

Les Levine “suggested that technological monitoring and control had infiltrated the intimate precincts of artmaking, for better or worse. Rather than rejecting this state of affairs as dystopian, Levine embraced it. Putting himself under constant surveillance, he hinted that, in a media-saturated environment, the creative process cannot be separated from self-exposure.

---*Tom Holert*



Les Levine, *A.I.R.*, 1968–70, TV monitors, concrete blocks, microwave transmitter. Installation view, Jewish Museum, New York, 1970. Roy Chapin and Jack Burnham. Photo: Shunk-Kender © Roy Lichtenstein Foundation.

We might regard patterning or predictability as the very essence and raison d'être of communication...communication is the creation of redundancy or patterning.

-- Gregory Bateson, *Steps to an Ecology of Mind*.

I know kinesthetically as well as conceptually that the text can be manipulated in ways that would be impossible if it existed as a material object rather than a visual display. As I work with the text-as-image, I instantiate within my body the habitual patterns of movement that make pattern and randomness more real, more relevant, and more powerful than presence and absence.

--N. Katherine Hayles, *Virtual Bodies and Flickering Signifiers*, 1993.

A B C D E F G H I J
 K L M N O P Q R S T
 U V W X Y Z
 a b c d e f g h i
 j k l m n o p q r s
 t u v w x y z
 1 2 3 4 5 6 7 8 9 ! ? { } (% / @ & \$

With a typewriter:

A letter is a stroke on paper. (material) either there or not there.

The mark is either **present or absent**.

Signifier and signified are in a one-to one relation.

With electronic media:

- The keyboard stroke sends electronic input (command) to the computer.
- Input is understood as code.
- Computer responds with a **visualization of what that keystroke represents**.
- **Relation is non-proportional, unrelated to keyboard pressure.**
- **We absorb things through the fingers that are part of the signification. We are interacting with electronic images.**

Signifier is not linked to the signified. In between there is a substrate of electronics and code.

A B C ... ABC ... ABC ...

What is the difference between these two forms of representation?



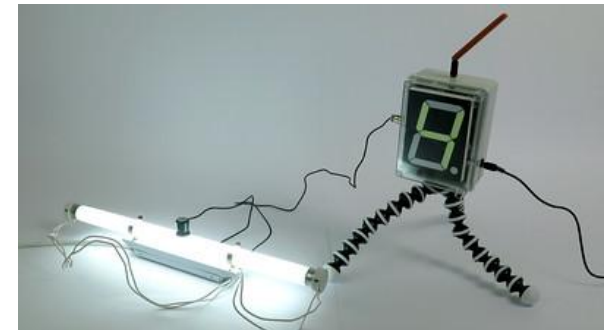
Information = Pattern

Non-information = Randomness, the absence of pattern.

With computational communication, pattern and randomness jostle and compete with formations based on *presence* and *absence*.

The material and the immaterial are connected through *pattern* and *randomness*.

742004696647854404844595428468644872587015746166256644086465
604422020628630442458844369486743802080848544842012661248646
067966424121520440034808204027128058490324446765076869009821
581430120902224520522426062172713692022044046068002823666149
706998432022866247082560567084922882686816728620900581856434
102444280022986640490806805460460544888040915427025249044088
483948460006510047986045169061918286627213509220048444871418
662602268060088006204029406062544688944494284442240731006405
004502067304844574036388958880424104168464218109807259345868
763268656276696102401008604856425004325960700804681494687624
87351847326722844573184990616137240404466008344322076284038
86504910180231660686670426326428837688680840007018692202454
840401674647383212047434750962421163642872732142364647988682
842620469220702761864882841880435498228465632062002268009688
205263360221822224004925389469404440224766282298483627284657
462209800454054894845486269587088688969259692882242974244140
300080604864542797303014968783436074245262400987340459050856
324440026772687827043840420752416430358604608004865387600780



From Robot 3/A “State of Sin” by James Bridle - using electrical noise picked up by an induction coil from a neon lamp as the seed for a random number generator.

ANALOGUE MEDIA starts disappearing w/computer advances.

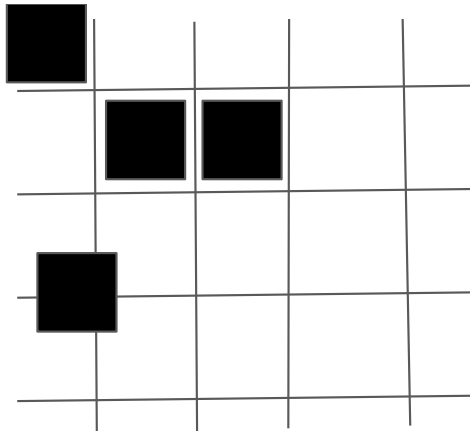
Magnetic Tape (audio cassettes, video cassettes, very old diskettes for main frame computing storage medium)

- Magnetized strip taking on tiny marks from activated electrons or “signal”.
- “Information” is thus, represented by the tiny marks from the excited electrons.

Vinyl Records

- Vinyl is physically marked by the movement of a needle in the groove. Early recordings made on wax.
- Playback by a needle bumping the interior, undulating groove.

Abacus has beads for numbers, representing numbers, but a digital calculator sends electronic pulse to turn on or off the square in a lattice of 0's and 1's.



DIGITAL Media becomes commonplace:

Digital media is Computational, made in “binary code” of 0s and 1s at the level of the lattice.

- Stored as 0s and 1s - it is either “there/not there”
- Is it presentation rather than a representation because there is no real physical mark or “analogy” being made between the code and the object made?
- Non-linear medium.
- Digital files can be read as code, as image, as text.
- Infinitely reproducible without loss of quality.
- Storage medium.

Digital Image-making: Terms & Ideas

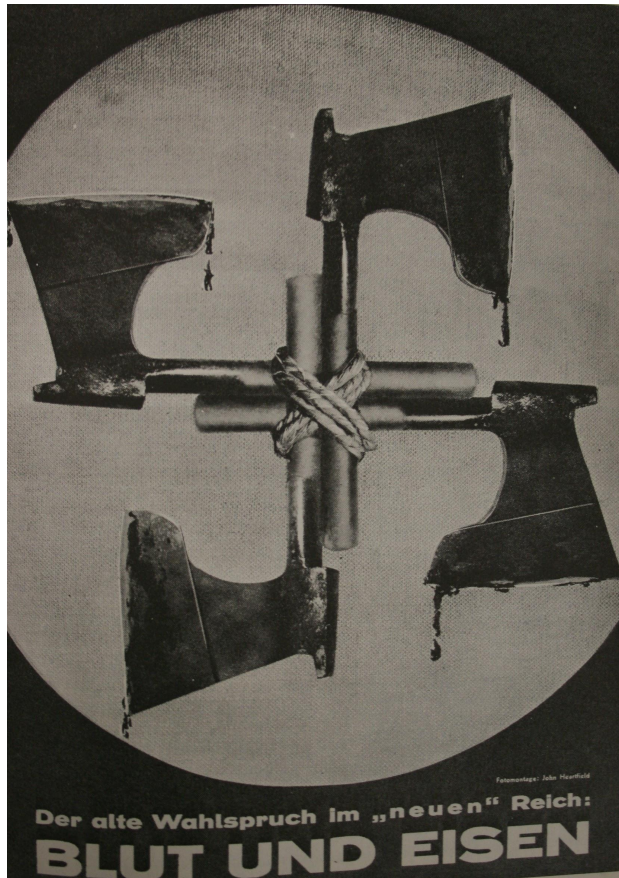
Christiane Paul, Ch.1, pp. 27-52

Basic characteristics of the Digital medium:

- Allows for multiple manipulations; and seamless combinations of artforms.
- Blurred distinctions between various media and their different aspects.
- Photography, Film, Video entail manipulation of Time and Place through *montage*, in digital media this aspect is *heightened*.
- Reality of “what is” is *open to question*. (Due to the capacity to manipulate.)
- Appropriation and collaging of images opens up *remediation* and *repurposing*.
- Copying without degradation *is taken for granted*.

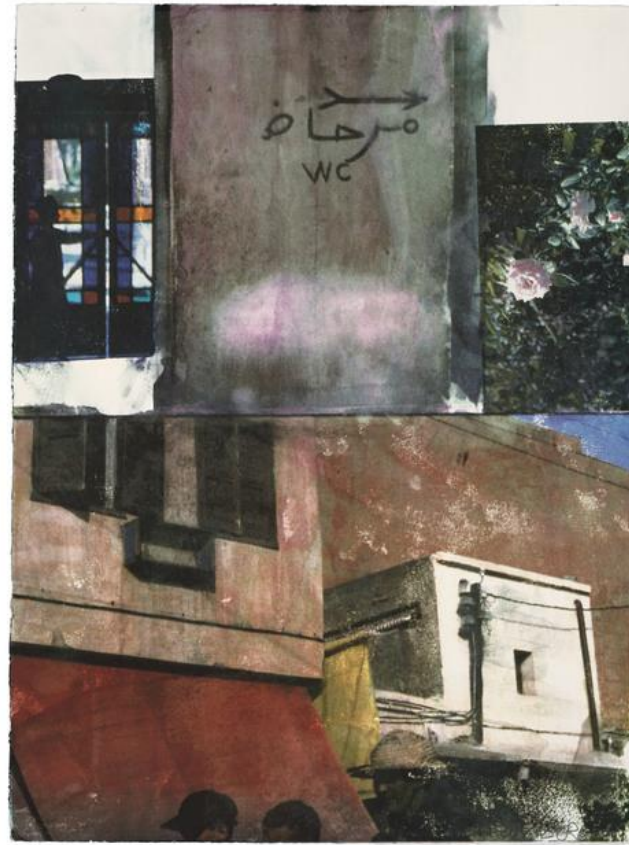
Subversion, Reconstruction of Reality

John Heartfield - Images as weaponry in the fight against fascism.





Hannah Hoch, *Cut with a Kitchen Knife Dada*, 1919.



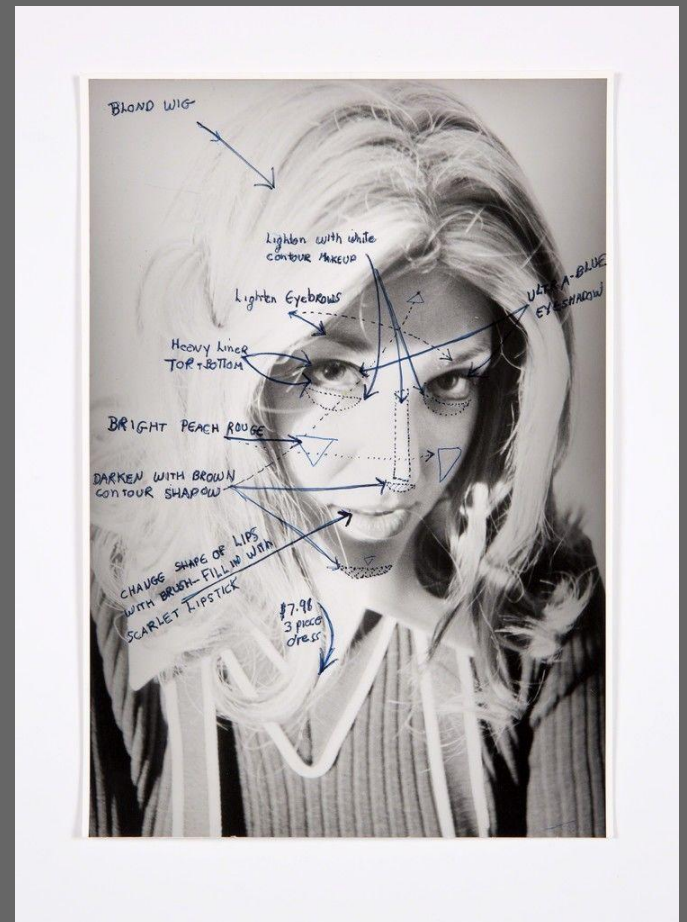
R. Rauschenberg, *Appointment*, 2000.
Scanned 35 mm photographs on paper.

Digitally-reconstructed
images stand-in for
the absence of an
authentic history.

Works created or
manipulated digitally,
then printed.



Ken Gonzalez-Day, *Untitled #36 (Romancita at the Cantina)* 1996.



Lynn Hershman Leeson, *Roberta Breitman* series, 1974-78..



Nancy Burson, «First and Second Beauty Composite», 1982

Photography | © Burson, Nancy

First Beauty Composite depicts Betty Davis, Audrey Hepburn, Grace Kelly, Sophia Loren, Marilyn Monroe.

Second Beauty Composite depicts Jane Fonda, Jacqueline Bisset, Diane Keaton, Brooke Shields and Meryl Streep.



Lynn Hershman Leeson,
Hero Sandwich
Series/Marilyn/Freud,
1986.

Lynn Hershman Leeson, *Phantom Limb Photography*, 1985-87

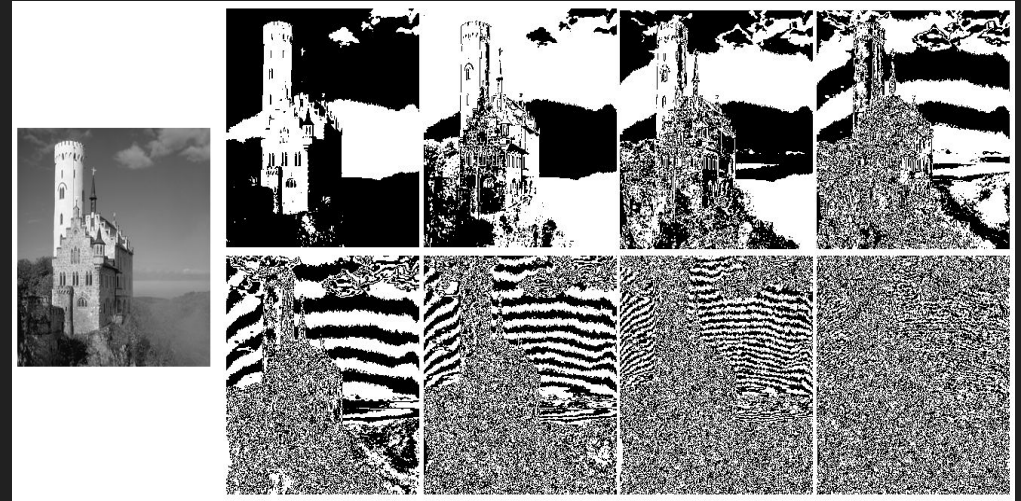


Bureau of Inverse Technology

BIT Plane, 1996.

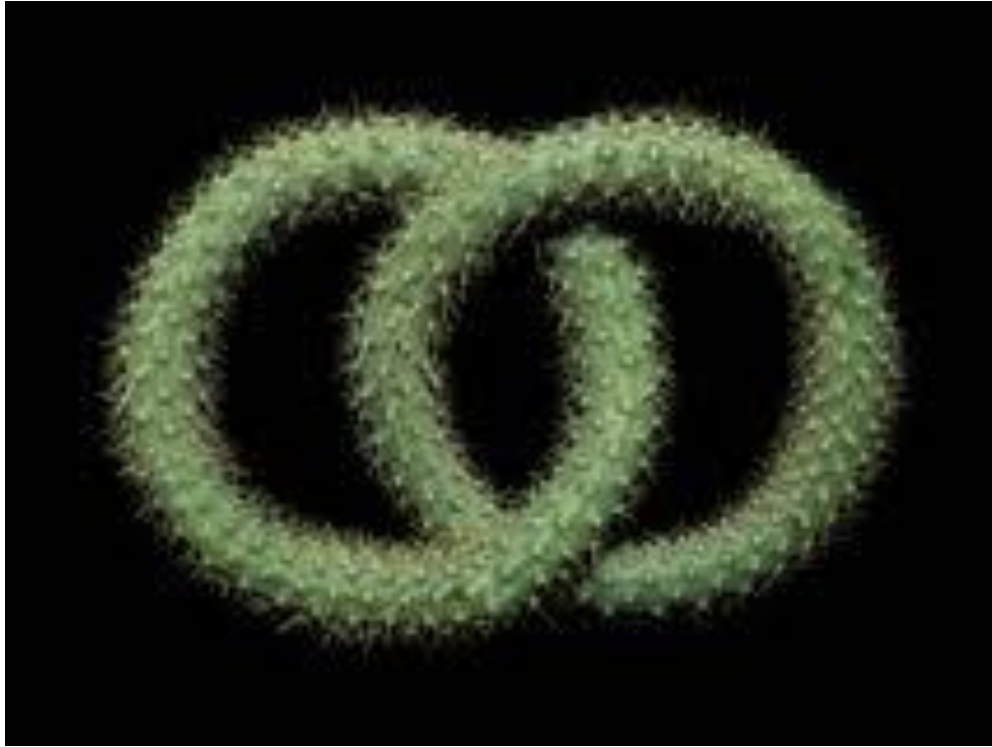


residents described aerial panoramas of
unknown origin



A **bit plane** of a digital discrete signal (such as image or sound) is a set of **bits** corresponding to a given **bit** position in each of the binary numbers representing the signal.

0110010010011101010110010010100000



Dieter Huber, *Klone #76*, 1997.



William Latham, *SERIOA2A*, 1995.



Alexander Apóstol, *Residente Rulido: Royal Copenhagen*, 2001.



Craig Kalpakjian, *Corridor*, 1997.



Google Earth photogrammetry of San Francisco.

Composite layers of digital information taken from:

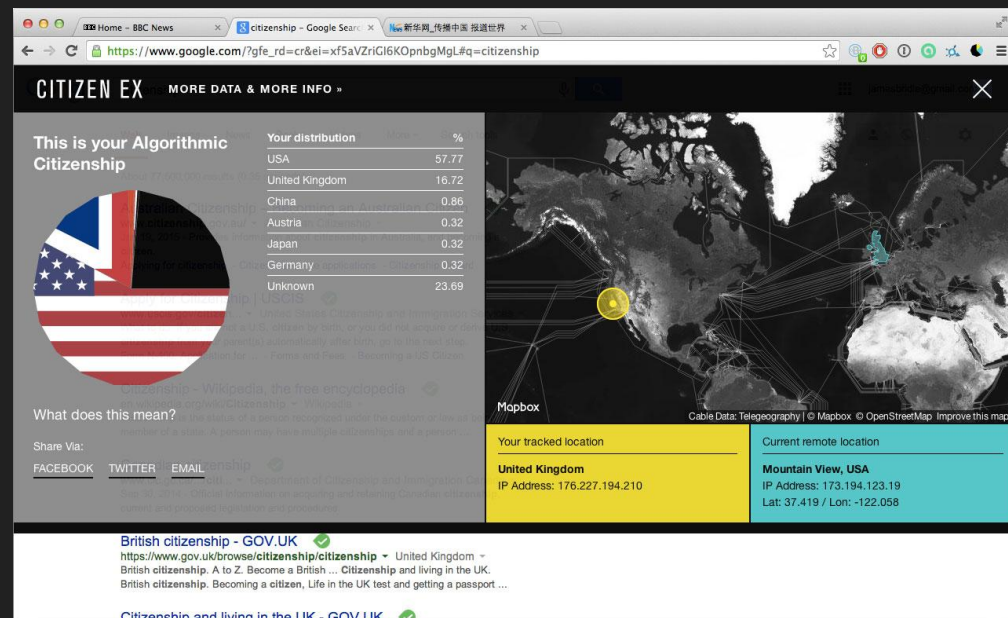
- Satellites
- Airplanes (“planes that do Street View”)
- Existing and new photographs
- Other data sets



Paolo Cirio, *Persecuting US*, 2012.

One million appropriated Twitter users profiled by political affiliations during the U.S. presidential election.

<https://www.paolocirio.net/work/persecuting-us/>.



<http://citizen-ex.com/>

James Bridle, *Citizen X, Algorithmic Citizenship*, 2011.



Paolo Cirio, *Street Ghosts*, 2017

<https://paolocirio.net/work/street-ghosts/>



James Bridle, [Drone Shadows](#), 2013.

James Bridle, *Satellite shadows*, 2016.





Jame Bridle, *Satellite shadows*, 2016.

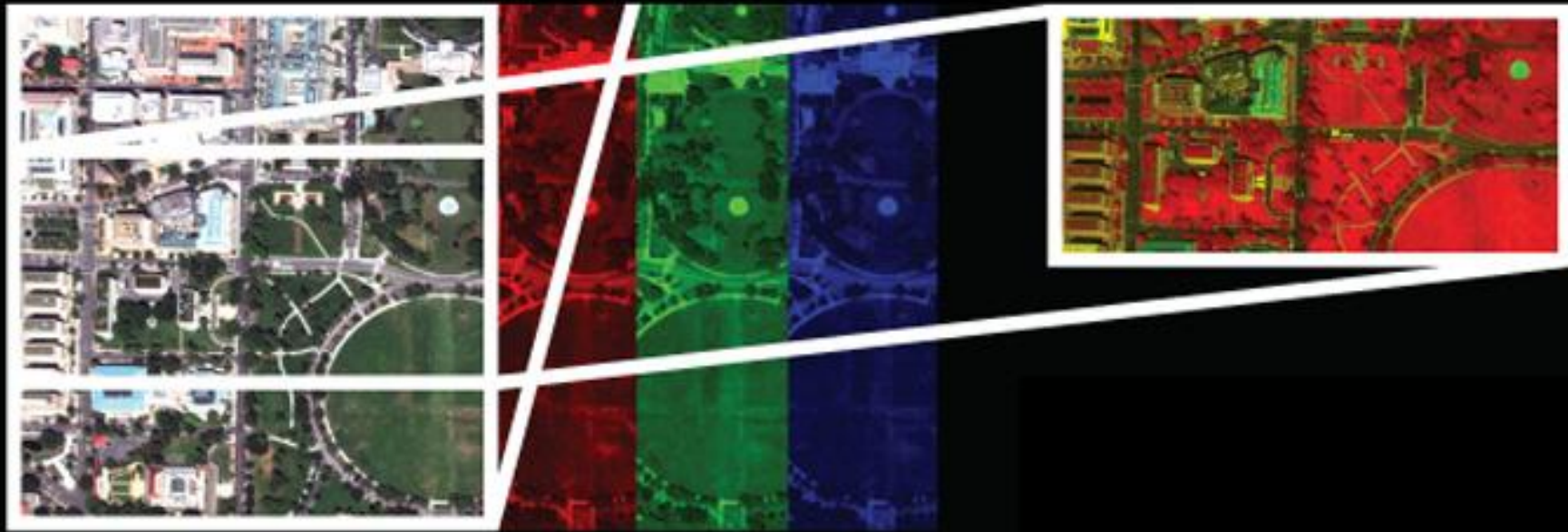


Satellite photos of jets showing 'panchromatic sharpening'.



James Bridle, *Rainbow Planes*.

A Miles M.52 is an experimental jet plane developed in secret to break the sound barrier at Farnborough, UK in the 1940. It is shown as if distorted by the characteristic pansharpining effect of satellite photography, as if viewed, in flight, from space.



A 5-3-2 image, in this case, the image is a composite of data from the visible red, green and blue sensors in a single, “true colour” image (although there is nothing ‘true’ about this). This image is then used to add colour to the higher resolution but black-and-white panchromatic image, a process called “panchromatic sharpening.”



Images of shots of faces from *The Eleventh Hour* by Dziga Vertov,
From the project, *Visualizing Vertov* by Lev Manovich, 2013.



Lev Manovich,
Taipei Phototime,
2014.

Instagram photos
“live feed” from
NY and
Taipei, and
abstracted as
“most used color”.



Sondra Perry, *A Typhoon
Coming on...*
2018.
Video installation.

J. M. W. Turner,
The Slave Ship, 1840.



Prince purple,
the default color
associated with an
error; that
something is
missing in the
render.

Sondra Perry, *A
Typhoon Coming on...*
2018.



Immersed in
Turner's out of
perspective and
skewed ocean
waves...

Perry questions
the point of
discussing
brutality and
violence as if the
memory and
experience weren't
enough.

Sondra Perry, *A
Typhoon Coming
on...*
2018.



Sondra Perry, *Graft and Ash for a Three Monitor Workstation* (still) (2016)



Anxieties of total visibility in a world of CCTV, camera-enabled devices, facial recognition, and other computer vision technologies.

Software has the ability to increase the fatness of the simulated face, but not allow Perry to create her own teeth or other nuances which would make a fully realized portrait.

- Incompleteness of digital self-description.
- Contradictory definitions of success as defined by capitalism.

In Free Fall: A Thought Experiment on Vertical Perspective by Hito Steyerl

<https://www.e-fux.com/journal/24/67860/in-free-fall-a-thought-experiment-on-vertical-perspective/>

BIT Plane

Alexander Apostol

<https://www.guggenheim.org/map-artist/alexander-apostol>

Tom Holert on the Art of Les Levine

[https://www.academia.edu/11107845/Information Society. Tom Holert on the Art of Les Levine in Artforum May 2013](https://www.academia.edu/11107845/Information_Society._Tom_Holert_on_the_Art_of_Les_Levine_in_Artforum_May_2013)

Sondra Perry on her work

<https://vimeo.com/304140642>