

TODAY

- The film Twelve Monkeys and writing about it
- Recap: Modern thought and institutions
- Thinking about (social) change in critical, productive, ways
 BREAK
- Thinking about values and exercise
- Note on assignments



Today – researching, imagining and generating sociotechnical change

Recap: Modern thought and institutions

Some different frameworks for thinking about change

BREAK

Thinking about values and exercise Anthropocene challenges
Note on assignments



AGENTS OF VES AGERMATIVES ALTERNATIVES Re-designing Our Realities Future Mak http://techfi 2019/



Modernity today or 'The future has already arrived (in Silicon Valley)'

The modern movement – claiming the end of change and history?



http://architecturalvisits.com/en/2013/09/17/weissenhof-le-corbusier/

Modernity, planning and science

The rise of expert power survey – analysis - plan

Centralised infrastructures

Industry-fuelled growth



Trends: STEEPV(L) that can be studied and assessed

S Society – Societal trends

T Technology – Technological trends

E Economy – Economic trends

E Ecology – Ecological/environmental trends

P Politics - Political trends

V Values – Value trends

L Legislative – Legislative trends



In modern thought and ideology, technology:

- Shapes social life (technological determinism or adaptation)
- Is a progressive force
- Is autonomous or 'blind to the future'
- Is inevitable
- Manages risk (and bias) better than humans

In practice and materially

- ?? Creates a 'mess' ?? Kim Fortun, Tony Fry and others
- Does enough to provoke a field into being: FUTURES STUDIES!



Critiques

- Technology is not autonomous (e.g. Langdon Winner)
- Technology is part of 'modernization', but it does not just happen to societies – it is shaped through sociopolitical processes (e.g. sociologist Ulrich Beck, anthropologist Lucy Suchman)
- Technology produces risk and uncertainty
- ⇒ The political and cultural aspects of this became key concerns of Science and Technology Studies (STS)

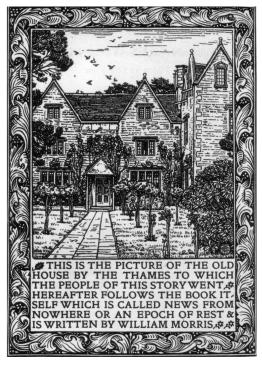
Note <u>The Familiar Strange</u> podcast <u>#36 If Machines Talked:</u> <u>Lucy Suchman on drone warfare, stubborn photocopiers & human-robot relations</u>

https://soundcloud.com/thefamiliarstrange/36-if-machines-talked-lucy-suchman

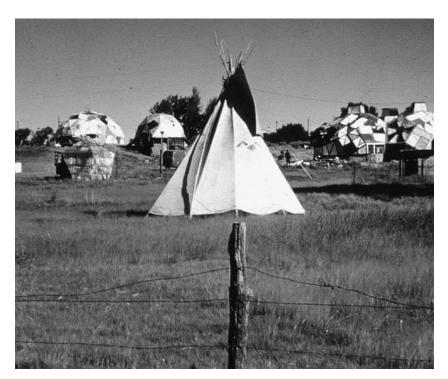
BUT: Enlightenment and modernity are BIG & COMPLICATED



Alternative modernities - Economic and social as well as technical



William Morris, 19th century



Drop City, 20th century



Techno-utopianism and cyberculture



Buckminster Fuller contemplating Universe

- Free from 'the system' be it government or the 'military-industrial complex'
- Celebrated new communications technologies and networks
- Turner, F. 2006 From Counterculture to Cyberculture.
- Turner, Fred. "Millenarian Tinkering: The Puritan Roots of the Maker Movement." *Technology and culture* 59.5 (2018): S160-S182.
- Scott, F. 2007. Architecture or techno-utopia: politics after modernism.

Hippie modernist and other alternative futures

""We are as gods and might as well get good at it. ... a realm of intimate, personal power is developing — power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested."

Stewart Brand, *The Whole Earth Catalog*, 1968

"We are a little wild here with numberless projects of social reform"

Ralf Waldo Emerson from the USA to his Scottish friend Thomas Carlyle in 1840. Quoted in Boal et al. (eds) 2012 West of Eden: Communes and Utopia in Northern California

ON ASSUMPTIONS about change

A multitude of words for and experiences of *futurity*

Myth

Frontier of exploration

Plan

Foresight

Progress

Anticipation

Modern

Scenario

Risk

Transition (management)

Choice architecture (nudge)

Prefiguring



The Idea of the Future in Social Life

Revolutionary, radical, utopians

• Ideological, wholesale change, romantic

Pragmatic, piecemeal social experiments (Karl Popper)

- reason, pragmatism, incrementalism, compromise
- ⇒ prime mover of social and historical change?
- ⇒ research focus that emerged together with environmental anticipation?



The idea of *futures*

It may be hard to anticipate the future. This does not make the future empty.

 "it is filled with all those things we have thrown into it as they travel back towards us delivering either their futuring or defuturing potential". Tony Fry, Design Futuring.

We may be part of a planetary humanity, yet still inhabit different worlds.

 Escobar, A. (2018). Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds. Durham and London: Duke University Press.



Ramia Mazé (2019) 'Politics of Designing Visions of the Future', *Journal of Futures Studies*, March 2019, 23(3): 23-38.

"Assumptions about time, progress and futurity underlie popular rhetoric concerning 'change', 'progress', 'tranformation' and 'transition', and design ... is affected by the increasing hegemony of values framed as 'newness' and 'innovation'".

- ⇒ attention to the politics of unspoken, unnoticed *values*
- ⇒ particularly 'good' human, 'good' behaviour

Rhetoric changes things: words

Speech acts like 'I pronounce you husband and wife'

• sometimes makes a consequential difference

Storytelling as statecraft (compare design as statecraft)
Picture-making as change-making as agency
Documentation as intervention



Rhetoric changes things: Images



Rhetoric changes things: Design









Change and its causes

Theories of change have some sense of:

- What causes it
- By what criteria change is judged

Change is art, science, philosophy and life

Change and its causes

Individual agent (e.g. me)

Or an actor network?

Collective actor (e.g. us)

An assemblage?

Negotiation and struggle

Filling needs, wants, desires:

"he made me do it!"

Natural genius? Diffusion? Adaptation? Also good reasons to resist change!

Not sharing desires: I want an

app-free life

Interlinked but different ways of asking about futures

Theories of change

theories of agency

theories of need

theories of values

theories about humans







- 1. Government inaction
- 2. Government inaction
- 3. Government inaction
- 4. Government inaction
- Government inaction

#RebelForLife against government inaction on the ecological and climate emergency: rebellion.earth

@IPBES #GlobalAssessment #IPBES7

IPBES



The 5 Drivers of Change in Nature with the Largest Global Impacts

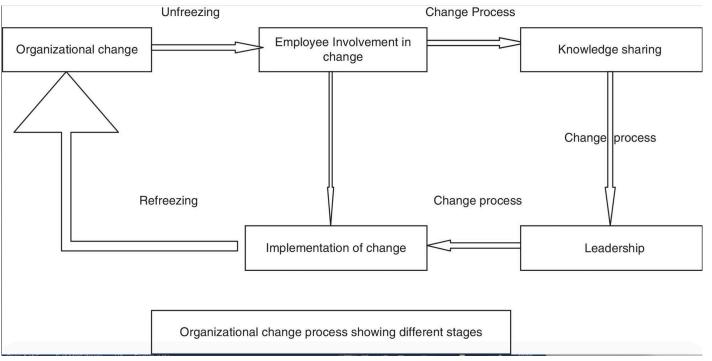
The IPBES #GlobalAssessment contains the best available evidence and expert analysis on the state of nature, arming decision-makers with the tools they need to make better choices for people & nature.

Rhetoric changes things: Politics and social movements, online and offline?

Innovation — an important mode of change in our society



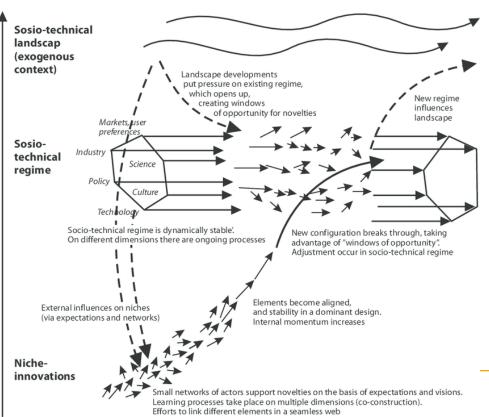
Innovation as a problem to be studied Key figure Kurt Lewin 1890 - 1947





Innovation as a problem to be studied: Frank Geels' Multi-level perspective on sustainability transitions

Increased structuration of activities in local practises



The niche
The regime
The landscape

Transitions are about regime shifts

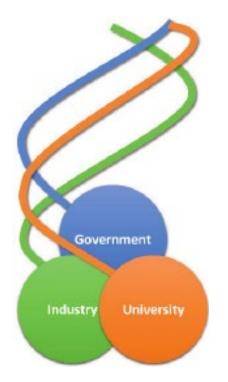
Science and technology as political Strand et al. text.

University – Industry – Government

Quadruple helix when involves non-expert stakholders (publics)

Impact and participation

And 'National Innovation Systems' and other policy initiatives



Innovation as an economic concern

Invention to satisfy needs (and to create needs)

consumerism

Innovation to sustain demand and competitiveness

intellectual property

Public sector innovation

managing social problems through prototyping

Guy Julier 2017 Economies of Design



New narratives for innovation Strand et al. *Journal of Cleaner Production* 2018

Innovation for growth as master narrative:

Rehearses linear modern narrative: technological optimism S & T (or R & D) must be funded to ensure innovation Competitive fears (if we don't do it, they will)

Critical perspectives :

Technoscience for sustainable growth (ecomodernism)
Socio-technical imaginaries of degrowth and other social
movements



Values embedded in innovations to 'improve' things

Technological innovation through capital-intensive effort aims at vague goals of better health, longer life, wellbeing, 'transparency', etc.

E.g. 'Smart' technologies – ubiquitous sensing, monetisation, linking to systems that are both decentralised and centralised

Degrowth technologies are more explicit about goals

Convivial, slow, creative, small-scale, place-based (possibly requires everyone to do some gardening...)

Samerski, S. (2018) Tools for degrowth? Ivan Illich's critique of technology revisited.

Journal of cleaner production.

Alternative innovations need space – literally and metaphorically

- From seeking 'systems innovation' and 'scaling up' to displace the existing socio-technical system
- To identifying and valuing 'protective niches' and 'alternative milieu'
 or 'a localised density of countercultural institutions, networks,
 groups and practices' for fostering financial and practical, as well
 as socio-cognitive space for novelty to emerge.

Noel Longhurst 2015

'Towards an "alternative" geography of innovation', *Environmental Innovations and Societal Transitions*



Bruno Latour's Cautious Prometheus: design is a good tool for thinking about change

- 1. More humble than 'construction' or 'building'
- 2. Attention to detail
- 3. Its meaning must be intepreted
- 4. To design is always to redesign
- 5. Involves an ethical dimension

Sustainable development and worldmaking in a context of *defuturing*

Knowledge reduced to global development indexes

Future-making focussed on (for example) a 'real world' of global economy and local brand values

E.g. urban policy making such as Tripla project in Helsinki The future needs to be filled!

Competing future-making premised on

Multiple worlds inhabited by different people but importantly different pasts

Tony Fry: material dependence means futures today dysfunctional

The future is already full of what we have thrown into it

Deconstructing and reconstructing innovation

- Technology and science as progress
 - Standard modern narrative
- Innovation pathways
 - Post-development approach
- World-making for the pluriverse
 - Social movements around the world
 - For alternative forms of globalization
- 'Design away'
 - Cameron Tonkinwise in Yelavich & Adams *Design as Future Making*



Anthropocene challenges – it can be 'good' or 'bad' for capitalism

Hamilton C (2016). The theodicy of the "Good Anthropocene". *Environmental Humanities*, 7(1), 233-238.

Things are changed by:

Nonhuman agents

Non-experts

Varieties of innovation and creativity

Communities

Past histories and their futures

Value or Values? Discussion

Exchange values
Use values
Moral values
Aesthetic values

Whose values?

Are the values contested? Are they so congealed that they are tacit and almost invisible?

Meanings, like values, operate in systems

- holistic (they all 'function' together)
- relational (they articulate differences in value and power)
- are they contrasts?
- mutually exclusive binaries?

Presentations

Groups with:

Prepare 10 minute presentations, allowing for 20 minutes discussion per group. Present your image. Write your caption on a power point slide and send in advance of the class to Eeva on email eeva.berglund@aalto.fi

The future you envision should incorporate explicitly designed interventions. These should reflect a cluster of values.

Some references to background material will be provided to help you identify changes and continuities (some facts, images, reports and websites on the Helsinki region in general).

Most importantly, concentrate on thinking about the people who will inhabit or use the space, the benefits and disbenefits of its features, and how its material and symbolic elements will have been deconstructed and then reconstructed to produce your vision. What role do values play (will they have played) in these constructions? Consider potential areas of friction.



More on resources to think with

Since we can still stand on the shoulders of giants...

History of ideas / science / everyday life / anything

Science and technology studies or STS

Fiction, the arts and the study of imaginaries

Comparative research e.g. anthropology, geography, politics

All kinds of case studies involving socio-technical arrangements

