes :  
The tendency to detect meaning in vague visual stimuli is a psychological phenomenon called pareidolia.

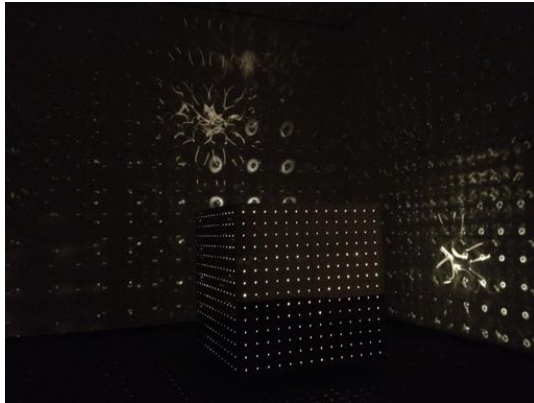
»Google Faces« explores how the cognitive experience of pareidolia can be generated by a machine.

url:  
<http://onformative.com/work/google-faces?p=lab/googlefaces/>

keywords:  
Artificial intelligence, Auto-generative art, Data, Data vis & sim, Network, Neural networks, Perception, Visualisation

# Otto Piene

## Lichtraum (Light Room)



date: 1960

description:

A light based installation in to a space or deep sea like world.

The exhibition is set in a dark room with two alien craft like mirrored cubes which project light and sound bouncing moving patterns about the space.

notes :

ZERO

The group rested on the ideal of “pure light”. Heinz Mack and Otto Piene saw themselves as an artistic movement inspired by the spirit of change and representing as a new foundation “that should serve as ground zero and starting-point for a fresh awareness of our surroundings”. They developed a new visual and formal language: light and movement moved to the centre of their artistic work, they reduced everything figurative. Their quest has been directed ever since to a purist concentration on the clarity of pure colour and the dynamic vibration of light in space. “Kinetic light art” is the magic word that materialises in the form of discs of light, spheres of light, whole rooms of light.

<https://www.goethe.de/en/kul/bku/20372381.html>

url:

<http://chrls.com/blog/2014/10/lichtraum-light-room-by-german-artist-otto-piene-1960/>

keywords:

Apparatus, Analogue, Art historical, Light, Light Art, Installation, Historical, Kinetic, Visualisation



# Pablo Garcia

## Profilograph (After Muybridge)



date: 2013(?)

### description:

Rendering of Muybridge Plate 624 fully extruded through all twelve frames

Caught in between two paradigms, I found myself nurturing two separate impulses: deep historical research into old, forgotten technologies and inquiry into new and future media

### notes:

To capture the action, Muybridge used twelve still cameras at regular intervals to capture one cycle of a horse's gallop. By cinema standards, this is quite sparse. There is a lot of data missing between each frame in comparison to the 30 frames per second of contemporary video.

### see also :

<http://www.pablogarcia.org/index.php?/projects/profilograph-after-duerer>

### url :

<http://www.pablogarcia.org/projects/profilograph-after-muybridge>

### keywords:

Aesthetics, Analogue, 3D render, Art historical, Context, Installation, Materiality, Movement, Pre cinema, Technology, Physicalisation

# Paleo Camera



date:

description:

"Small random holes in Paleolithic hide tents coincidentally and occasionally created camera obscuras, which projected moving images inside the dwelling spaces, triggering profound spiritual, philosophical, and aesthetic advances."

notes:

The people inside the tent could not see the living animal outside at the same time as they saw its image inside. The image and the object were in opposite directions from each other. In that perceptual moment the animal on the wall was independent of any real object. It was a representation, a two-dimensional approximation of the physical world.

url:

<http://www.paleo-camera.com/theorypage.htm>

keywords:

Analogue, Apparatus, Art historical, Historical, Light, Media archaeology, Optical, Perception, Technology, Time

# Penelope Umbrico

## 229 Mini Photo Labs For Sale on the Internet



date: 2011

description:

"I collected these images of out-of-commission photo labs for sale from various internet auction sites. Instead of representing the speed and economy we have come to associate with these labs, here they are monster-like objects, barely fitting into the photographic frame containing them — they seem to be pushing up against the edges, too physically big and awkward for the swiftness they are supposed to represent. As digital representations on the internet, collected and printed here, each one of these images of photo labs has entirely by-passed the bulky print machine it depicts."

url:

<http://www.penelopeumbrico.net/onehourphoto/onehourphoto.html>

keywords:

Aesthetics, Apparatus, Array, Context, Network, Media archaeology, Technology

# Pete Ashton

## Sitting In Stagram



date: 2015

description:

Sitting In Stagram re-appropriates Alvin Lucier's seminal performative work *I Am Sitting In A Room* (1969), exploring remix culture and the aesthetics of image copying on Instagram.

notes:

Since Instagram has no mechanic for reposting (unlike, say, Tumblr), users who want to “regram” an image take a screen capture and post it as a new image. Each reposting introduces generational loss as the image is transcoded from PNG to JPG and optimised by Instagram. While initially irrelevant, the loss adds up and the image degrades. (See *The Triumphant Rise Of The Shitpic* for more context.)

url:

<http://art.peteashton.com/art/i-am-sitting-in-stagram/>

keywords:

Aesthetics, Array, Artefact , Auto-generative art, Context, Media archaeology, Network, Technology, Visualisation

# Philo T. Farnsworth

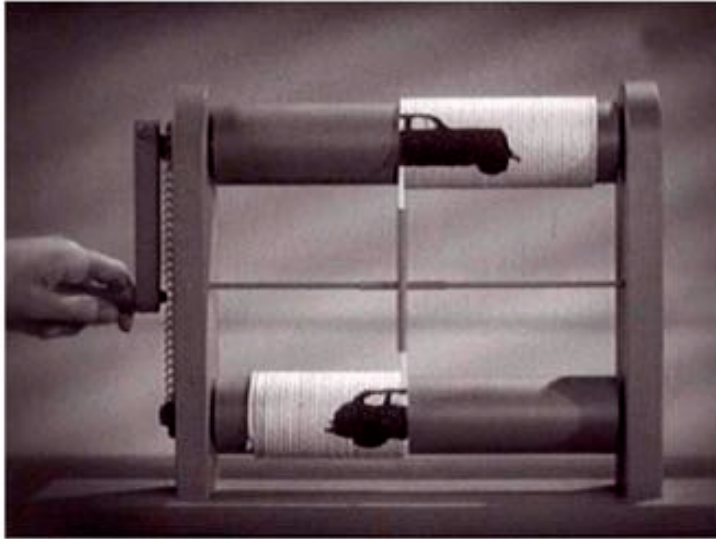


Fig. 1. Illustrative representation of serial image transmission in a contemporary educational film

date: 2010

description:

At fourteen, while tilling a potatoe field on his family's farm in Idaho, Farnsworth saw the neat, parallel lines of furrows in front of him, and it occurred to him - in a single, blinding moment - that a picture could be sent electronically through the airwaves in the same way, broken down into easily transmitted lines and then reassembled into a complete picture at the other end.

notes :

On his wedding night, he seized his bride by the shoulders and looked at her with those bright-blue eyes. 'Pemmie,' he said. 'I have to tell you. There is another woman in my life—and her name is Television.' "

url:

Gladwell, Malcolm: The Televisionary. The New Yorker Magazine (Issue May 27, 2002) 112

keywords:

# phototrails

Nadav Hochman, Lev Manovich.



date: 2013

description:

Phototrails is a research project that uses media visualization techniques for exploring visual patterns, dynamics and structures in user-generated photos.

notes :

What insights can we gain from this type of massive collective visual production?

The project is part of the emerging research field of Cultural Analytics which uses computational methods for the analysis of massive cultural datasets and flows.

Using APIs provided by popular media sharing services, we crawled millions of publicly shared photos and their metadata. We analyze every image and then visualize groups of images together using our software tools.

Explore our visualization layouts and techniques that use different aspects of the data in order to present it in new and revealing ways.

url:

<http://phototrails.net/>

keywords:

Amalgamation, Array, Cultural Analytics, Data vis & sim, Grid, Media, Network, Neural networks, Visualisation

# studio moniker

## Pointer Pointer



date:

description:

No matter where you put your computers cursor at PointerPointer.com someone will point to it. Pointer Pointer is an experiment in interaction, a celebration of the disappearing mouse pointer and a rumination on Big Data.

notes:

The site uses a Voronoi grid, which looks like a map with lots of little shapes of bright colors on it.

"In this case, the XY coordinates are going into the grid system, and this Voronoi grid comes back to find out what shape my cursor is in and matches that to one of the jpegs,"

url:

<http://www.pointerpointer.com/>

keywords:

Auto-generative art, Media, Meta, Network, Pointless, Interactive



# Muth

## PolaPi



date: 2016

description:

Instant-Printing-Point-and-Shoot camera. Or yet another Polaroid like.

notes :

The aim of this camera is not to make good quality or useful prints. Its give monochrome and tiny prints, but cheap and within few seconds.

url:

<https://hackaday.io/project/7176-polapi>

[hackaday.io](https://hackaday.io)

81 Projects tagged with "camera"

<https://hackaday.io/projects/tag/camera>

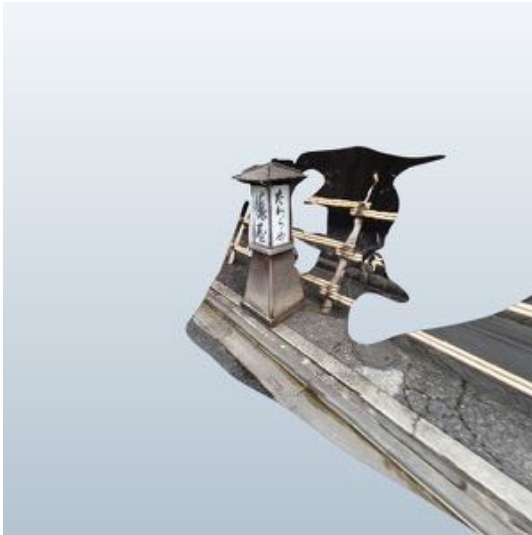
keywords:

Apparatus, Artefact , Computational photography, Context, Cultural Analytics, Media, Meta, Technology



# Kazu Otani

## Lantern of Tawara-ya Japanese Hotel, Kyoto



date:

description:

Tawara-ya is Jobs's favorite Japanese style hotel in Kyoto. This is it's lantern signboard.

notes:

incomplete artefacts

urls:

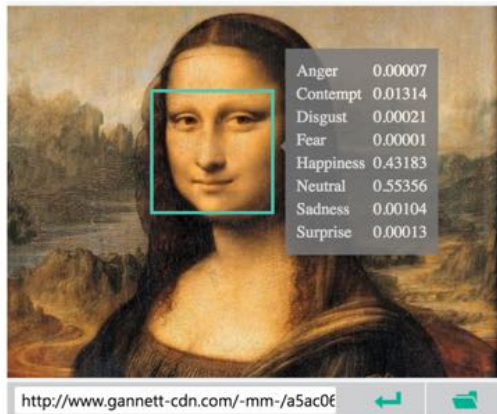
<http://www.123dapp.com/obj-Catch/Lantern-of-Tawaraya-Japanese-Hotel-Kyoto/908660>

keywords:

Artefact - distortion, deformity, Auto-generative art, Data vis & sim, Perception, Technology, Visualisation

# Project Oxford

## Vision application program interface



description:

Algorithms for face detection and recognition.

Face detection with attributes extraction and face recognition.

### Computer Vision API

The Computer Vision API are a collection of state-of-the-art image processing algorithms designed to return information based on the visual content, and to generate your ideal thumbnail.

### Face API

Microsoft's state-of-the-art cloud-based face algorithms to detect and recognize human faces in images. Your mobile and PC Apps will be powered with face capabilities

### Emotion API

Microsoft's cutting edge cloud-based emotion recognition algorithms let you build more personalized apps. The API identifies emotions in the wild based on facial expressions that are universal.

### Video API

Microsoft's state of the art video processing algorithms that enable you to analyze and automatically edit videos. Your apps will be powered with video intelligence.

url:

<https://www.projectoxford.ai/>

keywords:

Artificial intelligence, Cultural Analytics, Data, Media archaeology, Neural networks, Network, Technology

# Rafael Lozano-Hemmer

## Pulse Room



date: 1960

description:

This room is an interactive installation consisting of one to three hundred clear incandescent light bulbs, which are 300 W each and hung from a cable at a height of three meters. The light bulbs are distributed over the exhibition room, filling it completely. An interface placed on a side of the room has a sensor that detects the heart rate of participants. When someone holds the interface, a computer detects his or her pulse and immediately sets off the closest bulb to flash at the exact rhythm of his or her heart. The moment the interface is released all the lights turn off briefly and the flashing sequence advances by one position down the queue, to the next bulb in the grid. Each time someone touches the interface a heart pattern is recorded and this is sent to the first bulb in the grid, pushing ahead all the existing recordings.

see also :

Tape Recorders - (data visualisation)

Rows of motorised measuring tapes record the amount of time that visitors stay in the installation. As a computerised tracking system detects the presence of a person, the closest measuring tape starts to project upwards. When the tape reaches around 3 meters high it crashes and recoils back

[http://www.lozano-hemmer.com/tape\\_recorders.php](http://www.lozano-hemmer.com/tape_recorders.php)

see also:

Voice Array, Voice Tunnel

url:

<http://www.lozano-hemmer.com/videos.php?id=22&type=Projects>

keywords:

Apparatus, Light, Light Art, Installation, Historical, Kinetic, Interactive, Visualisation

# random-international

## Study Of Time / I



date: 2011

description:

takes light, its presence and absence, as a medium for the representation of time.

notes :

the installation can explore and re-interpret the age-old relation between falling light, shadow and time.

see also :

Study of Sunlight Video, 2012

Study Of You

Temporary Printing Machine

url:

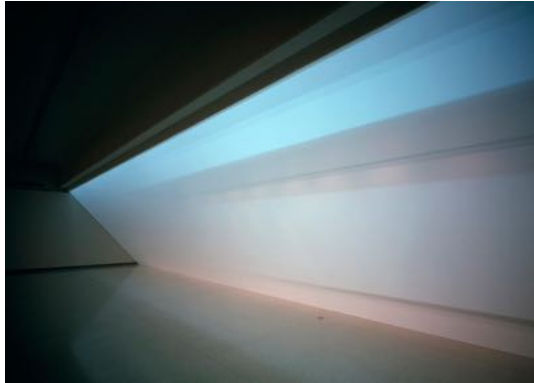
<http://random-international.com/work/so/>

keywords:

Analogue, Apparatus, Light Art, Installation, Time, Physicalisation, Visualisation

# Robert Irwin

## Untitled, 1971



name /date: Untitled, 1971

description:

'Seeing is Forgetting the Name of the Thing One Sees'

untitled, 1971, synthetic fabric, wood, fluorescent lights, floodlights,  
96 x 564" approx., Collection Walker Art Center,

notes:

His seemingly simple architectural interventions are philosophically rich exercises in the physical, sensory and temporal experience of space. Throughout the 1970s, he repeatedly worked with translucent scrim, a fabric routinely used in theatrical stage productions. Appearing opaque unless lit from behind

url:

<http://arttattler.com/archiverobertirwin.html>

keywords:

Aesthetics, Analogue, Architectural, Art historical, Colour, Extruded Light, Installation, Light Art, Materiality, Optical, Perception, Physicalisation

# Robert Seidel

## Tearing Shadows



date : 2013

description:

Enter the void. Decipher dark from light, temporal from physical, motion from stasis. Robert Seidel's recent installation at 401 contemporary encompassed video projection, sound, and solid-state artwork in an absorbing ode to the outer reaches of consciousness.

notes :

"I wanted to engagingly dissolve the sculptural space."

url:

<http://www.artslant.com/ny/articles/show/35528>

keywords:

Aesthetics, Apparatus, Installation, Kinetic, Light Art, Projection Mapping, Physicalisation, Visualisation

# Robert Wilson

## VIDEO PORTRAITS



date: 2013

description:

The medium is HD video but the form blurs time-based cinematography with the frozen moment of still photography.

url:

<http://www.robertwilson.com/video-portraits/>

keywords:

Cinematic, Media, Movement, Portraiture, Time-based/  
installation, Visualisation

# Ruben van der Vleuten

## From A to B



date: 2013

description:

Time-lapse: Package shipped with a hidden camera

notes:

He was inspired, in part, by Blu Dot's Real Good Experiment a few years back, when the company left 25 of its signature chairs scattered around New York; each was secretly GPS-tagged so they could be traced back to their happy new homes and owners for a pretty clever video. "It got me wondering if I could implement the same idea to find more about processes normally hidden from me,"

url:

<http://www.rubenvandervleuten.com/AtoB.html>

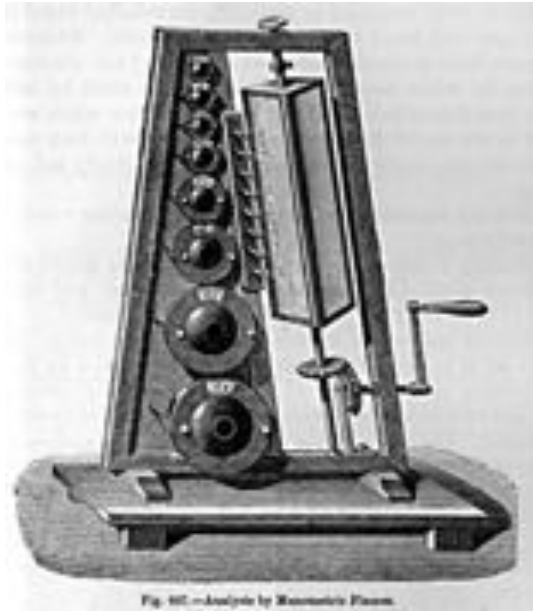
keywords:

Apparatus, Context, Data, Kinetic, Movement, Time-based/  
installation



# Rudolph Koenig

## Koenig's Manometric Flame Apparatus



date: 1862

description:

A laboratory instrument invented in 1862  
used to visualize sound waves

notes :

The object in image 1 consists of ten Helmholtz resonators arranged in a wooden frame, and was acquired from the Wheatstone Laboratory, King's College London, in the 1980s

url:

<http://www.hps.cam.ac.uk/whipple/explore/acoustics/rudolphkoenig/koenigsanalyzer/>

<http://physics.kenyon.edu/EarlyApparatus/Acoustics/Manometric/manometric.html>

keywords:

Analogue, Apparatus, Light, Installation, Historical, Kinetic, Technology, Interactive, Visualisation

# Scott Hessel

## Mulholland Drive



date: 2005

description:

notes :

is a light representation of data

<http://classic.rhizome.org/artbase/artwork/32221>

see also:

Sustainable Cinema No. 1: The Image Mill  
Falling water powers a moving image.

Sustainable Cinema No. 4: Shadow Play

url:

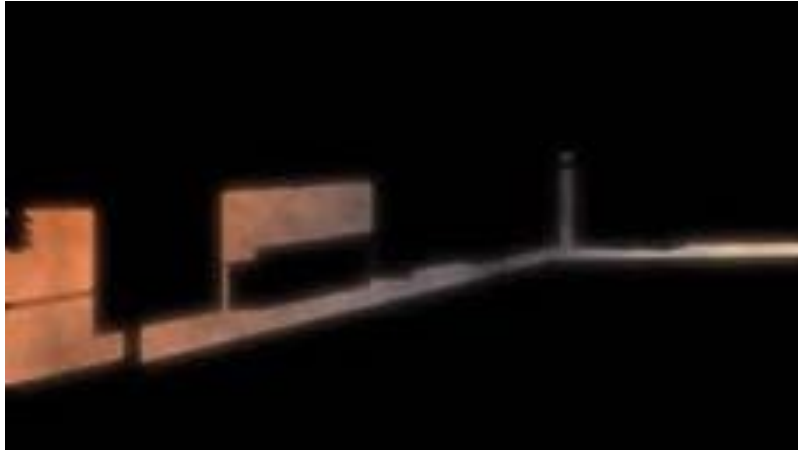
[http://www.dshessels.com/#!/en\\_project/Mulholland-Drive](http://www.dshessels.com/#!/en_project/Mulholland-Drive)

keywords:

Apparatus, Cinematic, Installation, Historical, Interactive, Light,  
Kinetic, Time-based/installation, Visualisation

# semiconductor

## play of light



date: 2014

### description:

Play of Light is a site specific, two channel moving image installation commissioned for the newly renovated brutalist Chichester Festival Theatre. Incidental in nature, this art work explores Moya and Powell's architectural vision through animated sequences of projected light and shadows.

### notes:

The digitally animated shadows are projected onto two interior rough concrete walls, which mirror each other. Each wall has its own distinct projection which explores each scene from a differing angle. The shadows appear as if they are being cast in situ: echoing elements of the surrounding environment, they fall incidentally on the walls.

### url:

<http://semiconductorfilms.com/art/playoflight/>

### keywords:

Apparatus, Architectural, Kinetic, Light Art, Physicalisation, Projection Mapping, Technology, Time-based/installation

# Shinichi Maruyama

## Nude #1



name /date: Nude #1, 2012.

description:

The figure in the image, which is formed into something similar to a sculpture, is created by combining 10,000 individual photographs of a dancer.

notes:

Relates to Anton Bragaglia

url:

<http://www.shinichimaruyama.com/>

keywords:

Extruded Light, Kinetic, Light, Perception, Time, Visualisation

# Simon Pyle

## Surveillance Camera Obscura



date: 2014

description:

What does surveillance mean when it is applied to nature photography?

However, this surveillance camera pans across the landscape and produces no record of what it reproduces.

notes:

The camera obscura is a simple device that still evokes wonder at way that the lens and light interact. This pleasurable way of looking presents itself in the form of a surveillance device with all the attendant contemporary anxieties of seeing and being seen.

url:

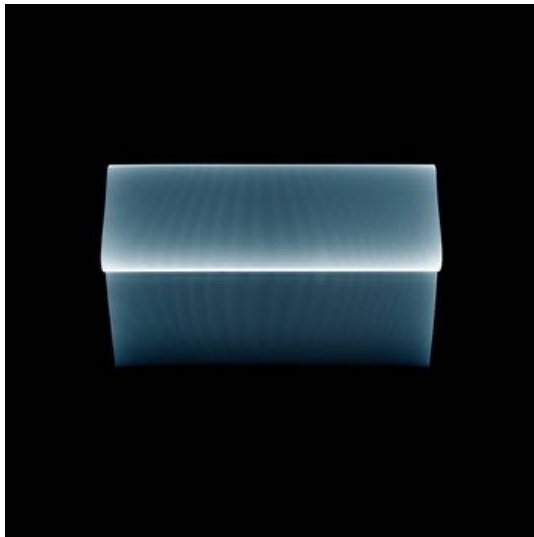
<http://www.simonpyle.com/Surveillance-Camera-Obscura>

keywords:

Analogue, Apparatus, Installation, Media archaeology, Optical, Perception

# Stephan Tillmans

## Luminant Point Arrays



date: 2010

description:

"A photographic series of old tube televisions taken at the very moment they are switched off

The TV picture breaks down and is abstracted to its essential element: light. This abstraction also results in the collapse of the external reference. Each of these photographs is from a different TV, but it's also the length of exposure, timing, and time the TV has been running before the photo is taken that affects the results."

url:

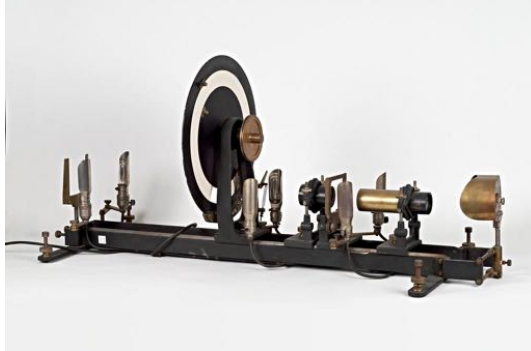
<http://stephantillmans.com/luminant-screen-shapings>

keywords:

Aesthetics, Array, Context, Light Art, Time, Technology, Visualisation

# Tachistoscope

## Rapid-viewing device 2



date: 1859

description:

A tachistoscope is a device that displays an image for a specific amount of time.

notes :

The first tachistoscope was originally described by the German physiologist A.W. Volkmann in 1859.[1] Samuel Renshaw used it during World War II in the training of fighter pilots to help them identify aircraft silhouettes as friend or foe.

url:

<https://en.wikipedia.org/wiki/Tachistoscope>

keywords:

Analogue, Apparatus, Historical, Art historical, Interactive, Perception, Optical, Time, Visualisation

**team-lab**

## Vortex of Water Particles



date: 2014

description:

A three dimensional rock was created in a fictional computer environment and water was poured on to it. The water is expressed as continuum of hundreds of thousand of water particles that flow in accordance with how the computer calculates the interaction of the particles. Once an accurate water flow simulation has been constructed 0.1% of the water particles are selected and lines drawn in relation to them

notes :

The waterfall video artwork is created in three-dimensions in a three-dimensional space in line with the concept of what we call "Ultra Subjective Space" – the logical structure of spatial awareness of ancient Japanese.

url:

<https://www.team-lab.net/works/vortexofwaterparticles>

keywords:

3D, Computational photography, Technology, Light, Light Art, Perception, Projection Mapping, Visualisation



# Ed Pingol

## The Cullinator



name /date:  
ongoing / uncompleted

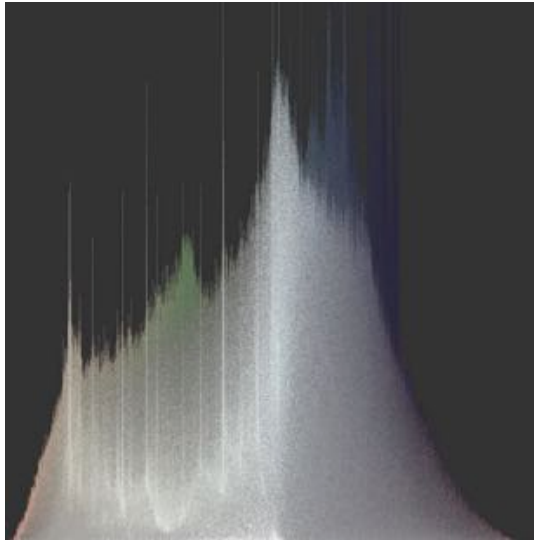
description:  
A game controller to cull & sort files in lightroom

url:  
<http://cullinator.com>

keywords:  
Computational photography, Context, Interactive, Technology

# Damon Crockett

## The Slice Histogram



date: 2015

description:

How to Visualize Colors in Big Image Data

'media visualizations' - visualizations of image data whose primary plot elements are the images themselves. Media visualizations are special cases of glyph visualizations, a class of statistical plots that present data points as glyphs - icons that carry information by way of their non-relational characteristics, things like size, shape, color, etc.

notes :

The mere presence of the information in the visualization does not guarantee its being readable for the viewing subject.

url:

<http://lab.softwarestudies.com/2015/09/how-to-visualize-colors-in-big-image.html>

keywords:

Meta, Media, Data, Data vis & sim, Technology, Visualisation

# Thibault Brunet

## Vice City



date: 2016

description:

The Vice City collection deals with landscape. In the video games, it holds a secondary role, set as a simple background for the plot. The slow motion of my walks led me to explore the spaces that are usually forgotten by players. The pictures show side spaces, barren and industrialized areas.

url:

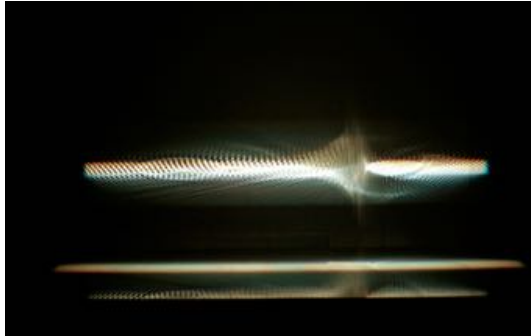
<http://thibaultbrunet.fr/portfolio/vice-city>

keywords:

Aesthetics, Context, Land art, Network, Technology, Visualisation

# Thomas McIntosh

## Ondulation



date: 2009

description:

Ondulation is a composition for water, sound and light. It employs a two ton pool of water which is set into motion using sound. Beams of light are projected onto the surface of the water and reflect onto a projection screen. The pool becomes a "liquid mirror" that is slowly sculpted into perfect three-dimensional expressions of a musical composition. In turn, the light on the screen is modulated by the movement of the water into complex visual forms which maintain perfect congruity with their musical source. The resulting fusion of sensory experiences is a temporal sculpture: a construction of water, sound and light which evolves as a composition in time.

notes :

url:

<http://www.ondulation.net/index.html>

keywords:

Apparatus, Artefact , Analogue, Light Art, Installation, Physicalisation, Visualisation

# Thomas Wilfred

Lumia, the art of light.



date: Clavilux Jr, ca. 1930.

description:

Thomas Wilfred [Danish-American; 1889 - 1968] was a pioneer in developing what he called Lumia, the art of light.

Conventional artists manipulate materials [stone, pigments, etc.]. These 'objects' reflect light into our eyes to form the images they want us to see. If there were no light, we could not experience their art. In contrast, Wilfred 'sculptured' light directly.

notes:

A Wilfred Lumia work is a composition of light, color, and form which changes slowly with time. It exhibits a very wide range of light intensity and a broad spectrum of delicate colors and shapes. These are extremely difficult to record and impossible to "play back" with fidelity, even using a high quality monitor. Thus you cannot

url:

<http://www.lumia-wilfred.org/content/intro.html>

keywords:

Analogue, Apparatus, Archive, Art historical, Colour, Extruded Light, Kinetic, Light Art, Perception, Technology

# United Visual Artists

## Always / Never



date: 2012

description:

Always/Never is the result of UVA's recent investigations of the perception of time.

Always/Never is a grid of pyramidal elements inspired by the sundial, each passing through time at a different rate.

Changing patterns of light and shadow create the illusion of a fluid surface; shifting combinations of colours from nature recall different times of day.

notes :

Powder Coated Steel, Timber, LED, Code  
1750 x 2900 x 174 mm

url:

<https://uva.co.uk/work/always-never>

keywords:

Apparatus, Analogue, Light, Light Art, Time, Time-based/  
installation, Physicalisation, Visualisation

# UPI 16-S

## Photos Transmitted



date: 1970s

description:

United Press International UPI Model 16-S, which scanned photos and then transmitted them using a telephone line.

notes :

First, you place a print on the drum and start the transmitter. The drum then rotates at a consistent speed while a scanning beam would move slowly across the photo, scanning one line at a time. Transmitting the analog signal required a connection to a phone line.

url:

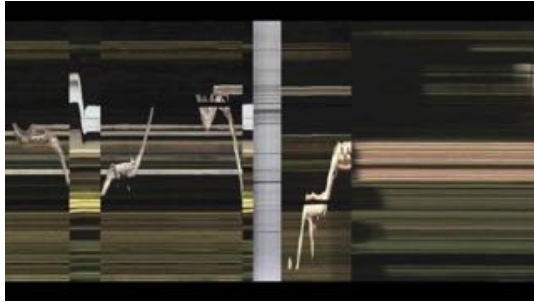
<http://petapixel.com/2015/07/26/this-is-how-press-photos-were-transmitted-back-in-the-1970s/>

keywords:

Analogue, Apparatus, Data, Historical, Materiality, Media archaeology, Physicalisation, Optical, Technology, Visualisation

# Kevin L. Ferguson

## Volumetric Cinema



date: 2015

### description:

“Volumetric Cinema” demonstrates the possibilities for “looking at film sideways,” taking the film scene as an object not just of two spatial dimensions rushing past in time, but as a spatiotemporal cube that can be manipulated, offering new methods of investigation into our understanding of moving image techniques such as editing, camera movement, and blocking.

### notes:

My research begins similarly by treating films as tomograms, using ImageJ’s tools to manipulate film scenes as three-dimensional volumes and to measure (and manipulate) a scene’s color and brightness values

### urls:

<https://vimeo.com/119790662>

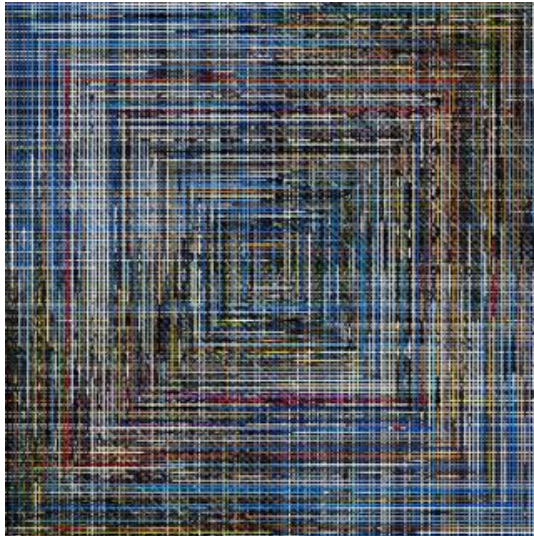
### keywords:

Apparatus, Cinematic, Technology, Time, Visualisation



# HUSH

## Weevmee



date :

description:

A Woven Digital Image

We created Weevmee™, a web application that aggregates your personal Instagram photos (or those that you search for) into custom, never-ever-ever-repeated, artistic images

see also :

Lenses - Light & Sound Installation

We created an interactive audiovisual installation that uses prisms, light and sound to represent the interplay of ideas between our designers, architects, musicians, and technologists. By arranging the prisms across a surface designed to bend and reflect light, users build a glowing, colorful visual array.

<http://heyhush.com/work/lenses/>

url:

<http://heyhush.com/work/weevmee/>

keywords:

Array, Data, Data vis & sim, Light, Sound, Media, Network, Visualisation

# Yang Yongliang

## The Night of Perpetual Day



date: 2014

description:

Yang exploits a connection between traditional art and the contemporary, implementing ancient oriental aesthetics and literati beliefs with modern language and digital techniques. His work as an expanding meta-narrative that draws from history, myth and social culture, and plays out in the context of the city and its ever-changing landscapes.

url:

<http://www.yangyongliang.com/video.html>

keywords:

Light, Perception, Time, Visualisation

# keyword count

alphabetical			frequency	
Aesthetics	17		Installation	87
Amalgamation	3		Visualisation	76
Analogue	52		Light	68
Apparatus	58		Technology	59
Architectural	8		Apparatus	58
Archive	8		Time	53
Array	13		Analogue	52
Art historical	20		Light Art	48
Artefact	13		Perception	38
Artificial intelligence,	8		Physicalisation	38
Audio	5		Media	33
Auto-generative art	12		Optical	30
Cinematic	7		Historical	29
Color-averaged	3		Data	27
Colour	19		Kinetic	26
Computational photography	21		Context	25
Context	25		Network	25
Cultural Analytics	9		Computational photography	21
Data	27		Movement	21
Data vis & sim	16		Art historical	20
Extruded Light	13		Colour	19
Grid	8		Materiality	19
Historical	29		Time-based/installation	19
Installation	87		Aesthetics	17
Interactive	16		Data vis & sim	16
Kinetic	26		Interactive	16
Land Art	5		Media archaeology	16
Light	68		Array	13
Light Art	48		Artefact	13
Materiality	19		Extruded Light	13
Media	33		Auto-generative art	12
Media archaeology	16		Meta	11
Meta	11		3D	10
Movement	21		Cultural Analytics	9
Network	25		Sound	9
Neural networks	8		Architectural	8
Optical	30		Archive	8
Perception	38		Artificial intelligence,	8
Physicalisation	38		Grid	8
Portraiture	2		Neural networks	8
Pre cinema	2		Cinematic	7
Projection Mapping	6		Projection Mapping	6
Sound	9		Audio	5
Technology	59		Land Art	5
Time	53		Amalgamation	3
Time-based/installation	19		Color-averaged	3
Visualisation	76		Portraiture	2
3D	10		Pre cinema	2

**Steve Rood**  
Shadow Machine Project

March 2016