Mood of Optimism in Climate Policy?

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BI

Chapter in Festschrift

- In the 70 years since Second World War wide swings in public mood about the prospects of humanity
 - V-Day Hunger Winter
 - Hiroshima and United Nations
 - Population Bomb and Green Revolution
 - Decolonization and Arms Race
 - Tragedy of Commons Limits to Growth
- Change in strategy
 - Attitudes or institutions?
 - Collective action or aggregate actions?

Have only 10 minutes, so

- Tell the history of the world
- Lay out the whole Earth system
- Place of Jørgen Randers in both

How do humans interact with nature

- Natural forces determine human fate
 - Forces unpredictable, violent, unmanageable
 - So adapt catch as catch can



But *Homo Sapiens* wants to *control* the forces of nature



First: Control by magic

- Manage nature by placating Gods
 - See omens, read signs, fathom auguries
 - Sacrifices

Offerings





But: Nature's little helper: Regularity

- Cyclicality
 - Day and night
 - Seasons calendars
- From regularity to foresight

Circular heaven



The orbit of the sun



Yet never full control by foresight

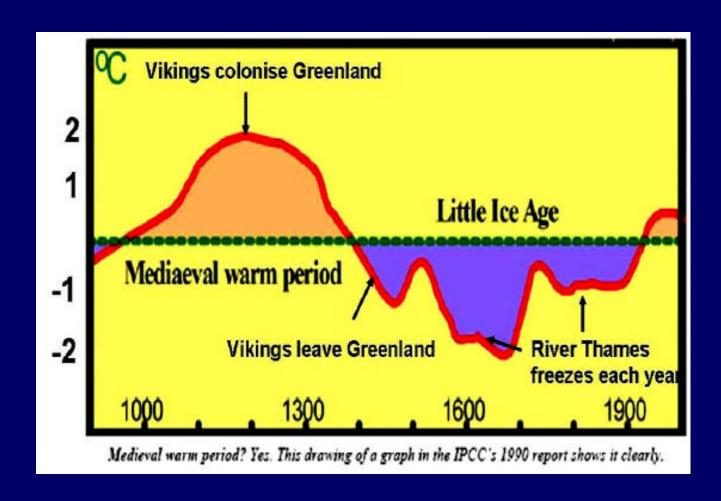
• Floods



Famines, hunger



Climate Change: Little Ice Age



Yet from regularity to insight – and to intervention!

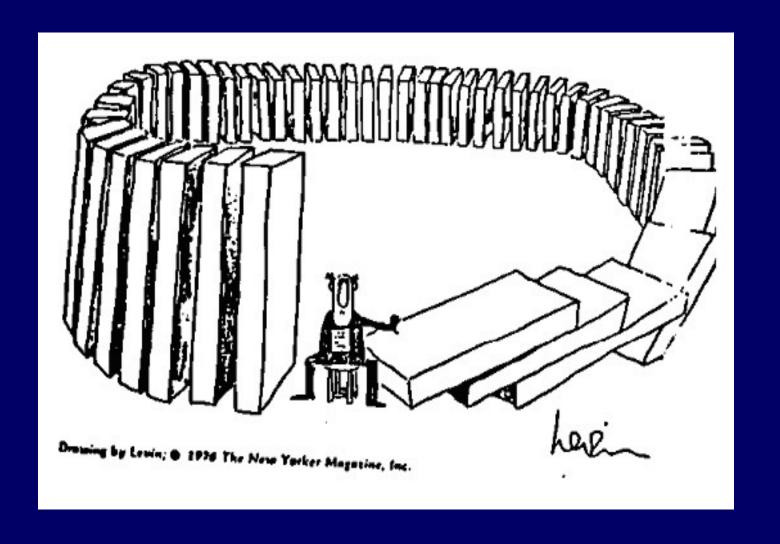
- Intentionality harnessing causality
 - Improve on nature by action on it
 - Agriculture
 - Industry
 - Energy
- Causes for pessimism:

The problem: Complexity

- Side effects
 - Do A \rightarrow B
 - But also unleashes $\rightarrow C$,
 - $\rightarrow D...$

- *Unforeseen: Inadvertently but irrevocably*
- Delayed impact
 - time bombs
- Could go blindly over the brink...

Complexity: Long and delayed effects

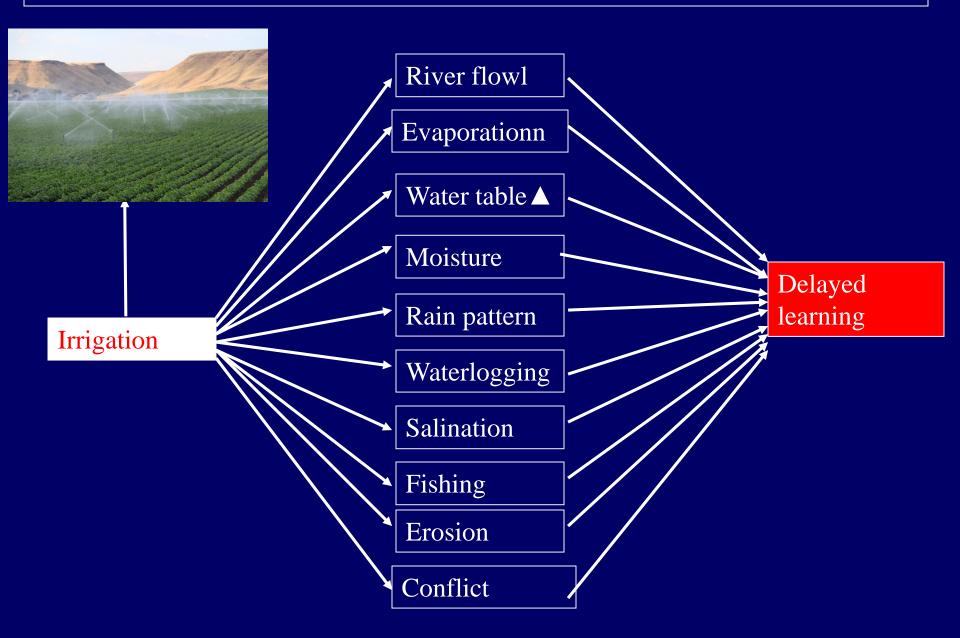




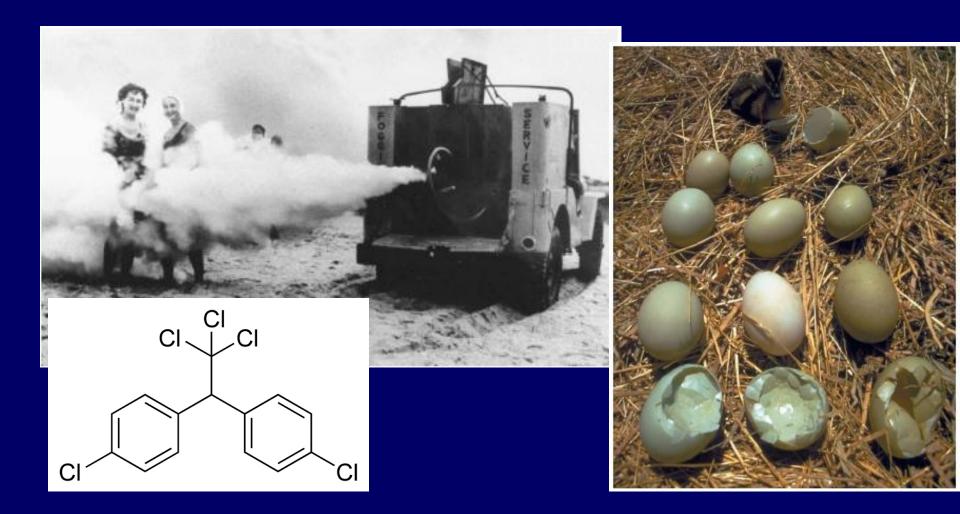
Intention of Irrigation



Impacts of Irrigation:



Complexity: DDT & Silent Spring

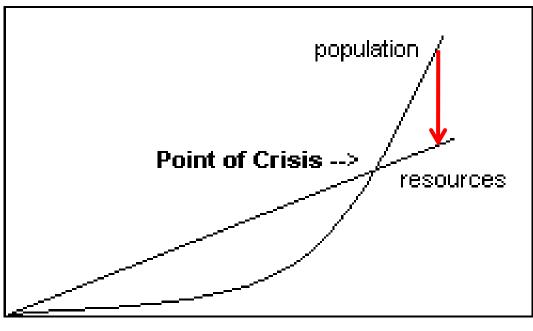


Complexity means the desire for welfare can defeat its purpose

- E.g. family insurance: Offspring:
 - And you, be ye fruitful, and multiply; bring forth abundantly in the earth, and multiply therein. King James Bible Genesis 1:28

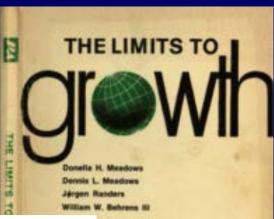
E.g. Malthusian Curse,

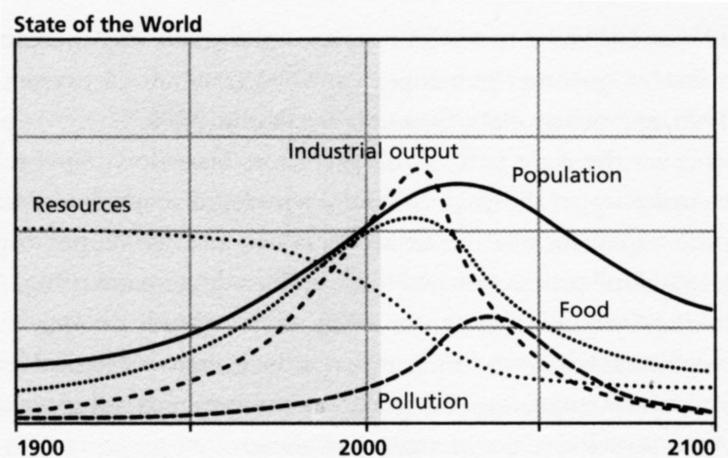




Malthus' Basic Theory







for THE CLUB OF ROME'S Project on the ant of Mankind

MAC ASSOCIATES BOOK

\$ 2.75

Problem: Mentalities?

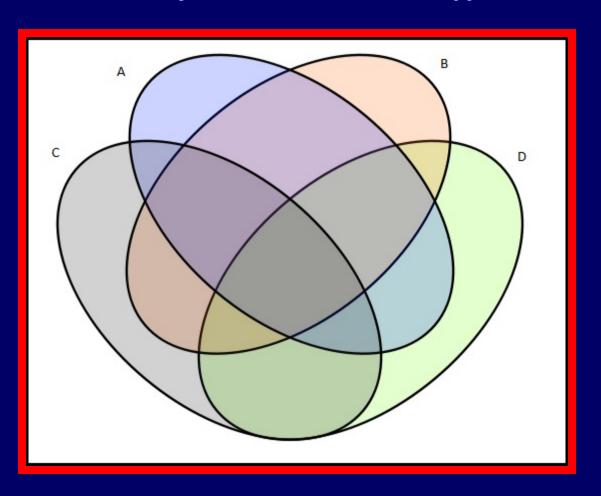
- Ecologically illiterate politicians
 - Even when literate, still politicians!
- Problem mindset and mentalities
 - Leaders unsuited to problems face
- To break mentalities must change organizations!

Problem: Institutions?

- Solutions not technical (alone)
- Incentive systems wrong
 - Global ecology national political systems
- Scope of problems vs. range of institutions
 - Cannot internalize externalities
- Systemic:
 - Solutions overcome by system of government!

Mismatch:

Scope of problems vs. range of institutions Cannot just run own affairs!



Two complex systems – the ecological and the political– more tightly interwoven

- Crises in one spill over to the other
- Politics in the 21st century will increasingly consist in understanding, meeting and mastering complexity
- Where human effects are both directly societal and indirectly ecological
- The coming confluence of crises!

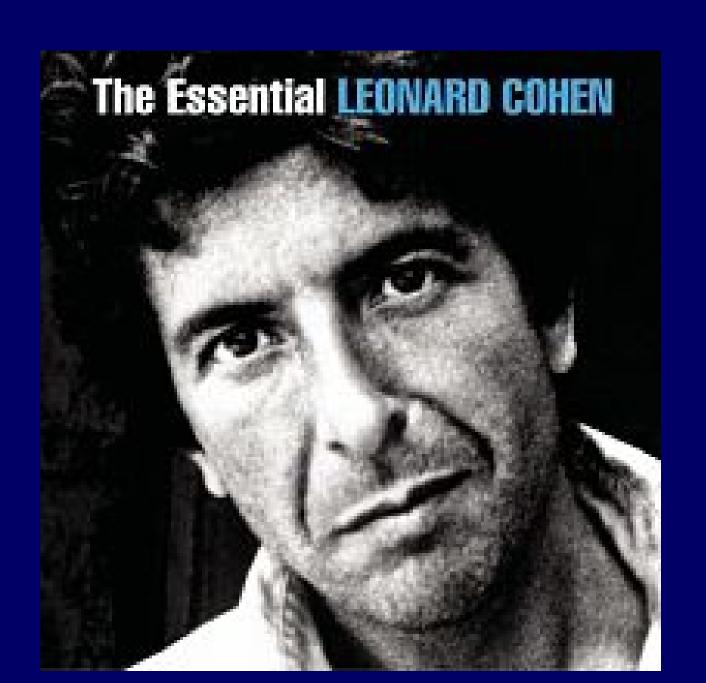
Key problem

- Climate erodes national boundaries
- System dynamics: Units and interactions
 - The nation, the corporation
 - The competition
 - Economic: Capitalism
 - Political: Democracy
- Cannot shut climate out <u>and</u> cannot cope within present institutions

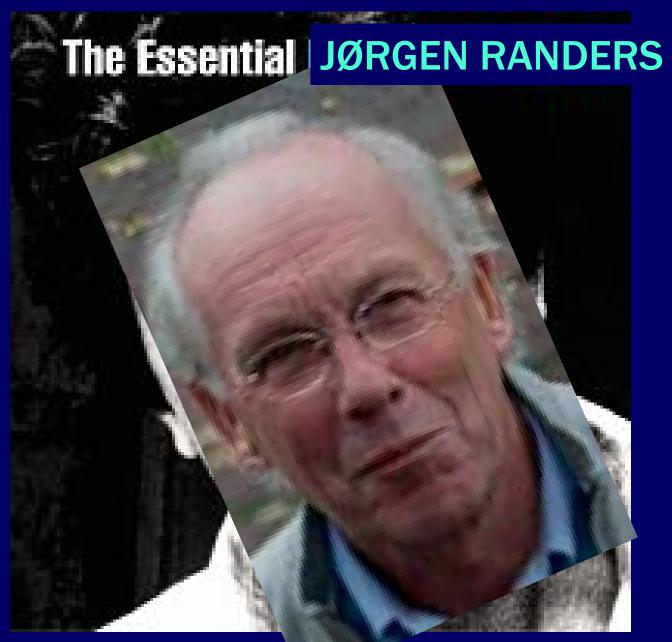
The role(s) of Randers

- Pandora: Opening the box of knowledge
- Cassandra «I told you so»
- Prometheus: Punished for stealing the fire

The Essential Randers



Climate pessimist



Cohen/Randers

• They sentenced me to twenty years of boredom for trying to change the system from within. I'm coming now, I'm coming to reward them. First we take Manhattan, then we take Berlin.

• They sentenced me to twenty 40 years of boredom for trying to change the system from within. I'm coming now, I'm coming to reward them. First we take Manhattan, then we take Berlin.

I'm guided by a signal in the heavens.
I'm guided by the birthmark on my skin.
I'm guided by the beauty of our weapons.
First we take Manhattan, then we take Berlin.

Randers/Prometheus at the cliff of Kazbek

