

Steve Rood

Shadow Machine Project

April 2016

referent concepts
categorisation and keywords

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concepts

catalogue of referent concepts

keywords

categorisation and keyword development

the issue

How do contemporary
technologies and contexts
enable new forms of photographic practice?

the issue

In which ways can contemporary technologies and contexts enable the development of new visual **descriptions of time** within the realm of visual media?

the issue

What valuable, and as yet un-utilised insights, are to be gained from reassessing specific **historical technological transitions** and reasserting them into a **contemporary context**?

the issue

What are the advantages of **digitised cultural heritage** becoming available for cultural processes to be analysed in new ways?

the photographic

Since the photographic medium has been digitised,
a **fixed definition** of the term “photography” has
become **impossible**.

Michael Fried

Why Photography Matter Art As Never Before
2008

Photograph*

the photographic

Digital technology does not subvert “normal”
photography because “**normal**”
photography **never existed**.

Lev Manovich

Photograph*, Digitisation

the photographic

Photography as a separate entity might well be on the verge of disappearing forever, even as the photographic as a rich vocabulary of conventions and references lives on in ever-expanding splendour. In short, it appears we have already entered a **“post-photography,”** that moment after but not yet beyond photography.

Geoffrey Batchen

Each Wild Idea: Writing, Photography, History
2000

Photograph*, Technology

the photographic

Photography may have been its most
paradoxical invention:

a technological breakthrough for holding onto the past,
a technology always rushing forward,
always looking backward.

Rebecca Solnit

The Annihilation of Time and Space
2003

Perception, Temporality, Time, Historical

the photographic

computing's future, like photography's, is already inscribed in its past.

What is demanded from us is a **new perception of the relationship between these three moments (*past, present, future*)**—a new perception of history itself.

Geoffrey Batchen

Each Wild Idea: Writing, Photography, History
2000

Perception, Temporality, Time, Historical

the photographic

From the beginning, then, we find the **history of computing** associated with the transformation of human beings into data—in this case, digitized for the purpose of making **predictive judgments that fix them in space and time (that photograph them)**.

Geoffrey Batchen

Each Wild Idea: Writing, Photography, History
2000

Data, Space, Time, Temporality

the photographic

What pricks me is the discovery of this equivalence. In front of the photograph of my mother as a child, I tell myself: She is going to die: I shudder... over a catastrophe which has already occurred. Whether or not **the subject is already dead, every photograph is this catastrophe.**

Roland Barthes

Camera Lucida: Reflections on Photography
1980

Death, Photograph*

time

The ancient Greeks had two words for time :

Kairos - qualitative

the right or opportune moment (the supreme moment)

Chronos - quantitative

sequential time

Temporality, Time

time

Much of the early history of still photography may be looked upon as the struggle as the art to purge itself of **temporality**.

Hollis Frampton

Eadweard Muybridge: fragments of a Tesseract. Artforum
1973

Photograph*, Time, Temporality

time

'**Time**' is our name for an irreducible condition of our perception of phenomena; therefore, statements which would separate the notion of time from some object of direct perception, are **meaningless**.

Hollis Frampton

Eadweard Muybridge: fragments of a Tesseract. Artforum
1973

Light, Time

time

One can imagine a pairing of Wright's painting, each of its factory windows illuminated by the oil lamps that allowed work to proceed continuously, with a mid-twentieth-century image of a not dissimilar multi-story building with windows lit by the glow of television sets.

In both cases, there is a transformational **relation between a deployment of light sources and the social construction of time.**

Jonathan Crary

24/7: Late Capitalism and the Ends of Sleep

2013

Time, Technology, Light

time

If **light** is the the basic material of the painter or photographer, then **duration** is the materia prima of the time based arts of cinema and video.

Bill Viola

Reasons for knocking at an empty house

1995

Light, Time

time

the photograph keeps open the instants which the
onrush of time closes up; it **destroys the overtaking,
the overlapping of time.**

Maurice Merleau-Ponty

Time, Perception

time

perception over time equals thought

Bill Viola

Reasons for knocking at an empty house
1995

Perception, Time

time

All photographs are memento mori.
To take a photograph is to participate in another person's
(or thing's) **mortality**, vulnerability, mutability.
Precisely by slicing out this moment and freezing it, all
photographs testify to time's relentless melt.

Susan Sontag
On Photography
1973

Mortality, Time

time

the spirit of the digital age still finds its expression in this
re appropriation of time.

because computer code is **biased away from
continuous time**, so too are the programs built on it,
and the human behaviours those programs encourage.

Douglas Rushkoff
Program or be Programmed
2011

Time, Perception

time

Annihilating time and space is what most new technologies aspire to do: technology regards the very terms of our bodily existence as burdensome.

In Marx's view, capitalism itself was the engine of the annihilation of time and space, the locomotive its tangible form, and time and space were being annihilated to increase profits.

Rebecca Solnit

The Annihilation of Time and Space
2003

Time, Space, Technology

time

The **sequence** endows its component parts with movement because we believe any sequence to be orderly, logical, and progressive,” even when it is not.

Marta Braun
At the Edge of Sight
2013

Data, Serial image

time

the distinction between past, present and future
is only an illusion

there is no **sequence because there is no time:**
Time comes to a halt and consequently there can be no
movement. At lightspeed in spacetime everything is
simultaneous.

Leonard Shlain

Art & Physics: Parallel Visions in Space, Time, and Light
2007

Serial image , Time

light

the technology of artificial light helped forge modern
consciousness

Wolfgang Schivelbusch

Disenchanted Night: The Industrialization of Light in the Nineteenth Century
1995

Perception

light

A shadow has no thickness.

Given that there exists a fourth dimension, the question must be asked; if shadows are two dimensional projections of three dimensional objects, could we and the objects in our worlds be **three dimensional shadows** of beings and things that exist in the **fourth dimension**.

Leonard Shlain

Art & Physics: Parallel Visions in Space, Time, and Light
2007

Perception

the image

The work of art reproduced
becomes the work of art
designed for **reproducibility**.

Walter Benjamin

The Work of Art in the Age of Mechanical Reproduction
1936

Technology

the image

“Photography” today is all about the reproduction and consumption, **flow and exchange, maintenance and disruption, of data.**

Fred Ritchin

Why Photography Matter Art As Never Before
2008

Data, Data image

the image

In film, the basic illusion is of movement produced by the succession of still images flashing on a screen. In video, stillness is the basic illusion: a **still image does not exist** because the video signal is in constant motion scanning across the screen.

Bruce Nauman

Data image, Technology, Perception, Visualisation

the image

Looking at digital images we are confronted every time with a **new event** of visualization of invisible data.

The event of its visualization is an original event, because the digital copy is a copy that has **no visible original**.

Boris Groys

From Image to Image File—and Back: Art in the Age of Digitalization
2008

Data image, Technology, Perception, Visualisation

data

“Yet now, Peter Norvig implores, consider capturing an image of a horse and speeding it up to 24 frames a second. Now, the quantitative change has produced a qualitative change.

A movie is fundamentally different from a frozen photograph.

Its the same with big data:

**by changing the amount,
we can change the essence.”**

Viktor Mayer-Schönberger

Big Data: A Revolution That Will Transform How We Live, Work, and Think
2013

Data, Data image

data

a database becomes **dynamic** and **subjective**.
... database and narrative merge into a new form.

Lev Manovich

Database as a Symbolic Form

1999

Data, Database

data

The meaning of the message is generally irrelevant.
meaning to be **“irrelevant to the engineering
problem.”**

Claude Shannon

The Mathematical Theory of Communication
1948

Meaning, Technology

data

Digital media translates everything into data,
waiting for an author or an audience (or a machine)
to **reconstitute** it.

Fred Ritchin

Why Photography Matter Art As Never Before
2008

Data, Data image

data

for the first time, the physiology of a living human being was coupled with a **storage medium** rather than a chain of symbols with a **repertoire of signs**, such as writing.

Friedrich Kittler
Optical Media
2010

Technology, Social

data

Correlation is enough.

We can stop looking for models.

We can analyze the data without hypotheses about what it might show.

We can throw the numbers into the biggest computing clusters the world has ever seen and let statistical algorithms find patterns where science cannot.

There's no reason to cling to our old ways.

It's time to ask: What can science learn from Google?

Chris Anderson

The End of Theory: The Data Deluge Makes the Scientific Method Obsolete
2008

Data, Data vis & sim

device

For the first time, but not the last, a **device** was
invested with **memory**

James Gleick

The information: A history, a theory, a flood
2011

Apparatus

device

an aberrant **vision-machine** as well as a **time-machine**, and an irreducible archive in its own right, that holds revelations not only about Muybridge's work, but also into the origins of film, the future of digital culture, and the perception of urban and corporeal forms.

Stephen Barber

Muybridge: The Eye In Motion
2012

Apparatus, Time

device

The system does not and cannot exist to satisfy human needs. Instead, it is human behavior that has to be modified to fit the needs of the system. This has nothing to do with the political or social ideology that may pretend to guide the technological system. It is the fault of technology, because the system is guided not by ideology but by **technical necessity**.

Ted Kaczynski - Unabomber

What Technology Wants

Kevin Kelly

2010

Technology

device

the movie audience as at once “**inside a machine**”

Michael Fried

Why Photography Matter Art As Never Before
2008

Apparatus

device

Flusser's "philosophy of photography" undertakes a "critique of functionalism in all its aspects – anthropological, scientific, political, and aesthetic." His aim is to promote the freedom of the image against the tyranny of the photographic medium, **"freedom to play against the apparatus."**

Hans Belting

'The Transparency of the Medium' An Anthropology of Images
2011

Apparatus

device

Cameras are still imagined, despite their increasing complexity, as machines of **logic and light**.

James Elkins

'Selenite, Ice, Salt' What Photography Is
2011

Data, Light

device

The information the photo carries sits on its **surface** and not within its body, as in the case of shoes or fountain pens.

Vilem Flusser

The Photograph as Post-Industrial Object: An Essay on the Ontological Standing of Photographs' Leonardo, 19:4, 329-332, 2012

Apparatus

device

Technical images are essentially different from traditional images. Traditional images are produced by **men** and technical images by **apparatus** ...
apparatus transcode **symptoms into symbols**, and they do it in function of particular programs.

The message of technical images must be deciphered, and such decoding is even more arduous than that of traditional images: the message is even more 'masked.'”

Vilem Flusser

The Photograph as Post-Industrial Object: An Essay on the Ontological Standing of Photographs' Leonardo, 19:4, 329-332,
2012

Apparatus

device

It is, indeed, the creative tension between **temporal loss** and **spatial presence** which makes of photography much more than the imprint of something which has existed at least once.

Paul Crowther

'The Phenomenology of Photography' *Phenomenology of the Visual Arts*
2009

Temporality

device

“Functionnaire” (“person who plays with and as a function of an apparatus”)—not to be confused with a **“Photographer”**: “a person who tries to make photographs with information not contained in the camera program.”

Martha Schwendener

Vilém Flusser’s Theories of Photography and Technical Images in a U.S. Art Historical Context

Apparatus, Technical, Technology

device

“Flusser claimed that the content of any given photograph is actually the camera that produced it. He continued with a series of nested apparatuses: *The content of the camera is the programming that makes it function; the content of the programming is the photographic industry that produces it;*

Flusser’s view, the traditional content of the cultural artifact is completely subsumed by the apparatuses — technical, political, social, and industrial — surrounding, and thereby defining, it.”

The only hope? Those who attempt to break the system by doing something with the camera that was never intended by industry ↯

Kenneth Goldsmith

It’s a Mistake to Mistake Content for Content

2015

<http://lareviewofbooks.org/essay/its-a-mistake-to-mistake-content-for-content>

Apparatus, Technical, Technology

device

An **archaeology of photography** would be less preoccupied with the individual rivalry between such figures [Talbot and Daguerre] or the specific personal wishes of specific individuals “to photograph” (a history through “psycho-biography,” which denies social levels of analysis) than with the issue of where and why it emerged as it did, what the photography was used for, and what **regular objects appear across the surfaces** of all these photographs.

David Bate

The Archaeology of Photography: Rereading Michel Foucault and The Archaeology of Knowledge'. *Afterimage*. vol.35 no.3
2007

Historical, Materiality

datified image

“... a number of tendencies in media art and design resist the omnipotence of the screen. Custom **"arrays"** mimic the grid structure of the screen but drastically lower its resolution, emphasising the material opacity of the substrate as well as its transmaterial capacity to articulate varying patterns. Structured light and projection-mapping experiments deploy **"images" tailored to a specific, non-uniform physical environment;** here in fact the video projector acts as a dynamically configurable **light-source**, rather than an image transmitter. In a growing wave of light-based work, the pixels of the digital image peel away from the screen, to be embedded in the environment; again these arrays expand or explode the screen, and always rematerialise it. They are concrete objects in the world, rather than windows to somewhere else. Using examples from across the media arts and design, and developing the author's work on **transmateriality**, this paper will theorise a **post-screen practice which strives for presence over meaning** (to use Gumbrecht's formulation), and for specificity over generality..”

Mitchell Whitelaw

After the screen : array aesthetics and transmateriality

2010

<http://teemingvoid.blogspot.co.nz/2011/04/after-screen-array-aesthetics-and.html>

Array, Light, Materiality

datified image

Except in photojournalism, there will be no such thing as a "straight photograph"; everything will be an **amalgam, an interpretation, an enhancement, or a variation**—either by the photographer as auteur or by the camera itself—under manual control or fully automatically.

Marc Levoy

Google Glass and Photography

2016

<http://unframed.lacma.org//2014/01/21/marc-levoy-on-google-glass-and-photography/>

Data image

datified image

The Smartphone is really about **streaming** much more than documenting.

whereas the streaming process becomes an active **experience** for the viewer.

The Smartphone image is no longer about creating **memory** as much as it's about shaping **experience**.

Stephen Mayes

From Memory To Experience: The Smartphone, A Digital Bridge

2012

<http://www.stephenmayes.co/category/writings>

Data image, Experience, Network

datified image

visualization ... implies that we can potentially take anything—numbers, text, network, sound, video, etc.—and map it into image to reveal **patterns and relationships in the data.**

Lev Manovich

Software takes command

2013

Data image, Meaning, Visualisation

datified image

medium = algorithms + a data structure.

rather than stating that materials turn into data structures while tools turn into algorithms, it would be more correct to say that a medium as simulated in software is a combination of a data structure and set of algorithms .

Lev Manovich

Software takes command

2013

Data image, Meaning, Media

datafied image

To make an analogy with language, we can compare
data structures to nouns and
algorithms to verbs.

Lev Manovich

Software takes command

2013

Data image, Meaning

keywords

keyword frequency query

| | |
|--------------------|----|
| Data | 17 |
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| Light | 7 |
| Apparatus | 6 |
| Photograph* | 6 |
| Temporality | 6 |
| Serial image | 5 |
| Meaning | 4 |
| Visualisation | 4 |
| Context | 3 |
| Historical | 3 |
| Materiality | 3 |
| Array | 2 |
| Mortality | 2 |
| Social | 2 |
| Space | 2 |
| Technical | 2 |
| Art historical | 1 |
| Cultural Analytics | 1 |
| Data vis & sim | 1 |
| Database | 1 |
| Death | 1 |
| Digitisation | 1 |
| Experience | 1 |
| Network | 1 |

all text

word frequency query

24 time
14 photography
9 images
8 photograph
8 new
7 screen
7 light
7 digital
6 perception
6 image
6 data
5 technology
5 technical
5 system
5 still
5 photographic
5 human
4 video
4 traditional
4 specific
4 space
4 social
4 photographs 4 objects
4 moment
4 media
4 machine
4 history
4 future
4 content
4 camera
4 apparatus
4 already
3 technologies 3 such
3 sequence
3 rather
3 programs
3 political
3 person
3 only
3 movement
3 message
3 medium
3 meaning
3 illusion
3 function
3 flusser
3 cultural
3 contemporary
3 computing
2 visualization
2 visual
2 technological
2 symbols
2 something
2 shadows
2 separate
2 science
2 quantitative
2 qualitative
2 programming
2 presence
2 practice

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