

Sam Meech

@videosmithery

[www.smeech.co.uk](http://www.smeech.co.uk)

[www.re-dock.org](http://www.re-dock.org)

Disrupt / Encode / Consolidate

**FEEDBACK FORM**

PRACTICE

# EXPERIMENTAL FILM



The Model City (2008)

## PROJECTION MAPPING



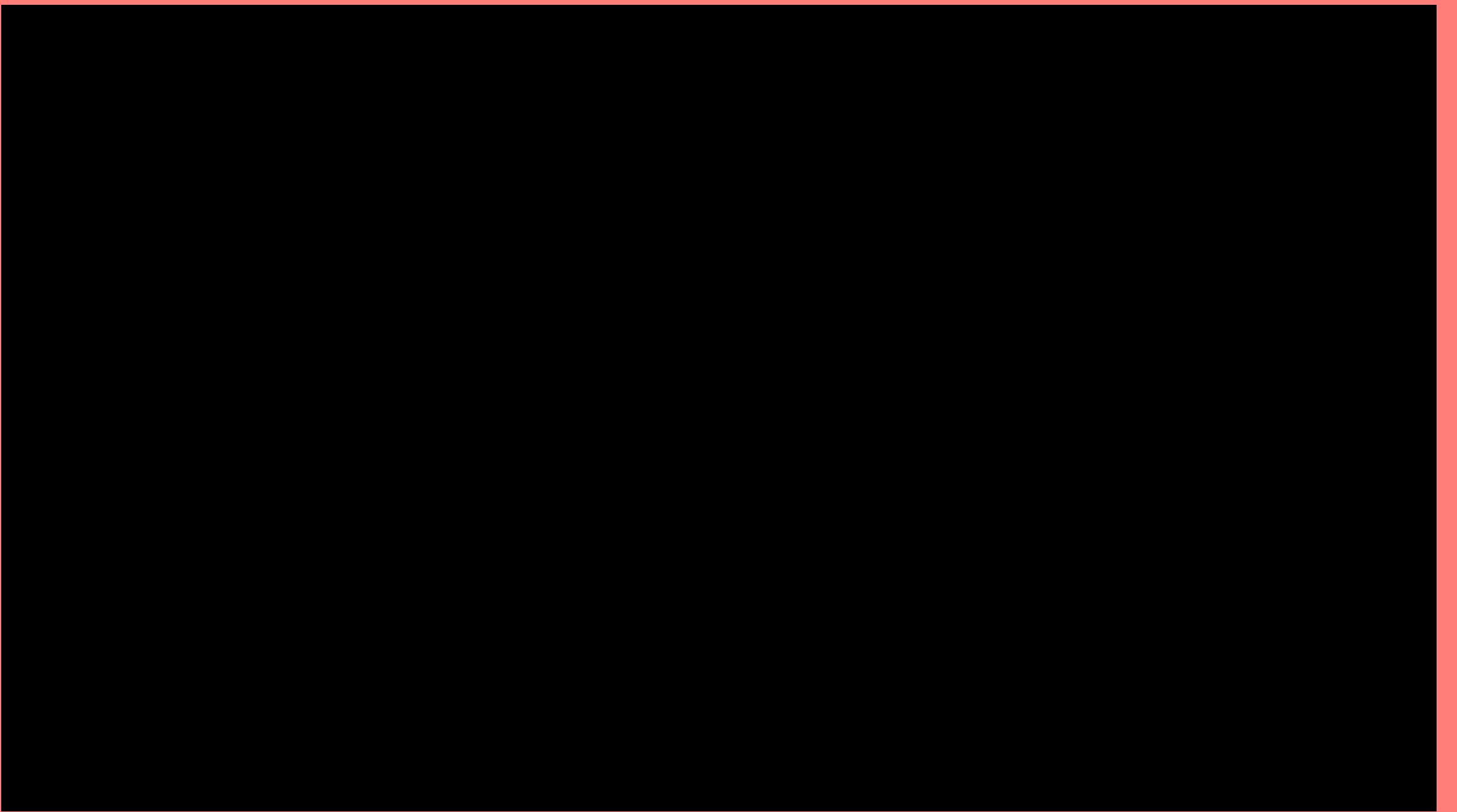
Virgin 40 tiles (London, 2013)

## PROJECTION MAPPING & STORY TELLING



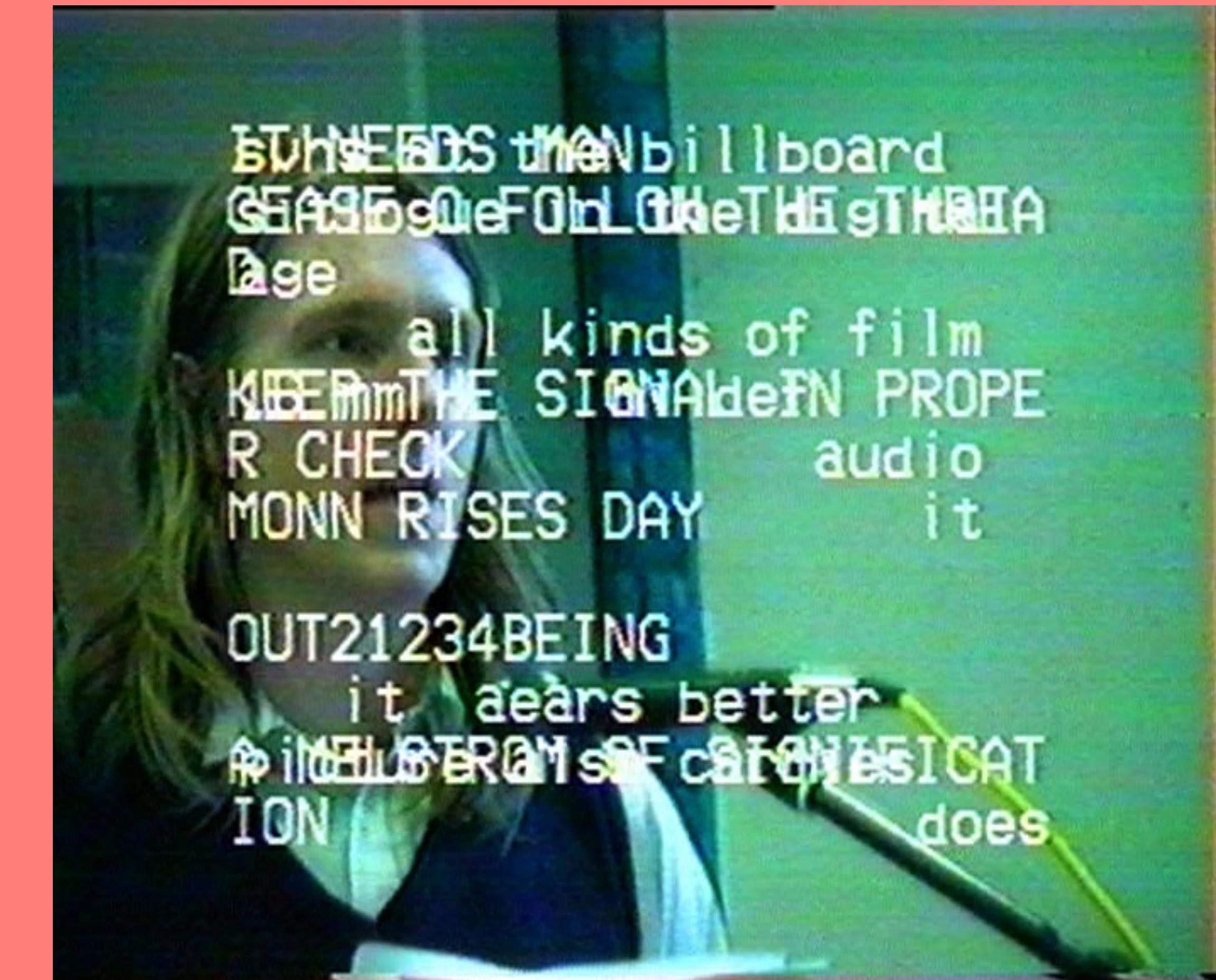
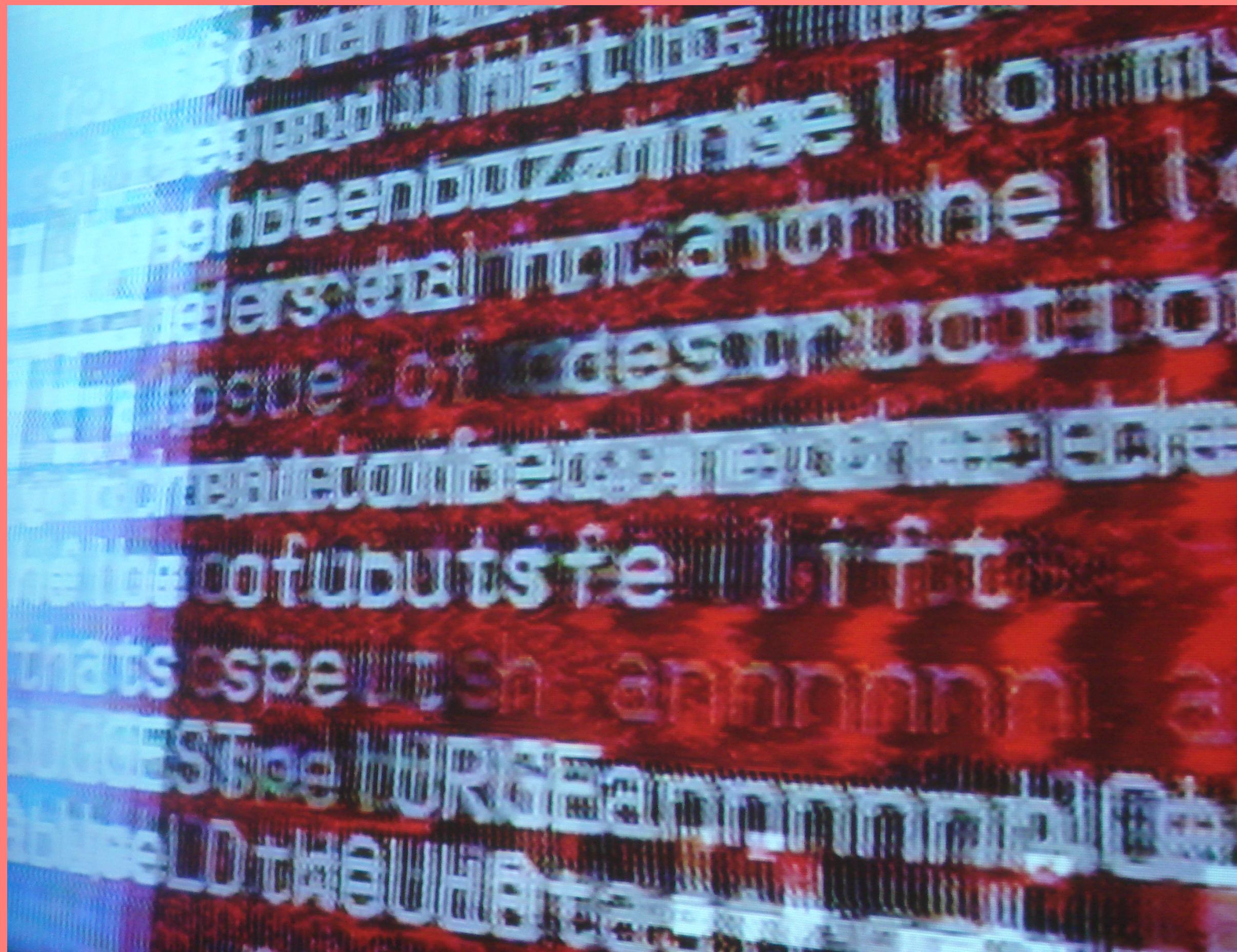
Wondrous Place (Liverpool, 2013)

## PROJECTION MAPPING & SCALE



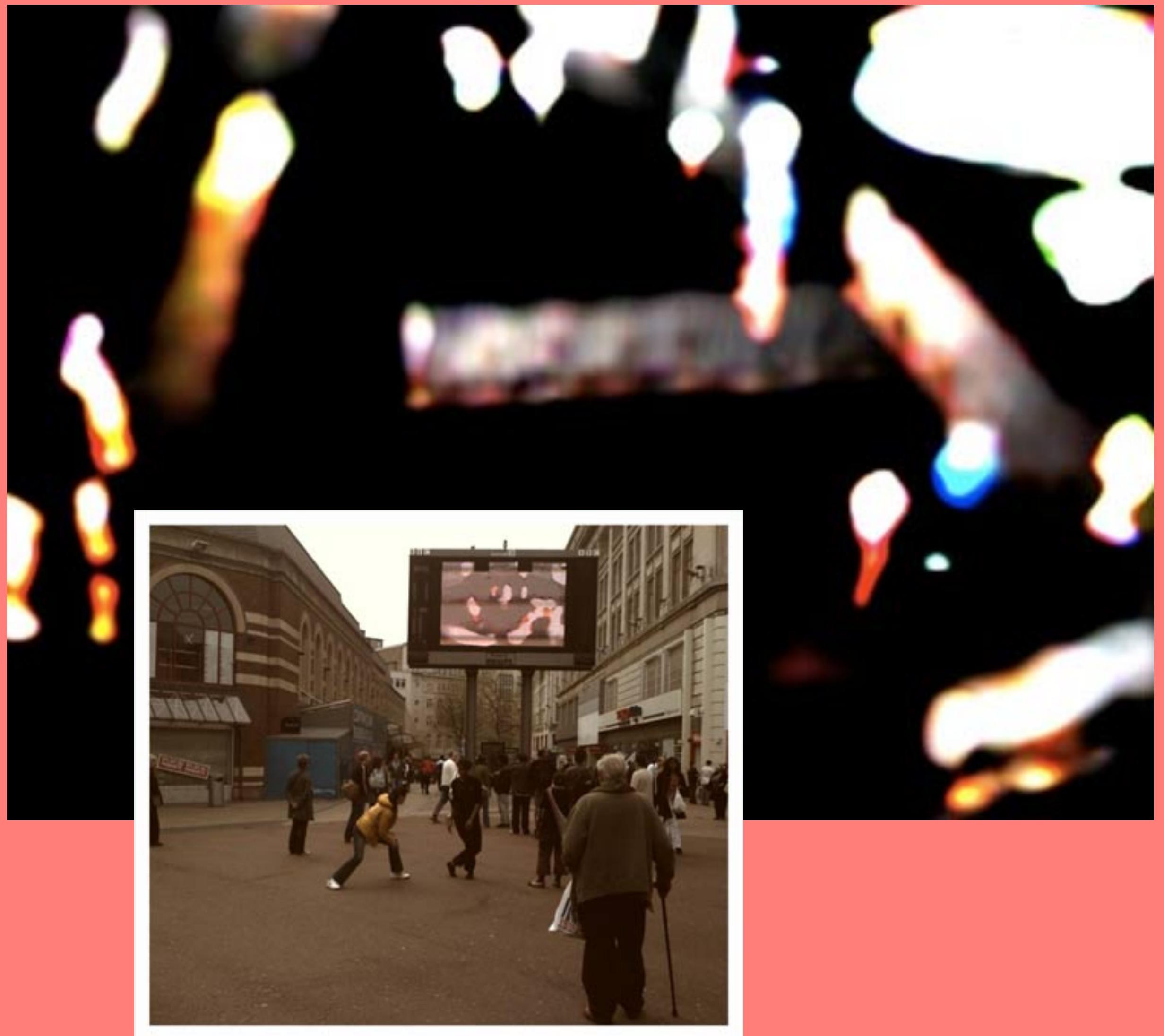
Video Culture (Riga, 2014)

## TEXT & TEXTURE OF VIDEO



Texture - Composite Lectures (Manchester, Liverpool, 2012)

## LIVE FEED VIDEO SYSTEMS



The Making (Liverpool, 2012) / Huge Entity (Liverpool, 2008)

# VIDEO FEEDBACK SYSTEMS



Feedback tests (2018)

HOW DOES MY PRACTICE AS A VIDEO  
ARTIST RELATE TO SCIENCE ?

1. RESEARCH INTEREST - VIDEO FEEDBACK
2. TOOLS & METHODOLOGIES

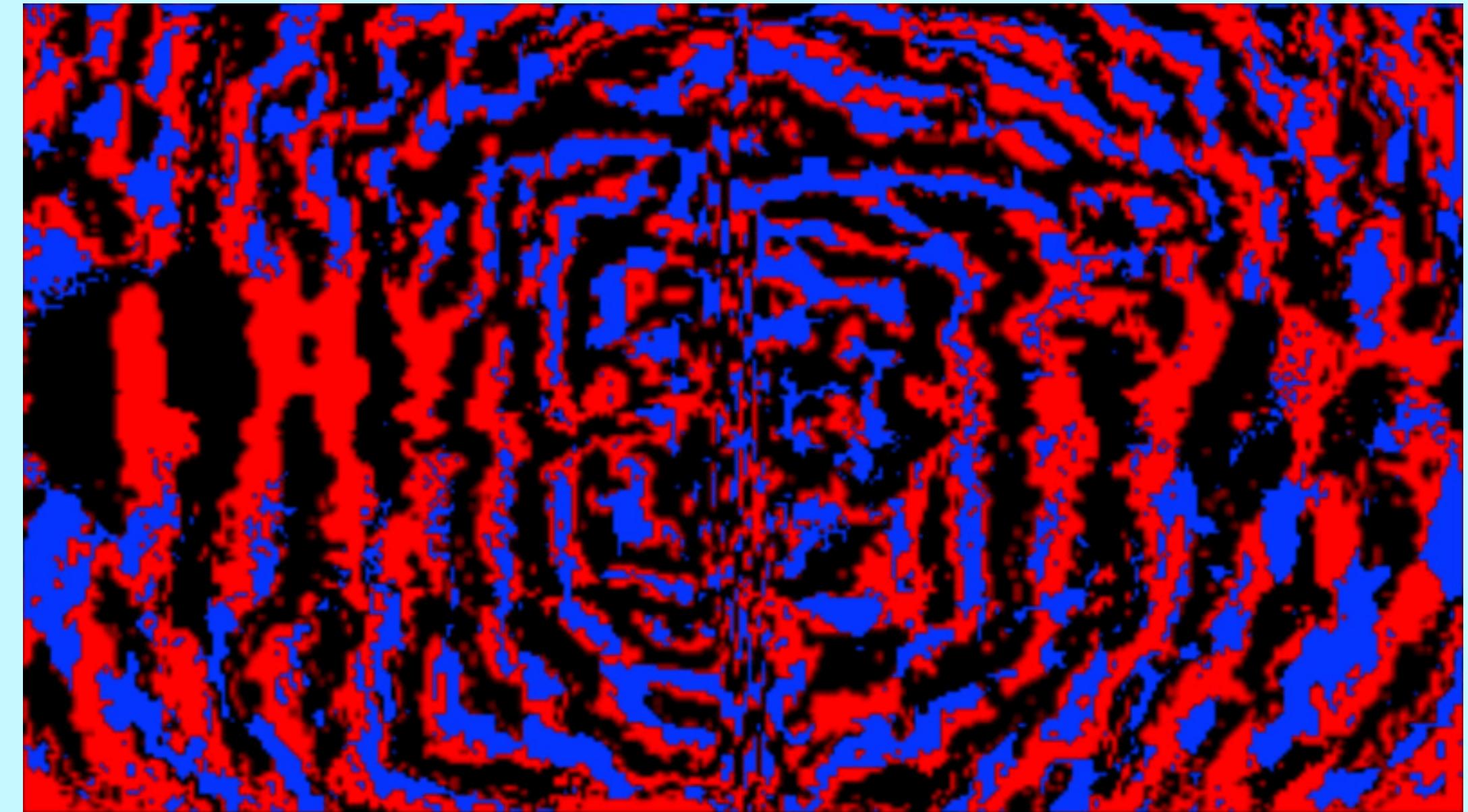
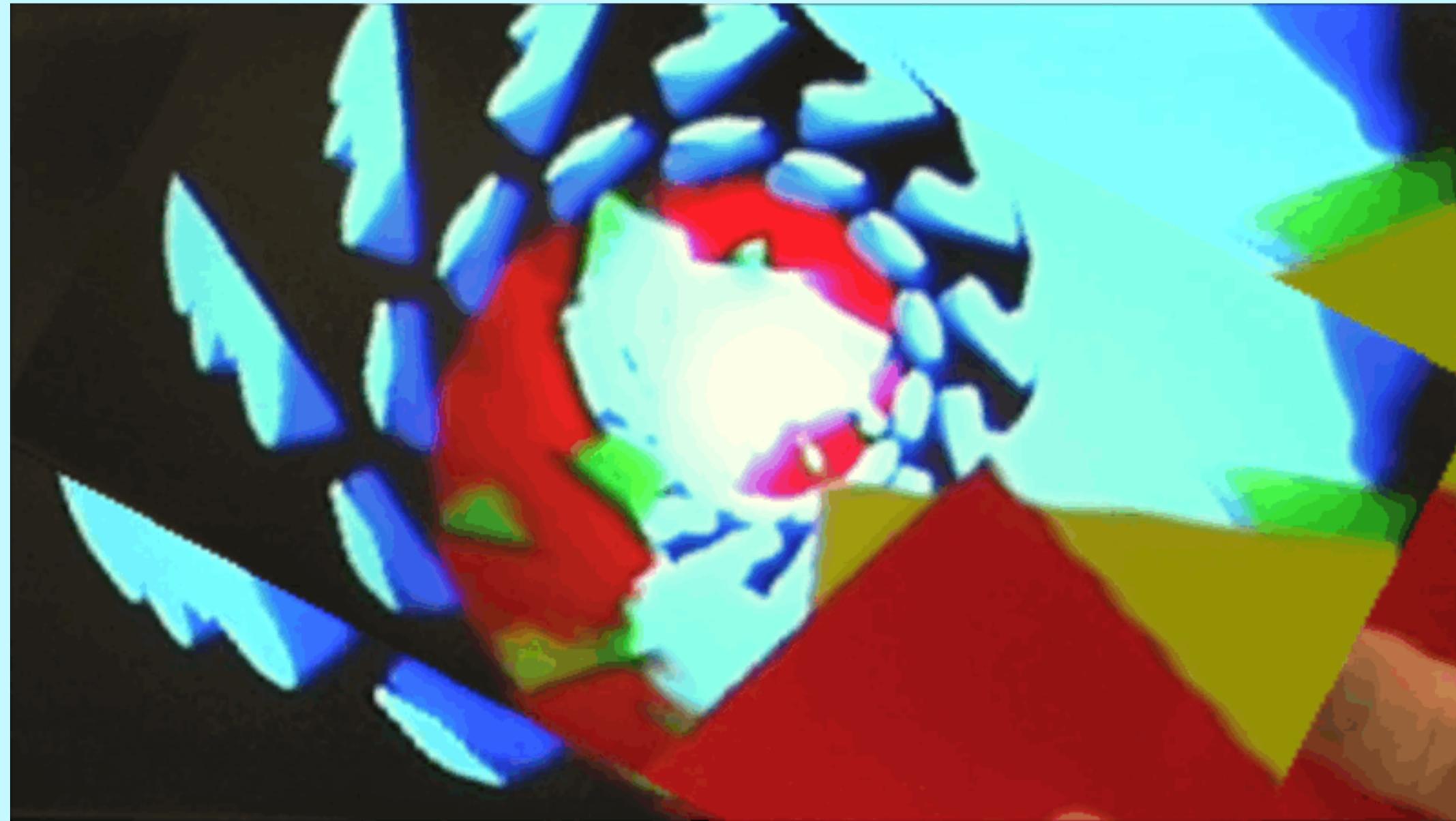
# THE SCIENCE OF VIDEO FEEDBACK

## SCIENCE OF VIDEO FEEDBACK

Video feedback is the process that starts and continues when a video camera is pointed at its own playback video monitor.

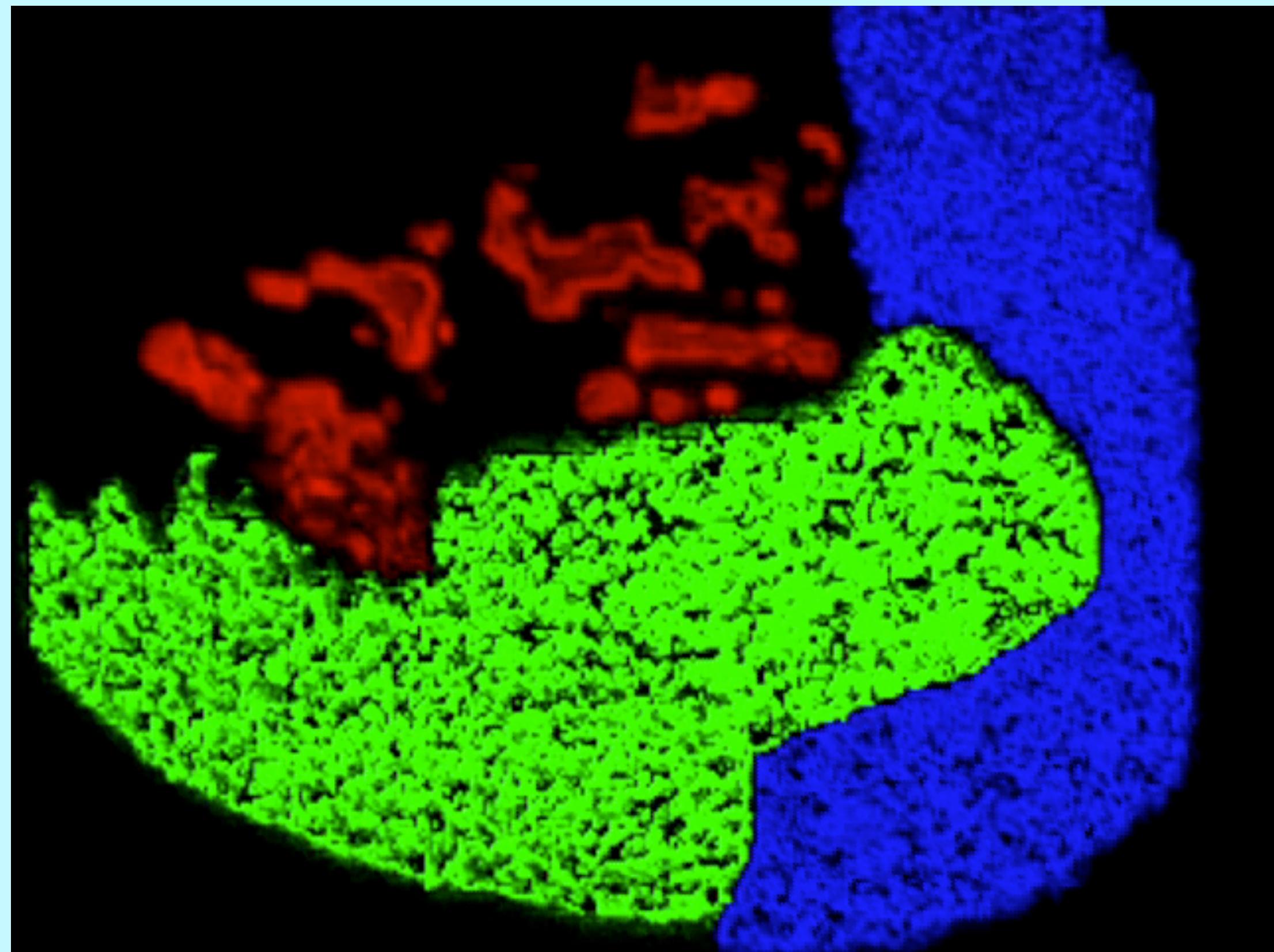
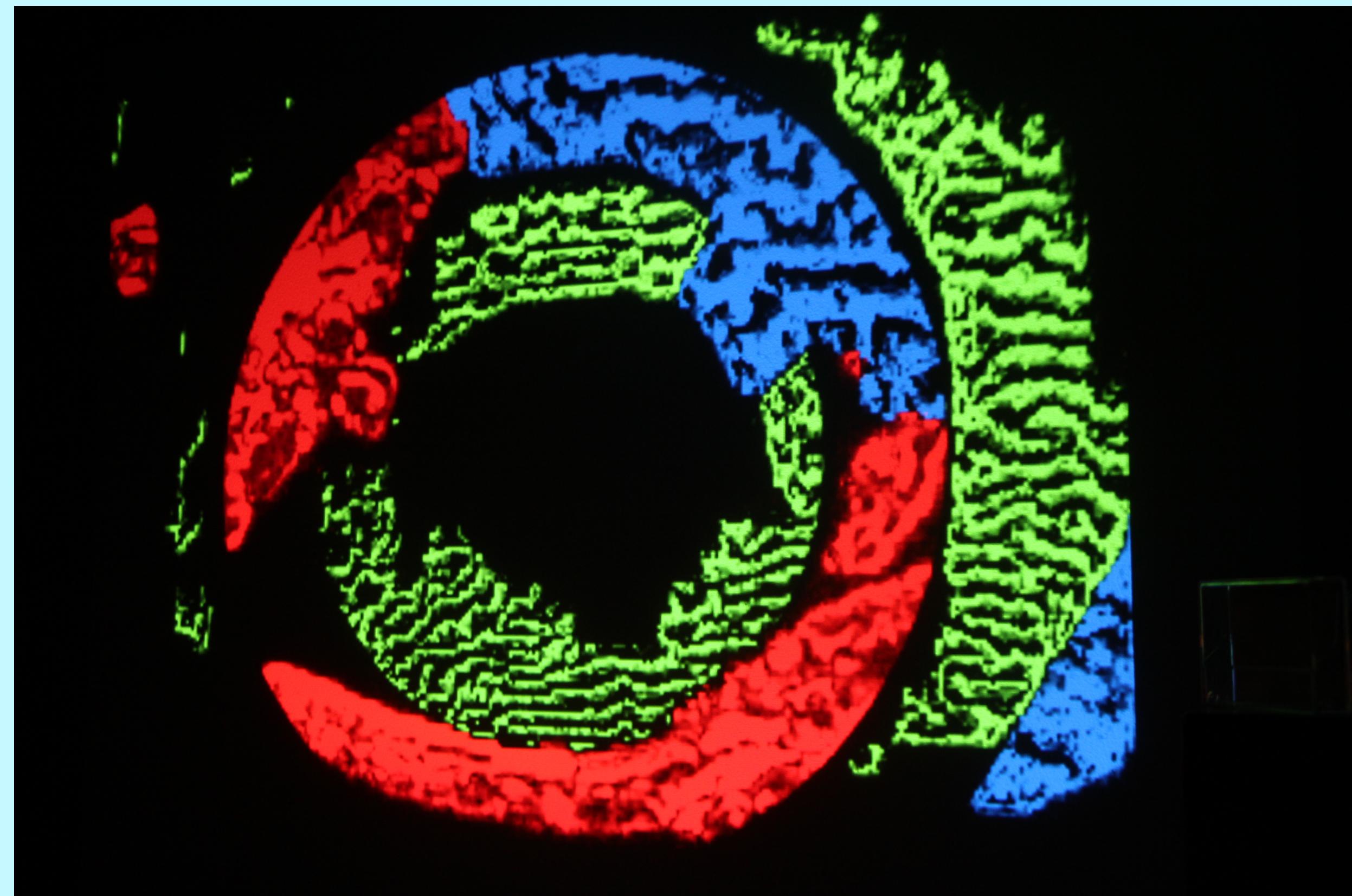


# SCIENCE OF VIDEO FEEDBACK



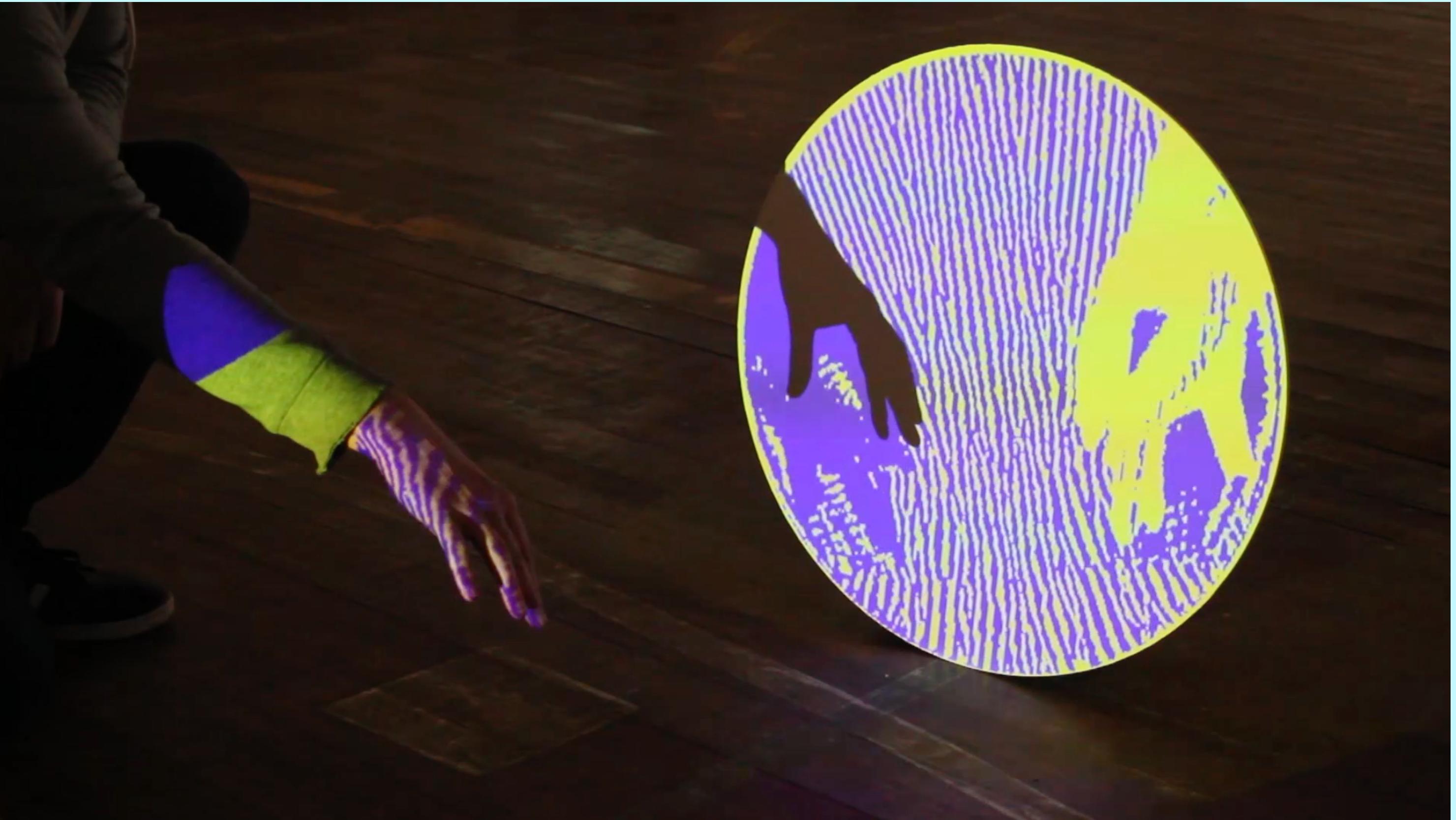
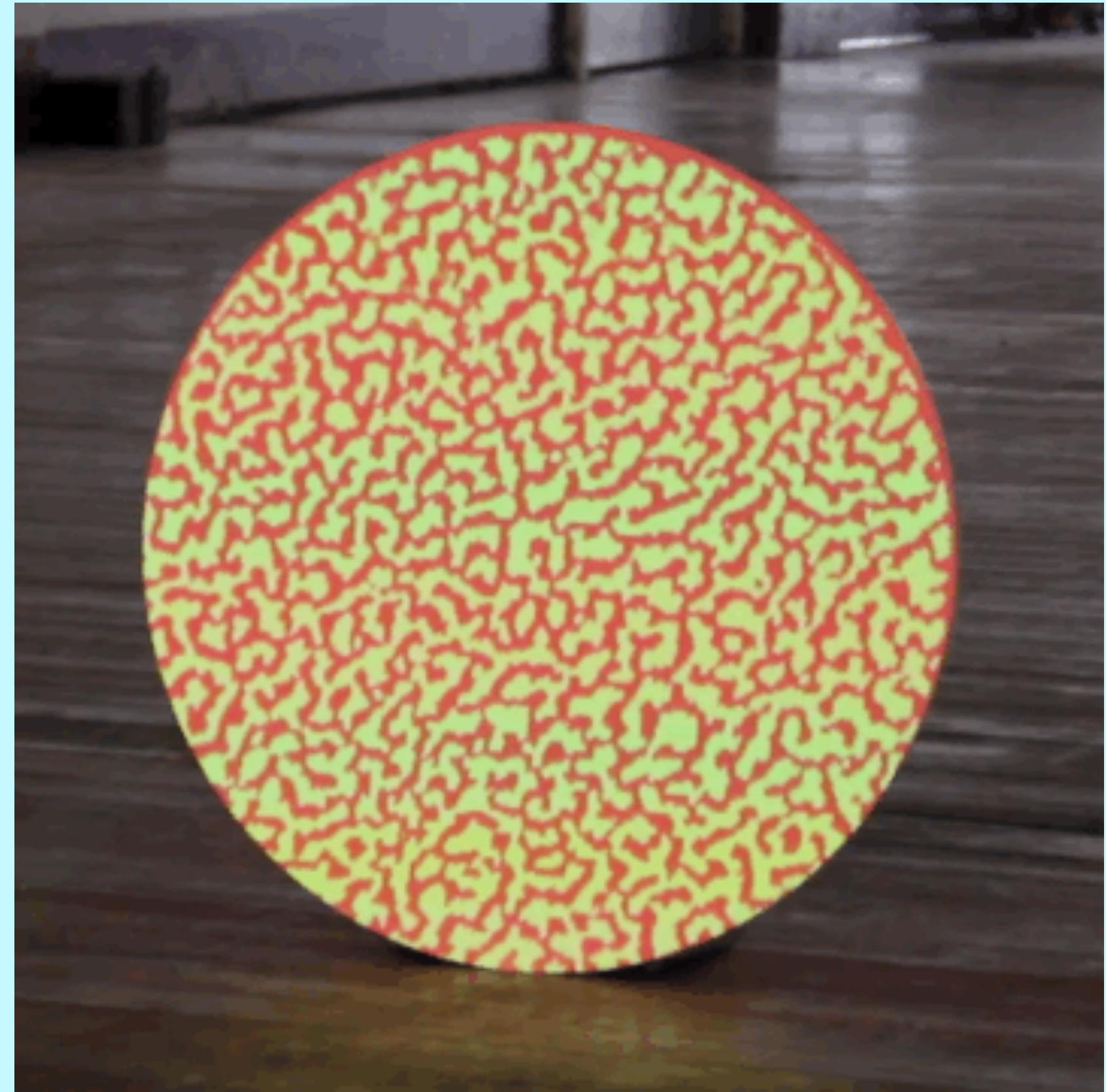
Tests - Sam Meech 2018

# SCIENCE OF VIDEO FEEDBACK



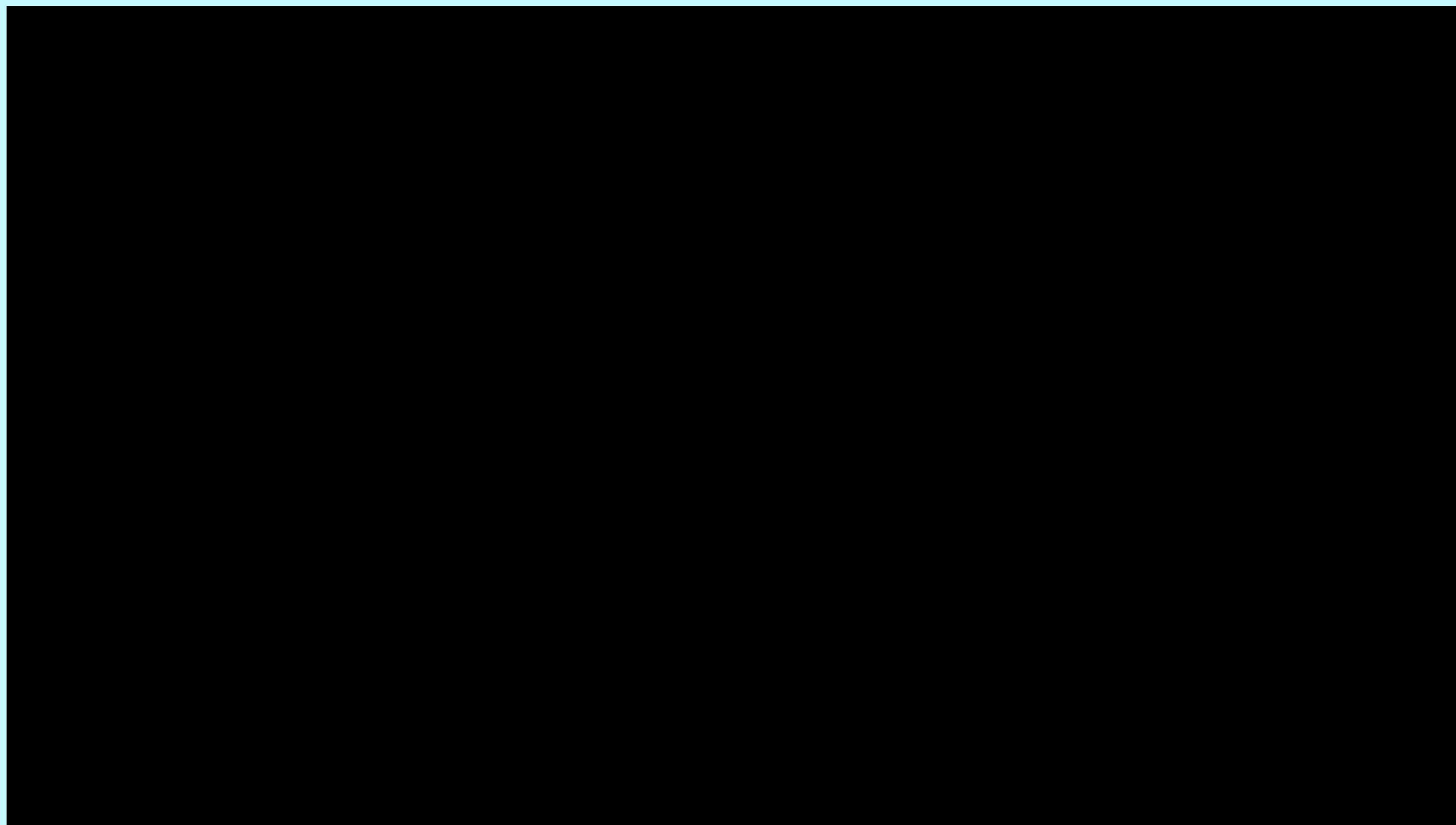
Video Culture tests - Sam Meech 2013

# SCIENCE OF VIDEO FEEDBACK



Tests - Sam Meech 2018

# SCIENCE OF VIDEO FEEDBACK

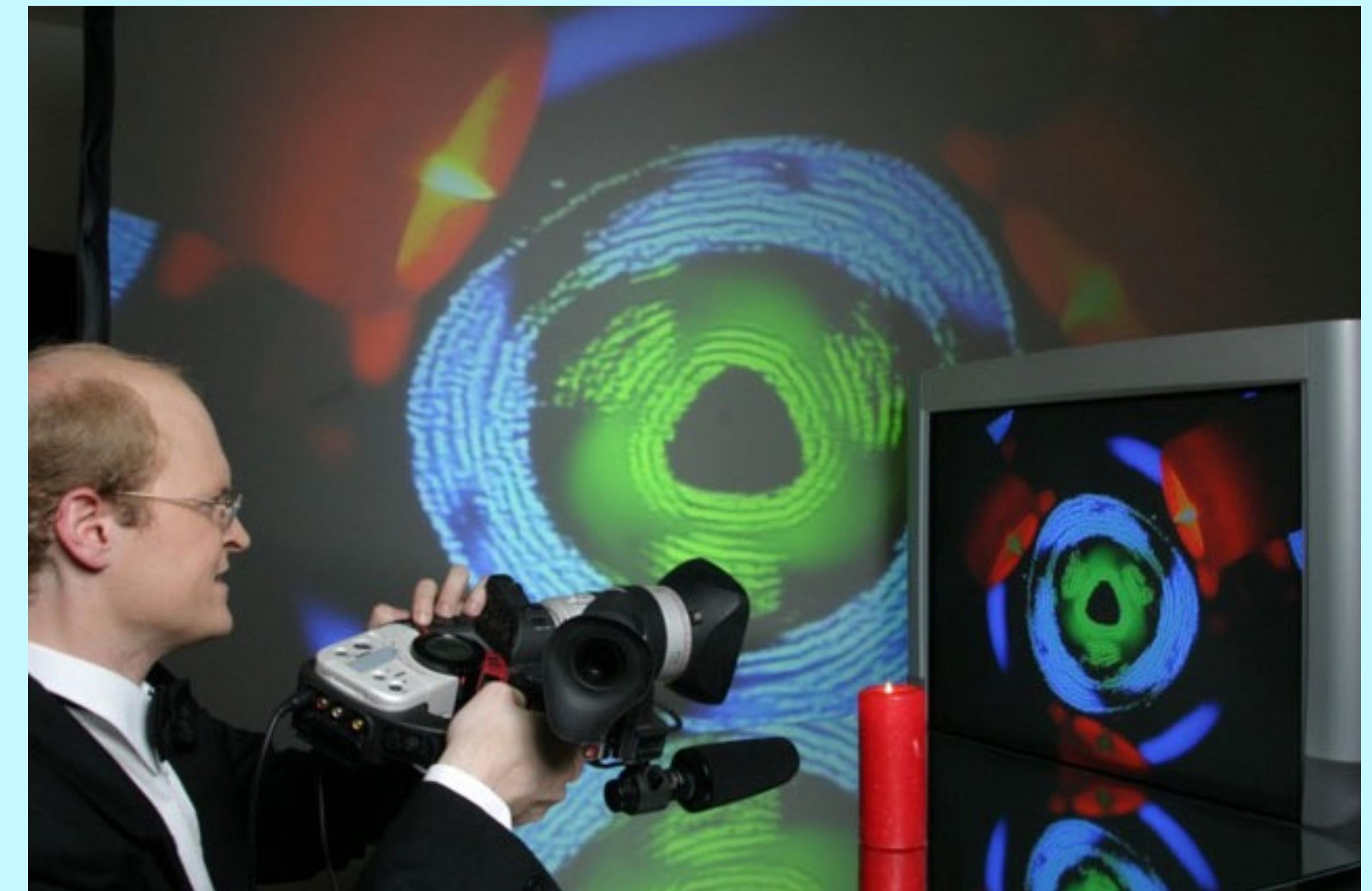


Doctor Who An Unearthly Child - Opening Credits, 1963 - by Norman Taylor

## SCIENCE OF VIDEO FEEDBACK

« Dr. Blume a.k.a. Stefan Heusler, aims his video camera at a television screen and films it...

...This simple set-up can create beautiful, almost psychedelic looking images that are constantly changing. In the show the images are accompanied by live music and projected on a large screen with a video projector. »



# SCIENCE OF VIDEO FEEDBACK

James P. Crutchfield

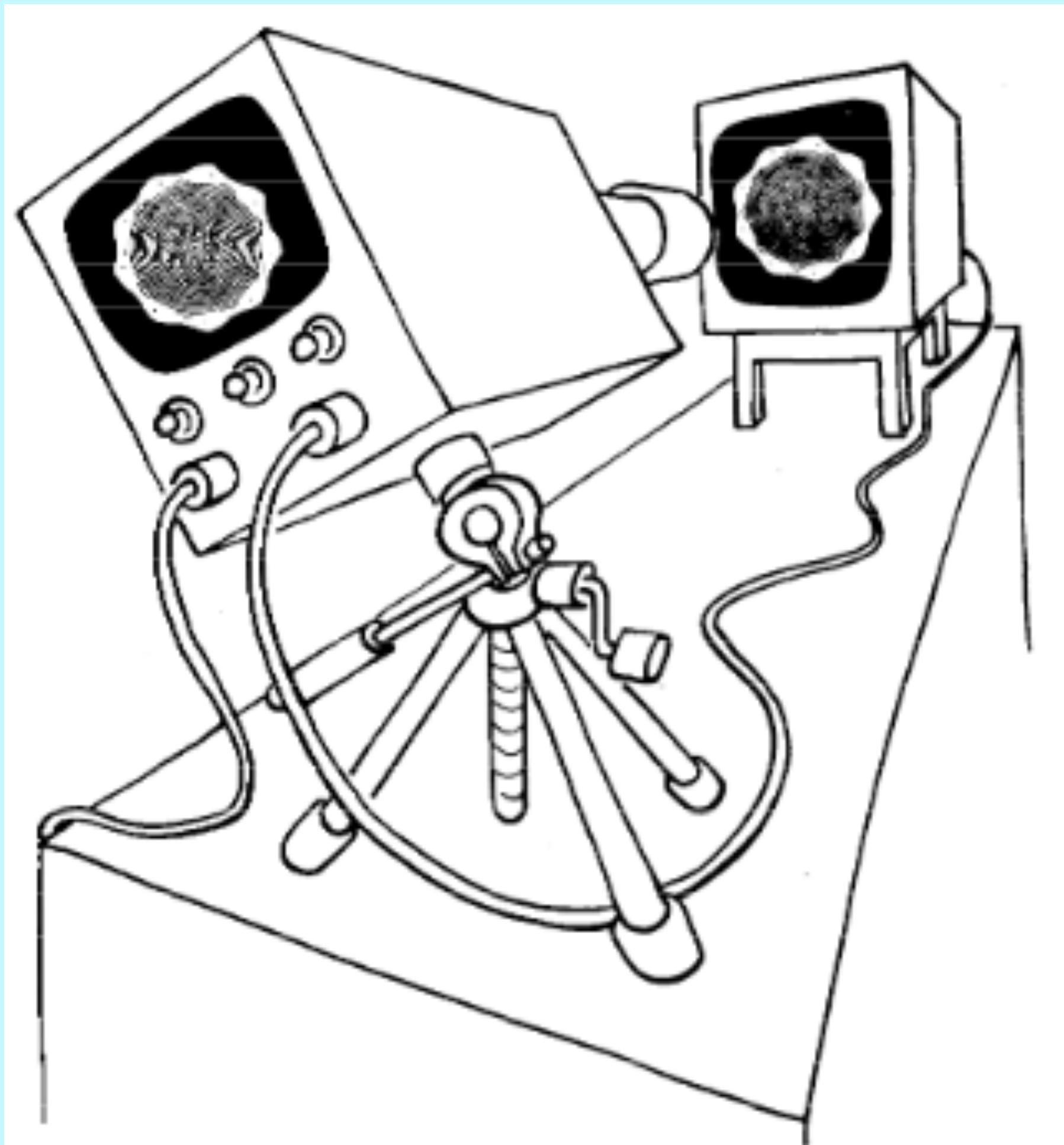
American mathematician and physicist

« Video feedback provides a readily available experimental system to study complex spatial and temporal dynamics »

Crutchfield, J.

SPACE-TIME DYNAMICS IN VIDEO FEEDBACK

Physica, 1984



# SCIENCE OF VIDEO FEEDBACK

« To study the dynamics of this simulator is also to begin to understand a number of other problems in **dynamical systems theory, iterative image processing, cellular automata, and biological morphogenesis**, for example.»

Crutchfield, J.  
SPACE-TIME DYNAMICS IN  
VIDEO FEEDBACK  
Physica, 1984



Photo 19. Logarithmic spiral.

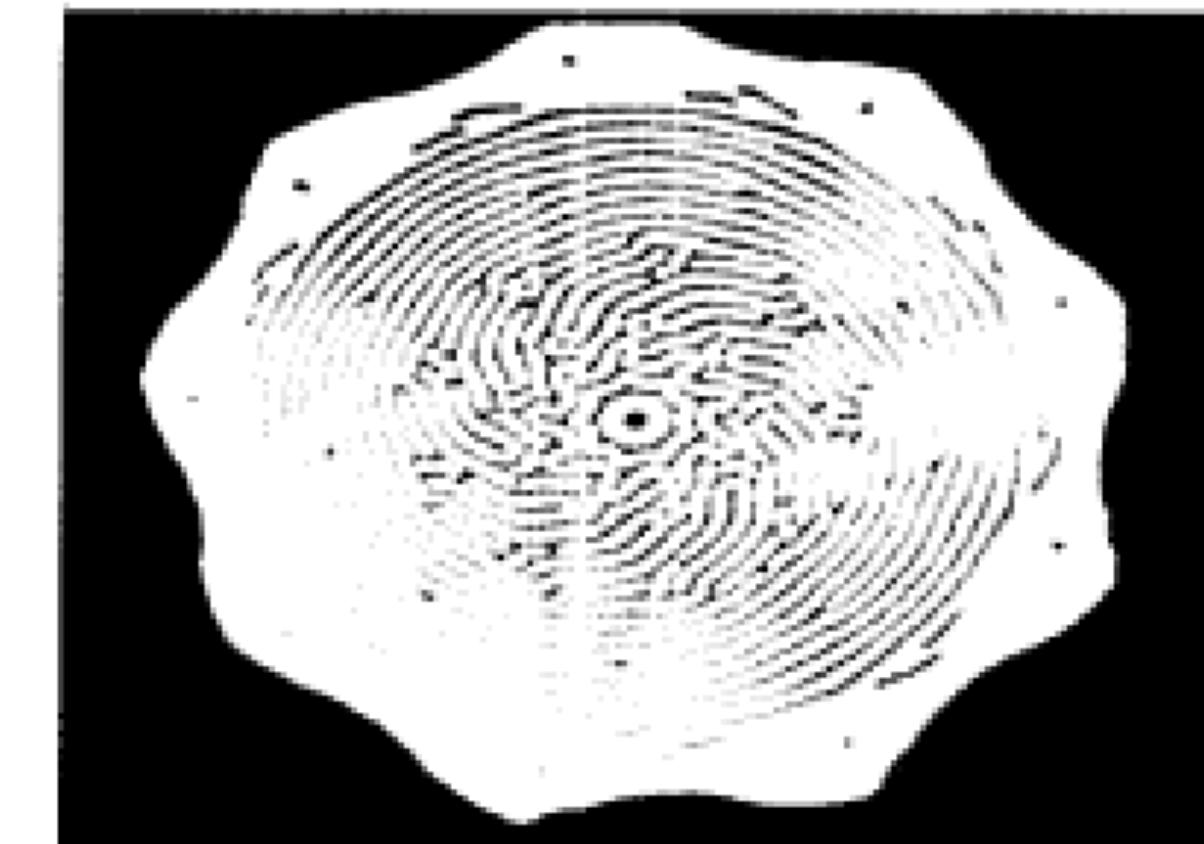


Photo 10. Dislocations are created at the center and move out into the laminar region where they are annihilated.

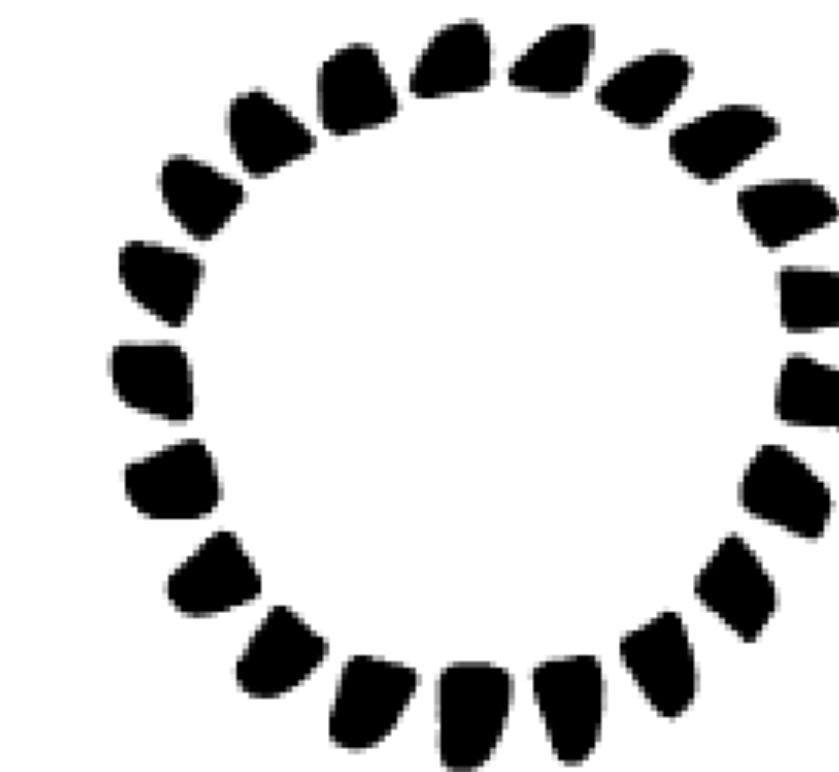


Photo 8. Near the twenty-one-fold symmetric, unstable fixed point pattern.

# SCIENCE OF VIDEO FEEDBACK

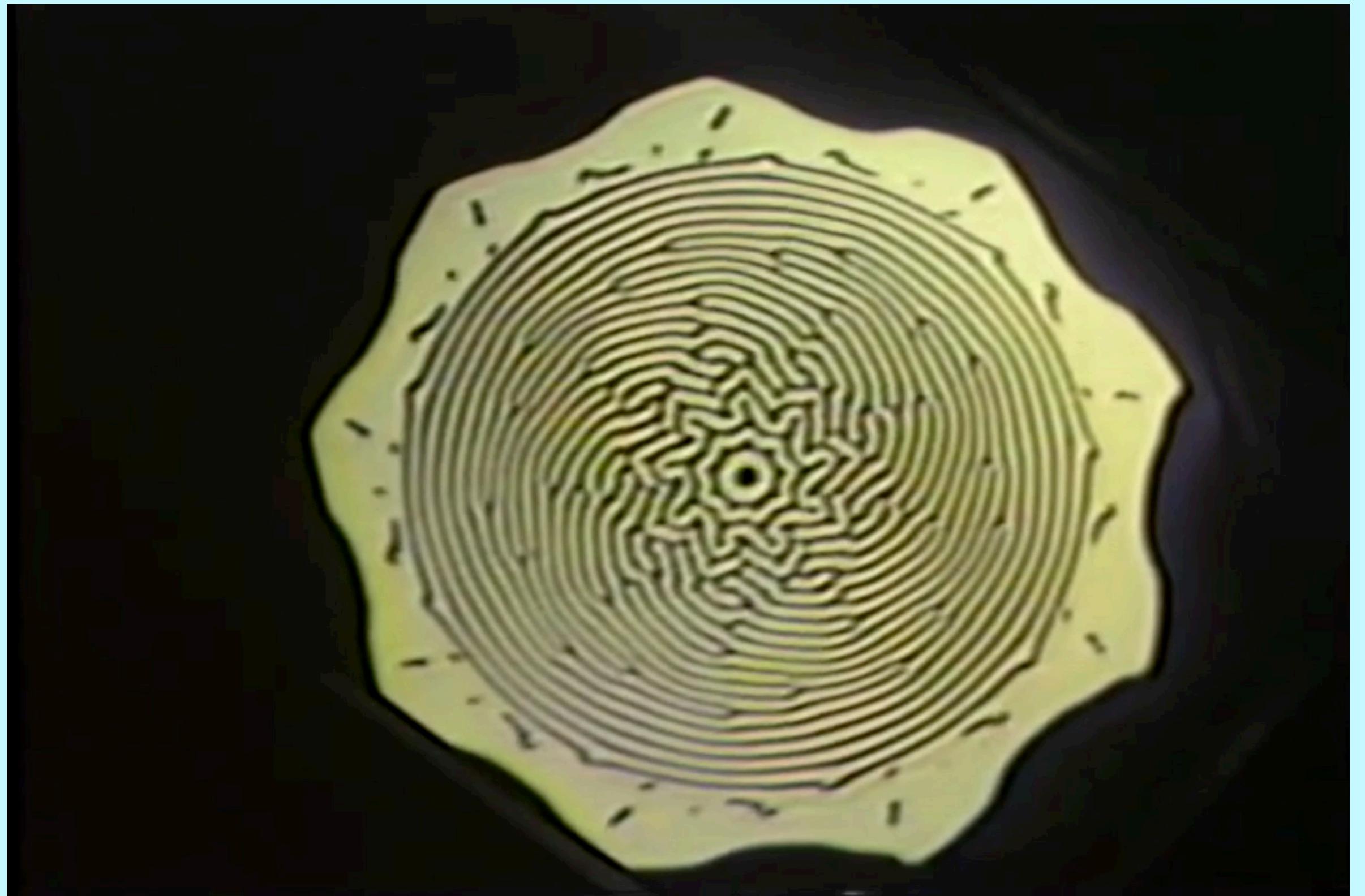
« Video feedback provides a creative stimulus of behavior that apparently goes beyond the current conceptual framework of dynamical systems...»

... I believe that an appreciation of video feedback is an intermediary step, prerequisite for our comprehending the complex dynamics of life. »

Crutchfield, J.

SPACE-TIME DYNAMICS IN VIDEO  
FEEDBACK

Physica, 1984



# SCIENCE OF VIDEO FEEDBACK

Steina and Woody Vasulka  
Video artists

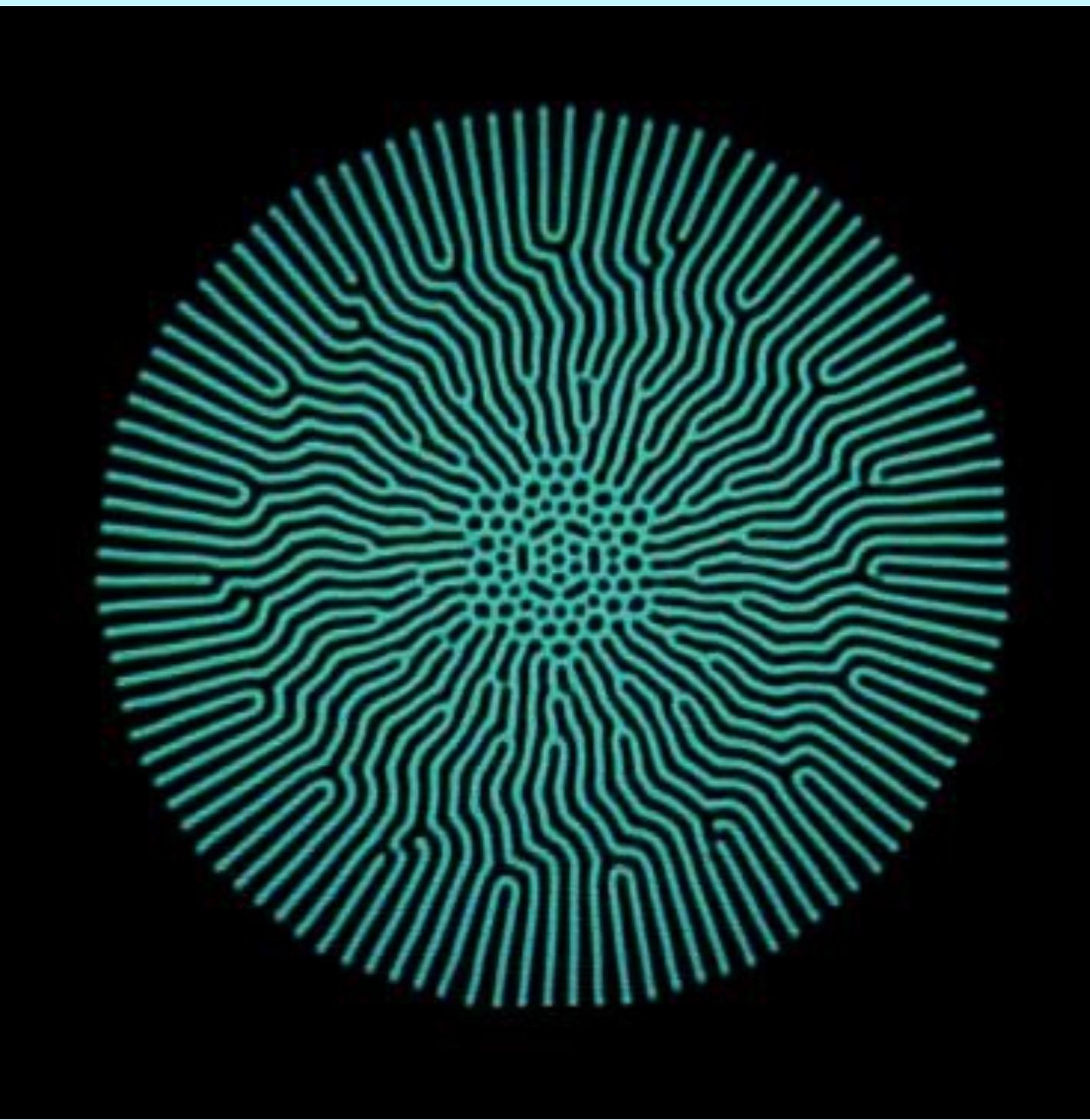
1999 - found the Art and Science Laboratory  
with James P. Crutchfield



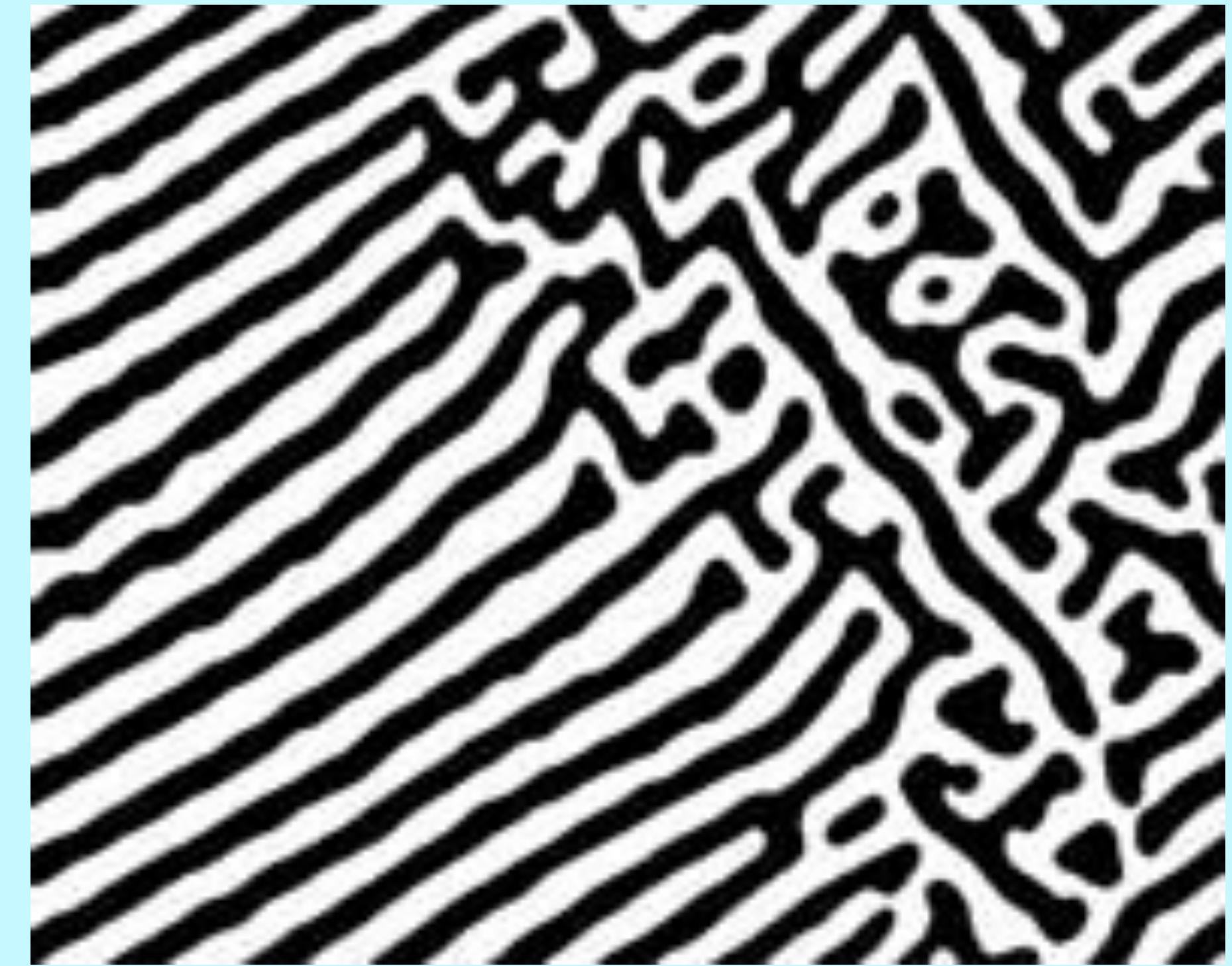
# SCIENCE OF VIDEO FEEDBACK



Marc Fichou

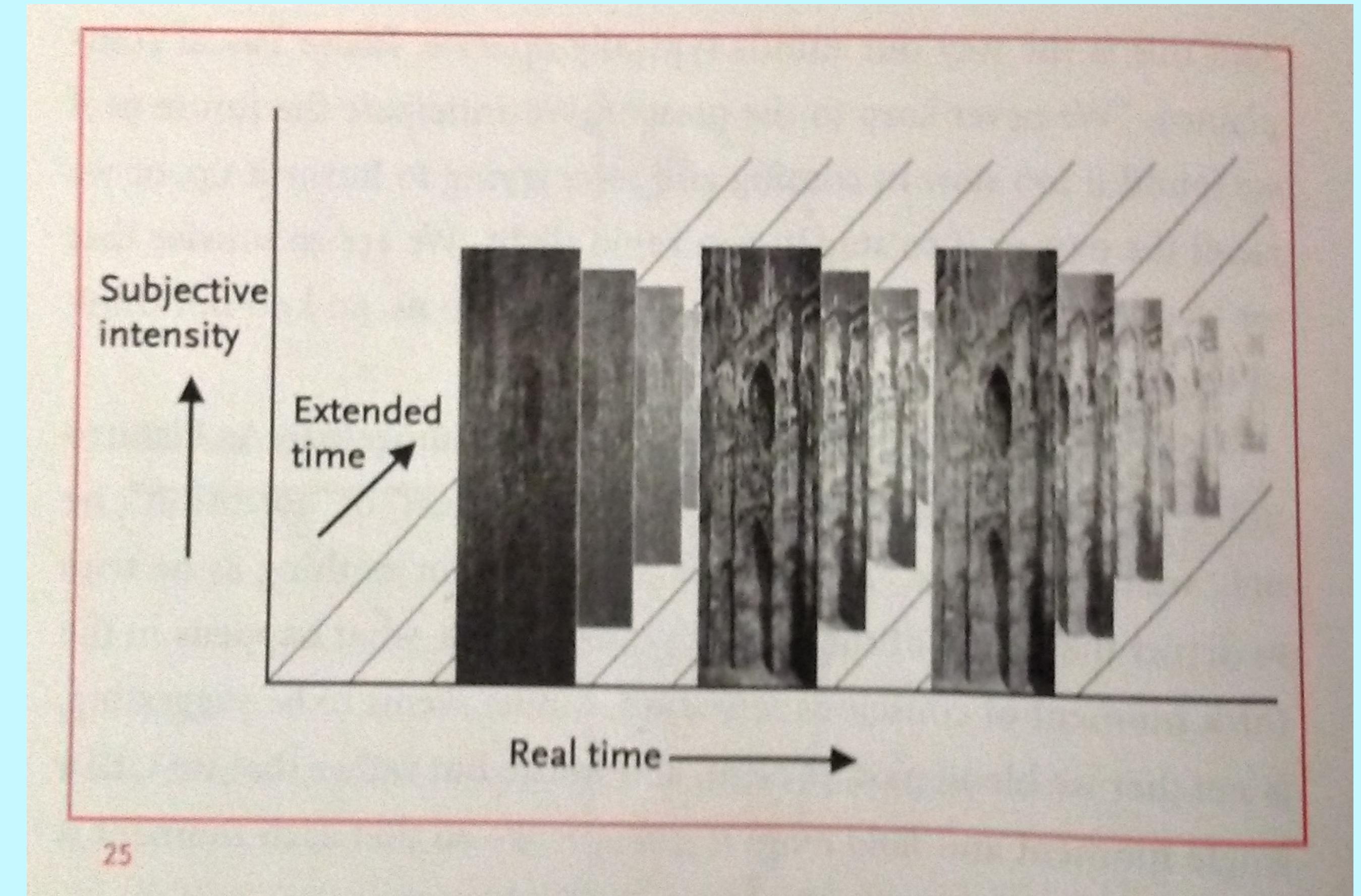
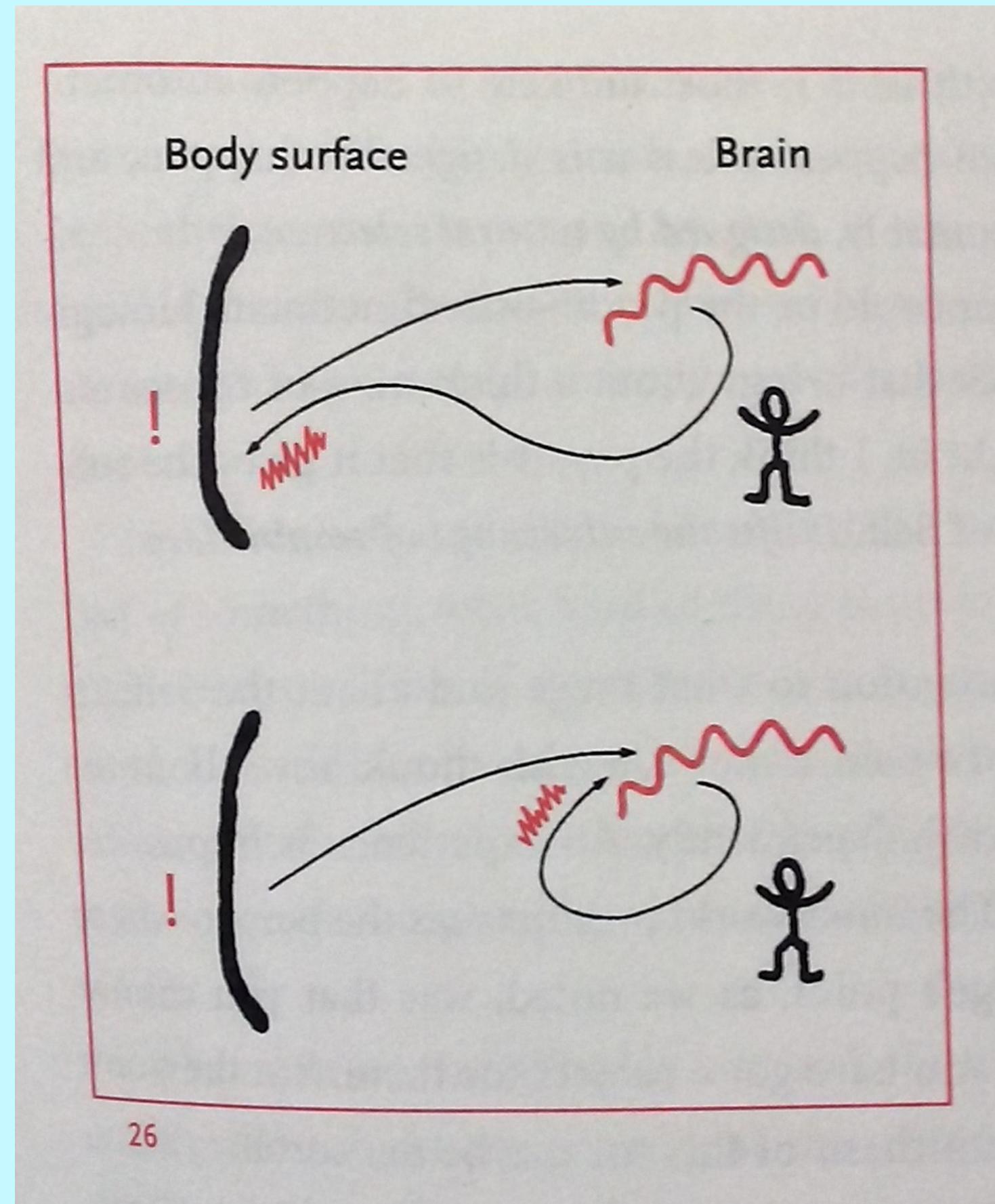


Ethan Turpin



Barbara Doser

# SCIENCE OF VIDEO FEEDBACK



## NEURO-PSYCHOLOGY

Nicholas Humphrey - Seeing Red: A Study In Consciousness (2009)

## SCIENCE OF VIDEO FEEDBACK

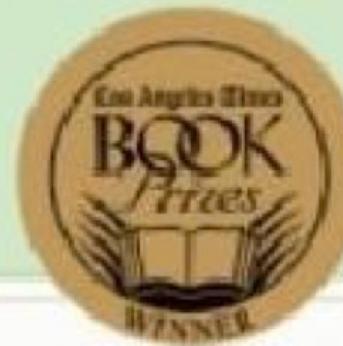
« Rather than trying to figure out how to account precisely for video reverberation in terms of phenomena at lower levels, I have come to just accept it as a fact, and I deal with it at as a phenomenon that exists at its own level. This should sound familiar to you, since it's how we deal with almost everything in our physical and biological world. »

Douglas Hofstadter  
'I AM A STRANGE LOOP'  
(2007)

COGNITIVE SCIENCE

"Brilliant... the most gripping 400 pages I've read in years." —*The Times* (London)

# I AM A STRANGE LOOP



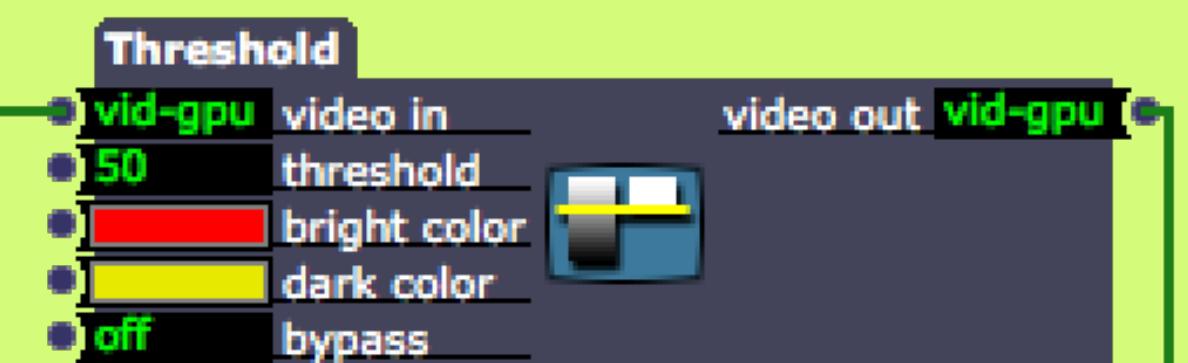
DOUGLAS  
HOFSTADTER

## TOOLS AND METHODOLOGY

# TOOLS AND METHODOLOGIES

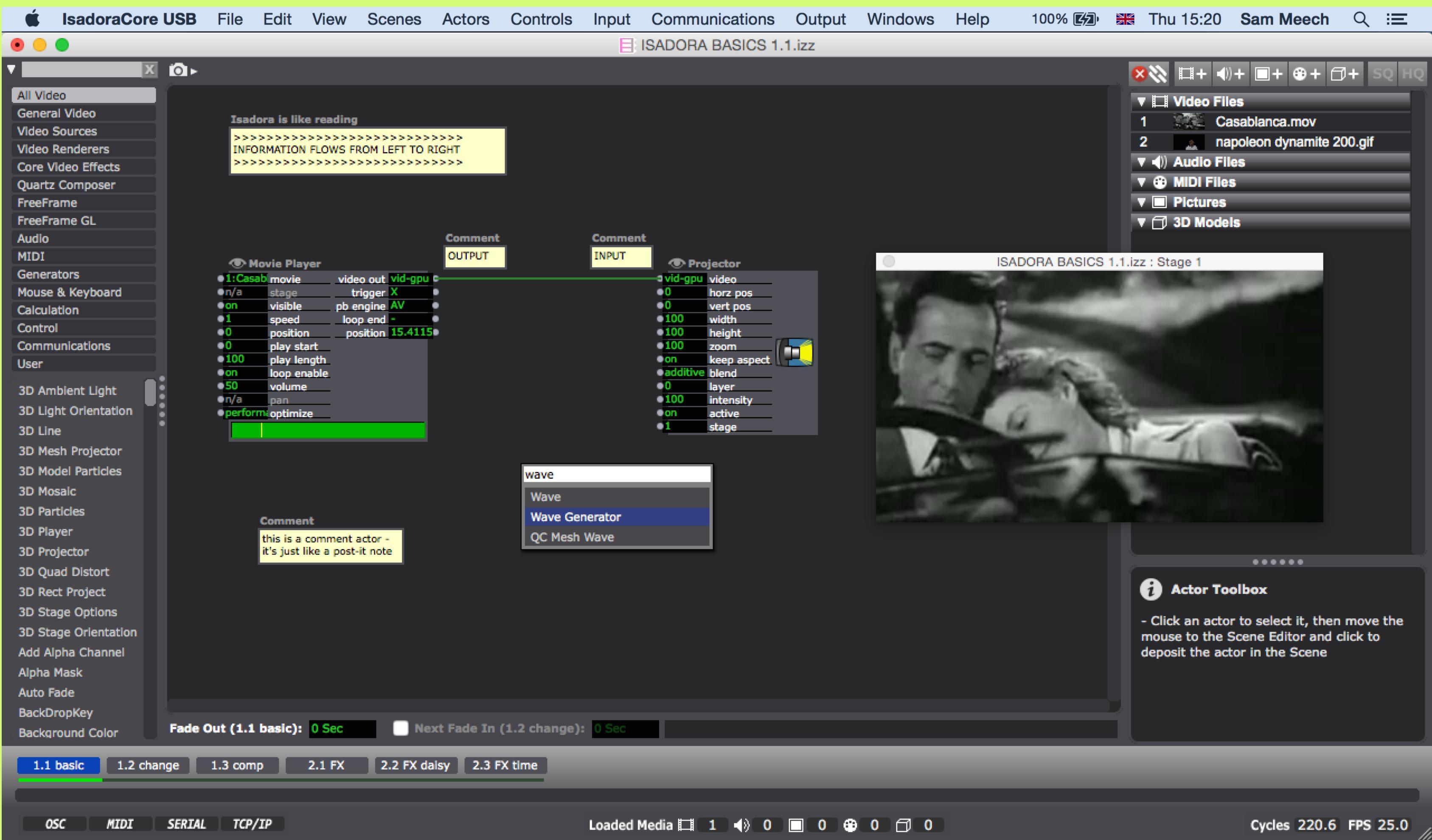
## VIDEO IMAGING:

1. REVEAL
2. FILTER / ENHANCE
3. CALIBRATION
4. ANALYSIS
5. APPLICATION



Isadora software - Troikatronix

# TOOLS AND METHODOLOGIES



Isadora software - Troikatronix