

Teaching Complexity: Complexity and Creativity

19.02.19 / 1500

Dave Cormier

Manager, Schulich School of Medicine, Windsor Campus

Rhizomatic Learner

Internet person

@davecormier

Tobias Revell

Programme Director, Graphic Design Communication, London College of Communication, UAL

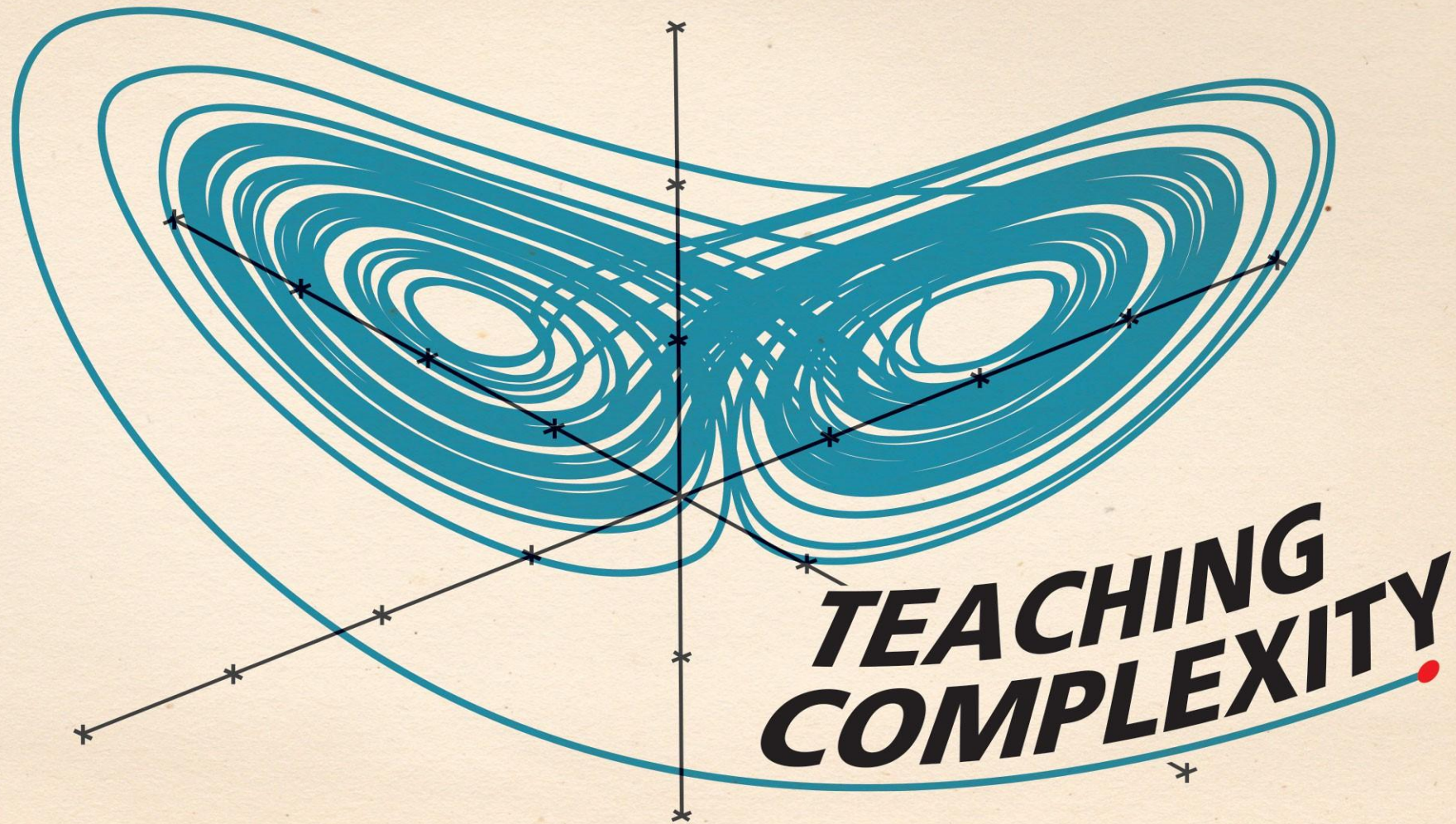
Director, Supra Systems Studio

Director, Strange Telemetry

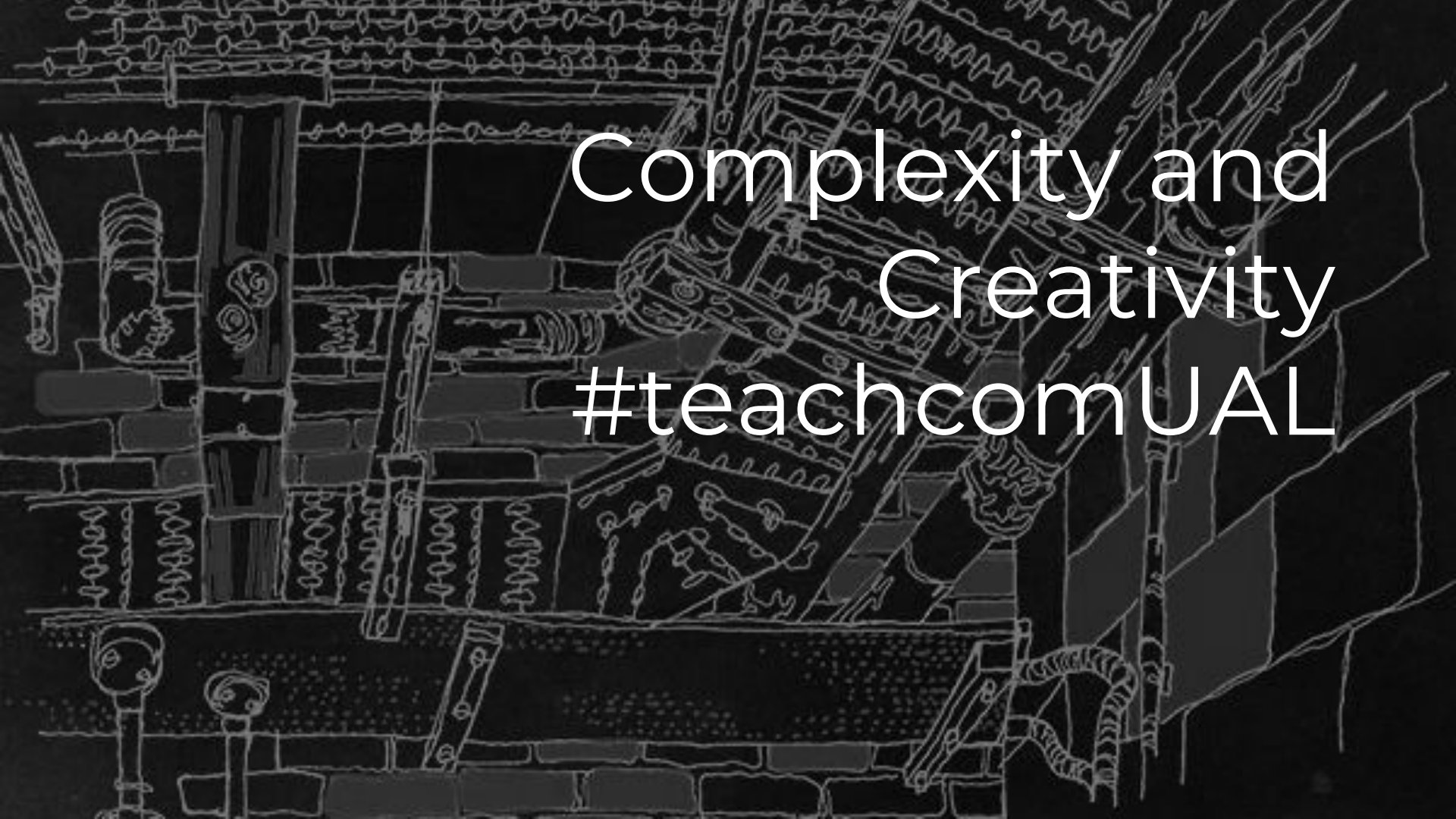
Curator, Haunted Machines

Pretty passable digital artist

@tobias_revell



**TEACHING
COMPLEXITY**



Complexity and Creativity

#teachcomUAL

David White, Head of Digital Learning - @daveowhite
<https://tinyurl.com/y8ddkg7k>

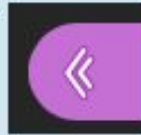
ual ■ university
■ of the arts
■ london
Teaching and Learning Exchange



Blackboard Collaborate Ultra - basics:

Setup your audio and video

Click the **purple icon** to expand control panel.



Click the **settings cog** icon.



If required, expand the **Audio and Video Settings** section and click the **Set up your camera and microphone** link.

Once configured use these buttons to turn on/off your microphone and camera:



Collaborate basics

Click the purple icon to expand control panel.

Chat



Attendees List



Share Content
(if granted by meeting organiser)



To leave the session

Just close the browser tab/window.

Questions and reflections:

**<http://teachcom.myblog.arts.ac.uk>
comments**

#teachcomUAL - Twitter

Premise

Simple and Complicated challenges are solved. Complex problems can only be confronted creatively.

Designing for complexity
(a goal for learning)

SIMPLE



Simple Problems

1. Easily measured
2. Does not require subject matter expertise
3. Fix it by DECIDING.

COMPLICATED



```
void loop() { //do it over and over and over again

  buttonFeelings = digitalRead(buttonBlue); // did you press the button yet? d

  if (buttonFeelings == HIGH) { //if button is pressed

    digitalWrite(ledPin, HIGH); // light turns on
    {
  for (coffeeChickpeaPosition = 0; coffeeChickpeaPosition <= 180; coffeeChickp
  coffeeChickpea.write(coffeeChickpeaPosition); // change the p
  delay(15); // wait a little bit
    }
  }
```

Complicated Problems

1. More difficult to measure
2. Sometimes more than one solution is possible
3. Requires subject matter expertise
4. Lean Six Sigma

Lean Six Sigma: DMAIC



Define

Define the problem.



Measure

Quantify the problem.



Analyze

Identify the cause of the problem.



Improve

Implement and verify the solution.



Control

Maintain the solution.



Complicated educational challenges
Please write on this slide.

COMPLEX



Complex Problems

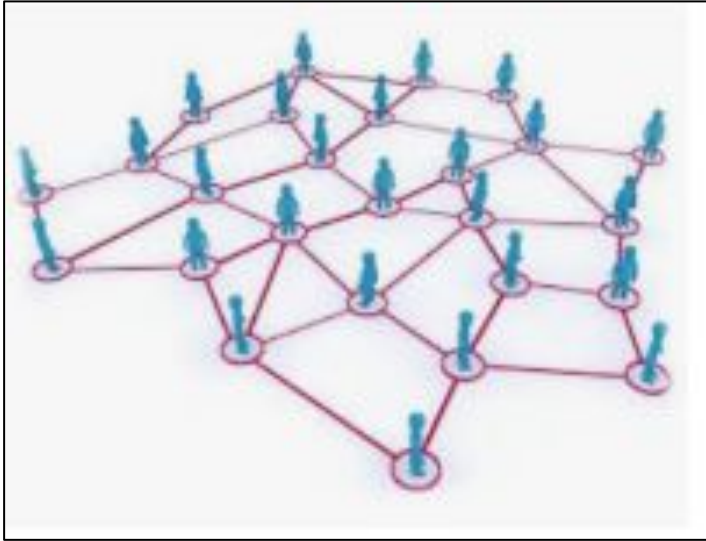
1. Not directly measurable
2. Does not have a solution
3. Can only work on part of the problem
4. Fix it with people

complex educational challenges
Please write on this slide.

Complicated
or complex?



Simple/Complicated
Clear learning objectives
Certainty
Student as follower

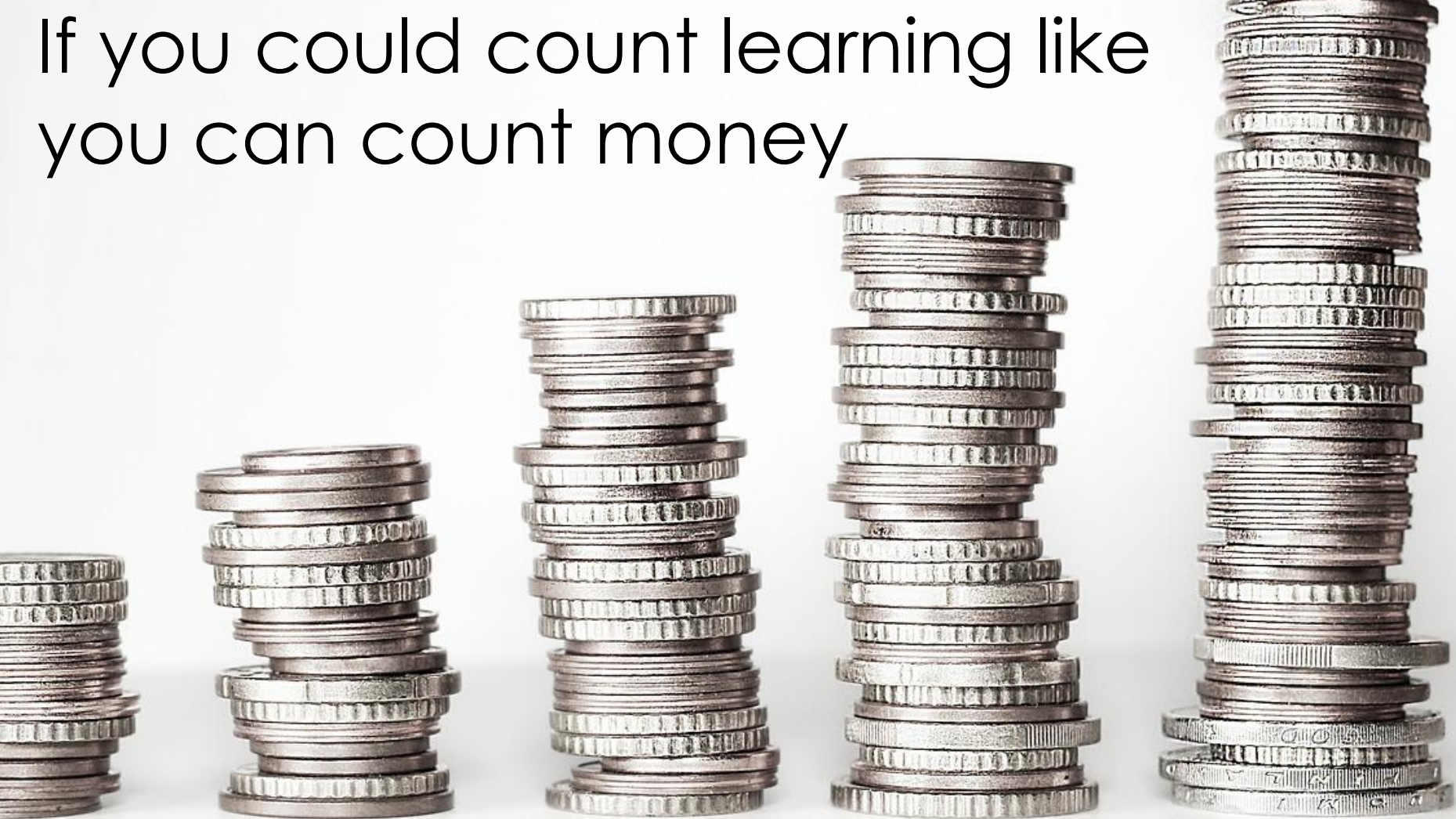


Complex
Learning ecosystem
Uncertainty
Student as collaborator



To what purpose?

If you could count learning like
you can count money



Creative approaches to complex educational things
Please write on this slide.

Ethics - Ideology:



Community

Openness - reuse - recordings

Creative Commons, Attribution

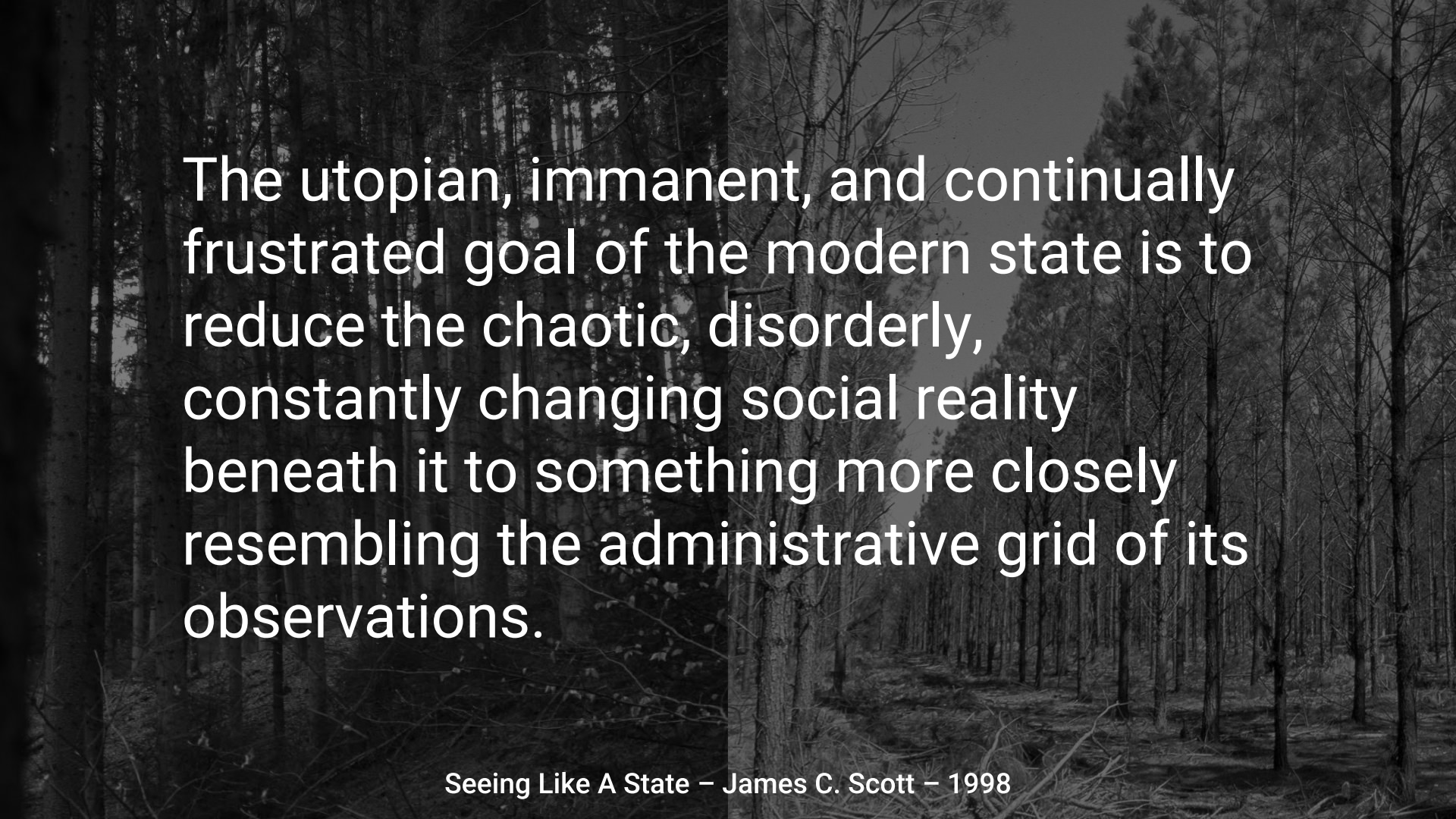


DIERVILLA. Hort. Cliff. 63 sp. 1.
 a. Caulis truncatus secus ramos depilatus.
 b. Rami oppositi, subrotundi, nodantes, cum Calycibus & Corollis irregularibus ac fere bilobatis.
 Fructus bilobularis & carnosus est. Hinc planta Lonicera adonidum affinis.

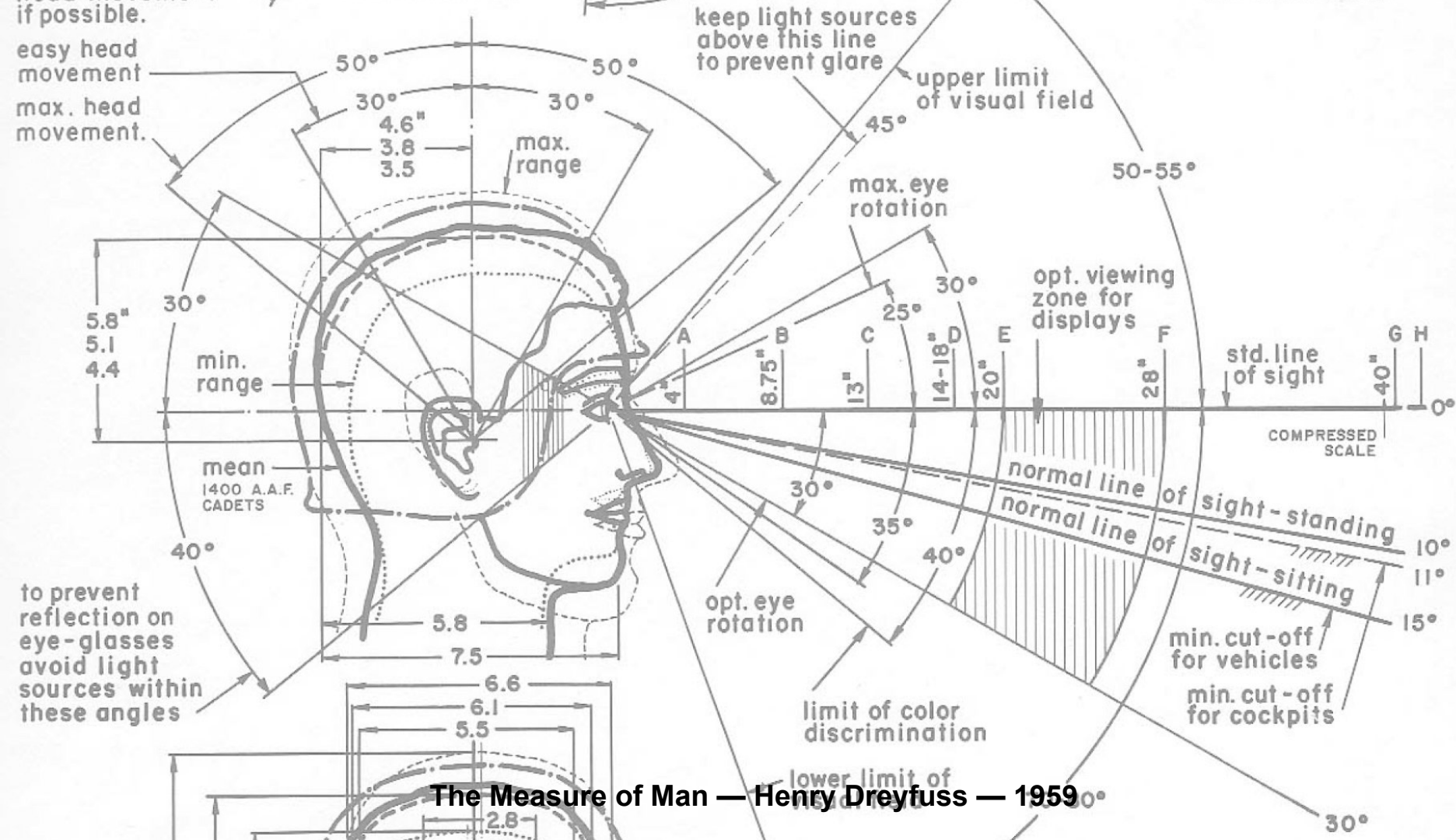
J. WANDelaar del. & scul.

Diervilla, Hortus Cliffortianus — Georgius Clifford (Georg Dionysius Ehret) — 1737





The utopian, immanent, and continually frustrated goal of the modern state is to reduce the chaotic, disorderly, constantly changing social reality beneath it to something more closely resembling the administrative grid of its observations.

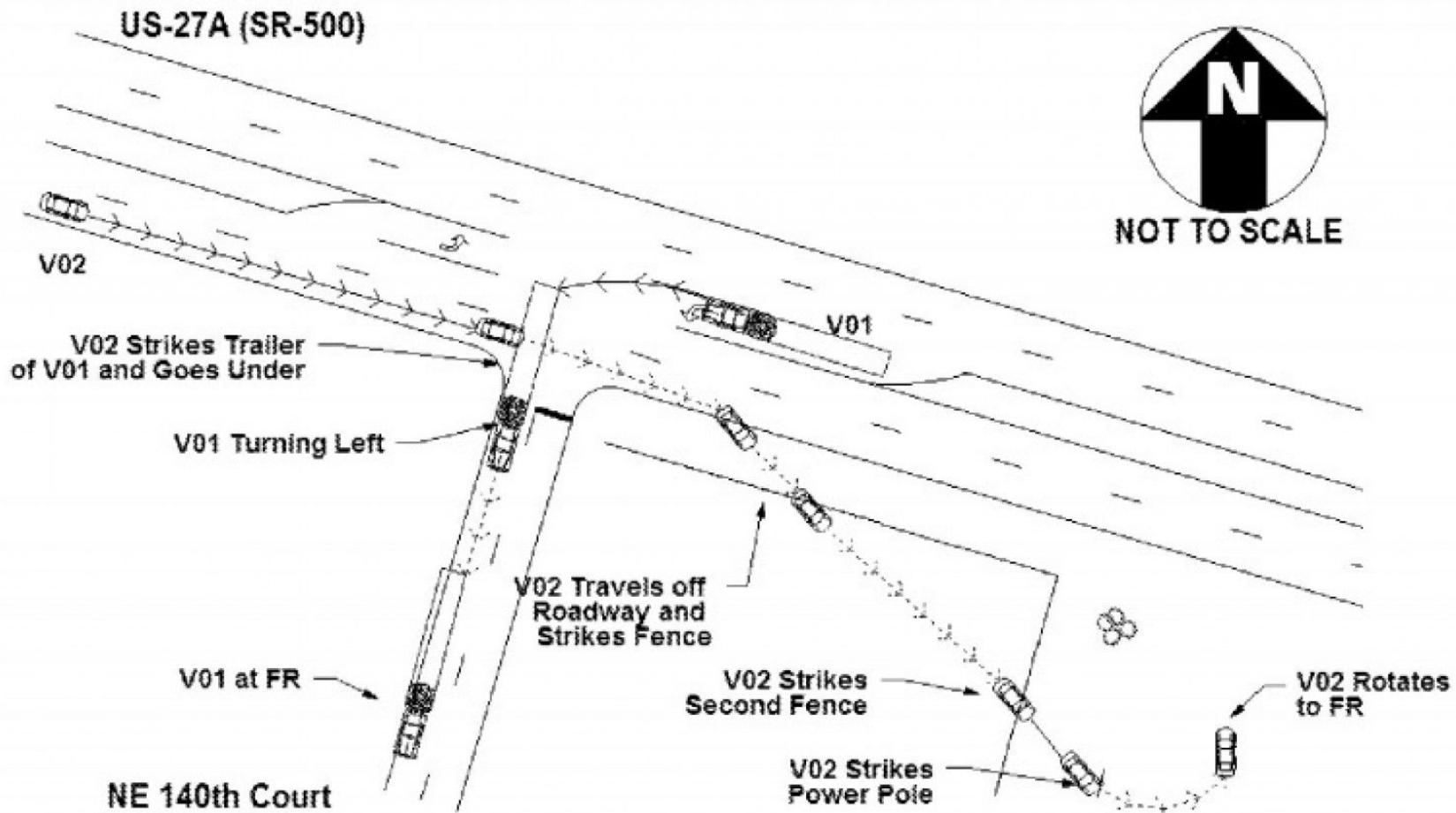


The Measure of Man — Henry Dreyfuss — 1959

There is no way of framing ethical, political, and philosophical questions that would not also have to be a matter of techne, technique, or technesis, and so would not have to be imagined mechanically.



La Ville Radieuse — Le Corbusier — 1935

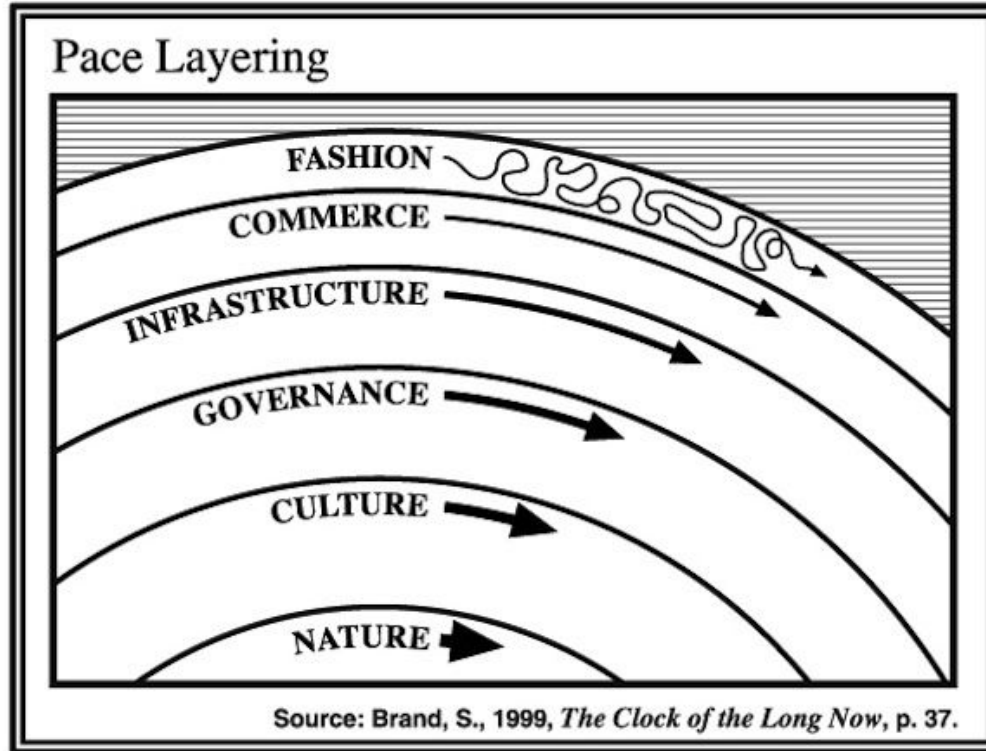




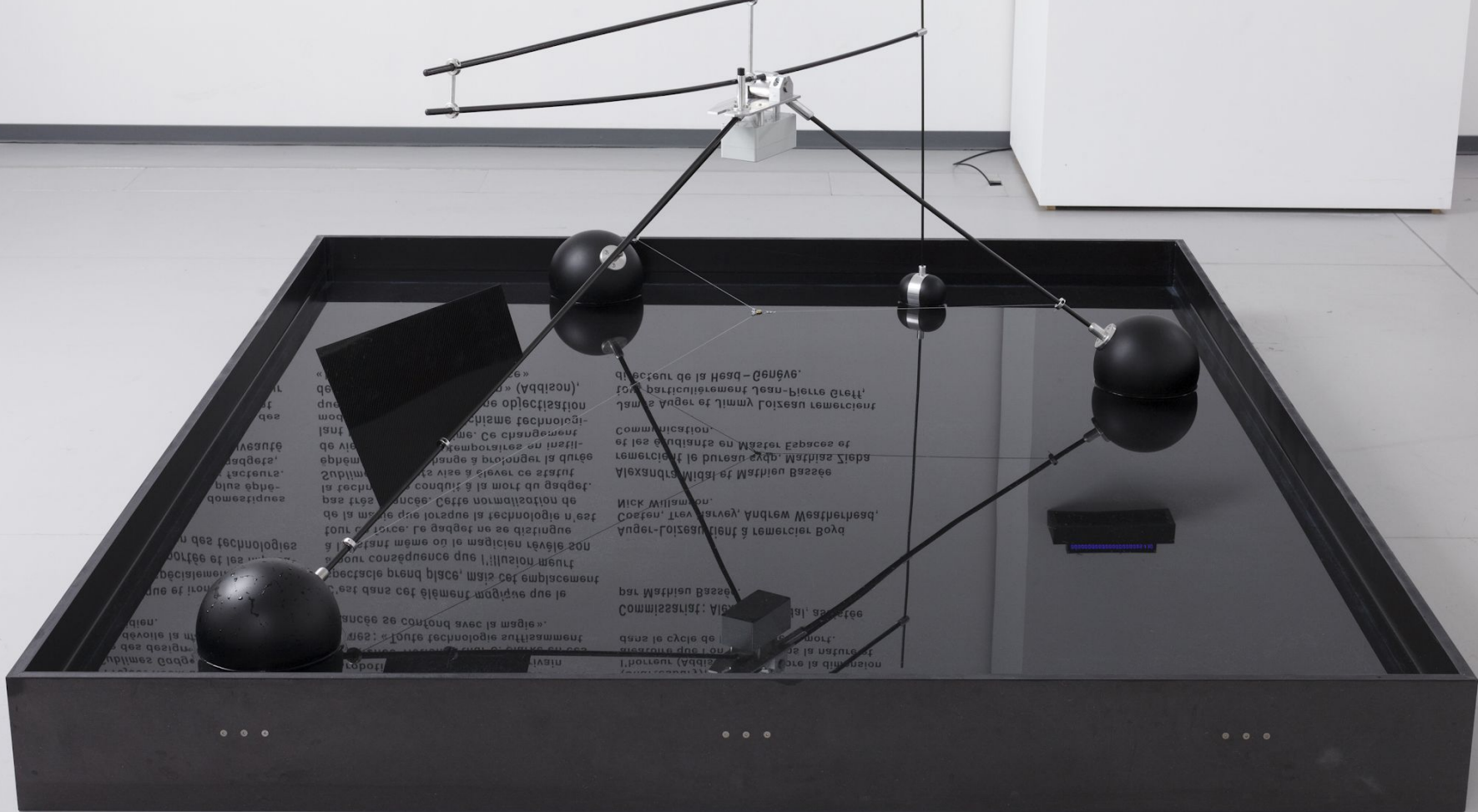
We are stuck with the problem of living despite economic and ecological ruination. Neither tales of progress nor of ruin tell us how to think about collaborative survival.

...

Imagining the human since the rise of capitalism entangles us with ideas of progress and with the spread of techniques of alienation that turn both humans and other beings into resources. Such techniques have segregated humans and policed identities, obscuring collaborative survival. The concept of the Anthropocene both evokes this bundle of aspirations, which one might call the modern human conceit, and raises the hope that we might muddle beyond it. Can we live inside this regime of the human and still exceed it?



Pace Layering – Stuart Brand – 1999



Ripple Counter – James Auger – 2015

#2019 Problems: How to urgently help learners contextualise their practice and research in systems of ten-thousand year, planetary scales when they're surrounded by speed and individualism?

KEEP THE CONVERSATION GOING!

Questions and reflections:

[HTTP://TEACHCOM.MYBLOG.ARTS.AC.UK](http://teachcom.myblog.arts.ac.uk)

COMMENTS

#TEACHCOMUAL - TWITTER

Next session February 26th 3pm GMT with
Sheldon Chow & Matt Lingard:
Digital Fieldwork 2

<https://teachcom.myblog.arts.ac.uk/digital-fieldwork-2>

