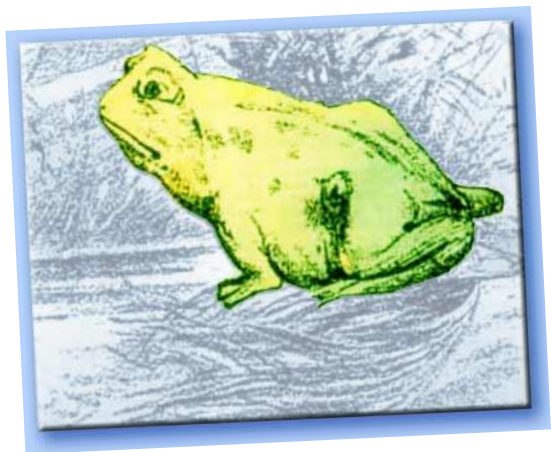
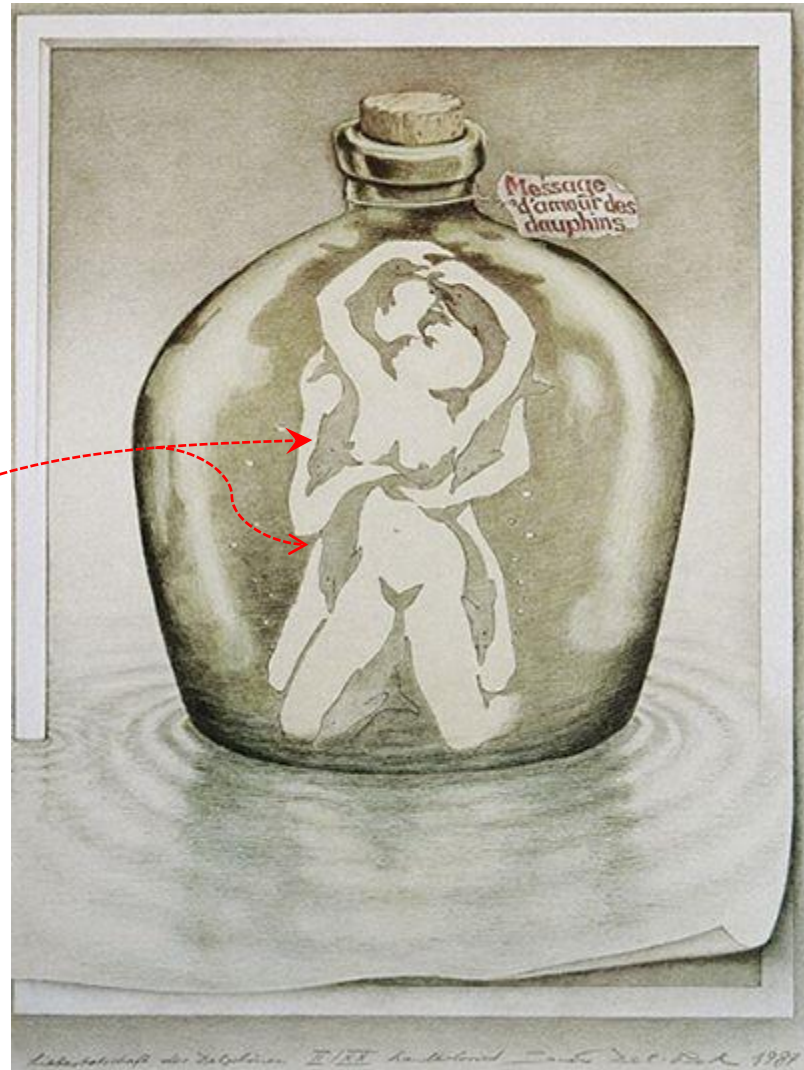


Che cosa vediamo

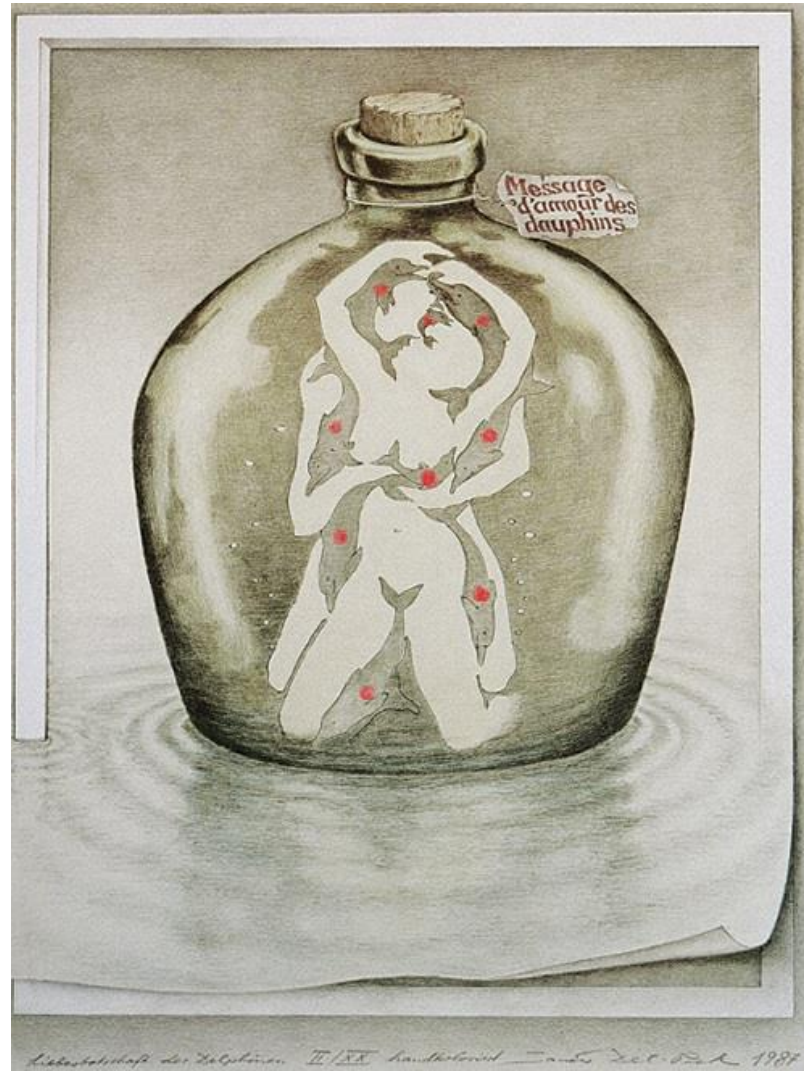




**Quanti  
delfini  
vedete?**



**nove**



nove

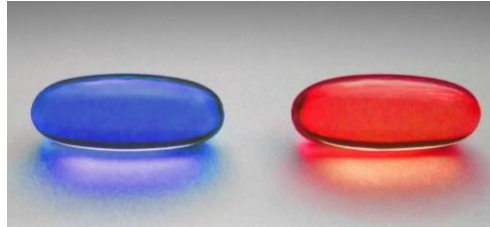
Dissonanza cognitiva e verità  
scomode

# ***MATRIX 1999***



<https://www.youtube.com/watch?v=kXlp9O2KnBI>

# Brundtland report 1987



- Future generations

- Needs



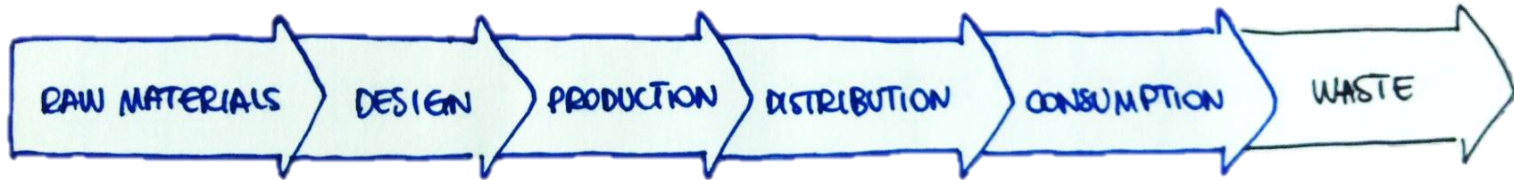
Una verità scomoda:

Economia circolare



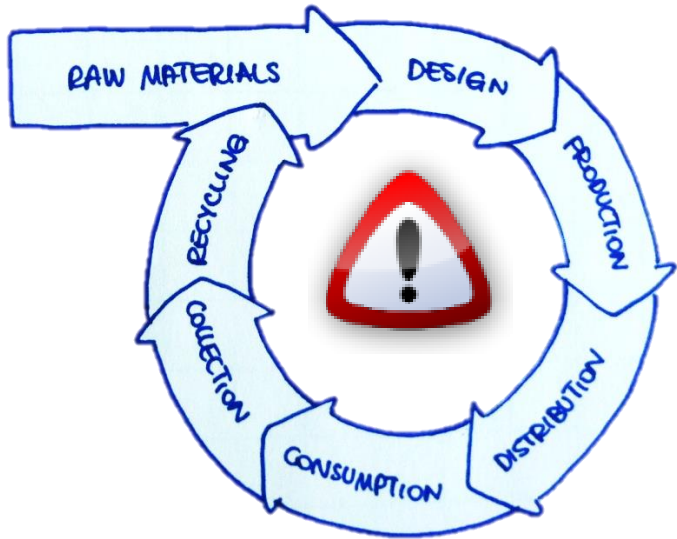
# Business As Usual (BAU)

Take – make - dispose

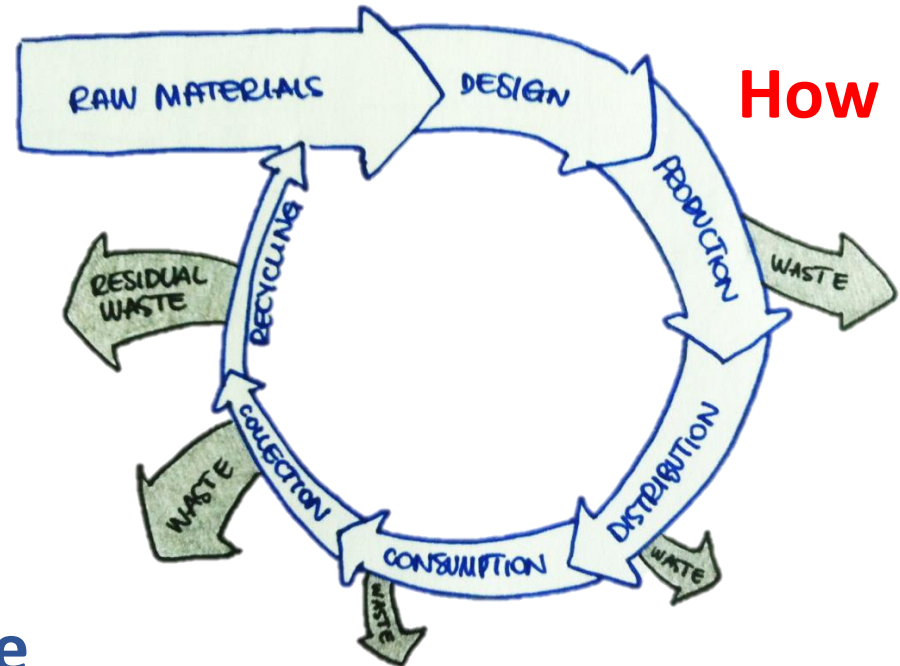


# Circular economy

Reduce, Reuse, Recycle, and Renew



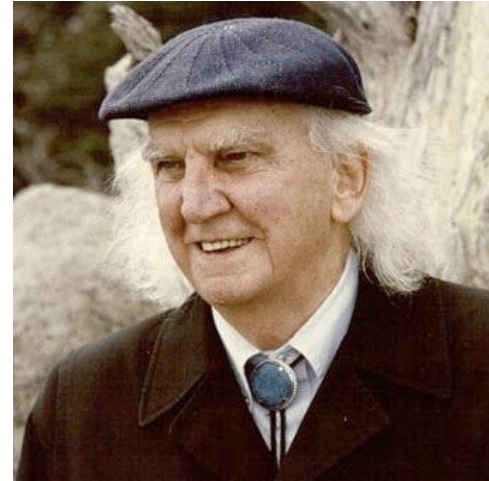
How it is supposed to be



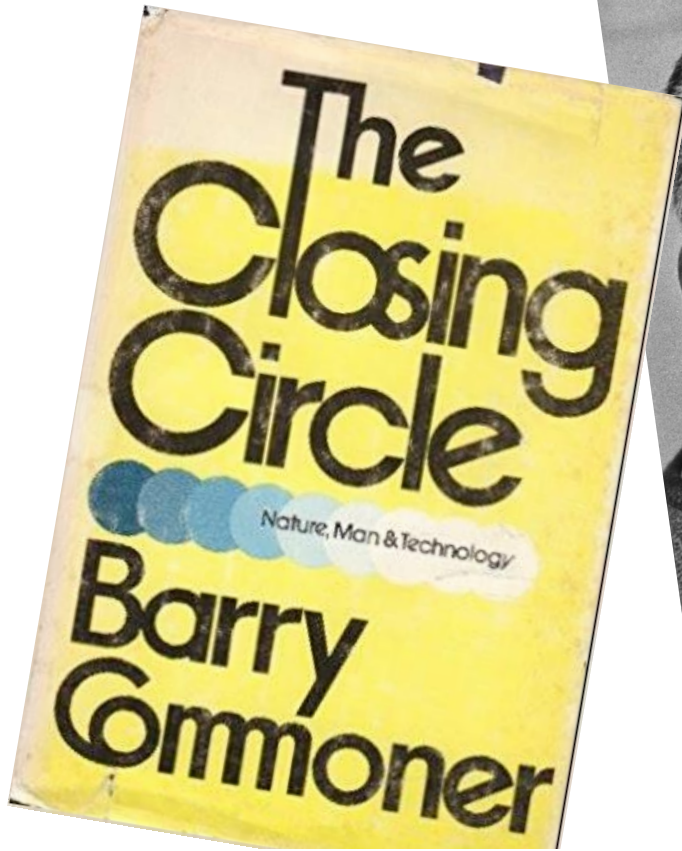
How it is

K. E. Boulding (1910-1993)

1966: **The economics of coming  
Spaceship Earth**



"The closed economy of the future might similarly be called the 'spaceman' economy, in which the earth has become a single spaceship, without unlimited reservoirs of anything, either for **extraction** or for **pollution**, and in which, therefore, man must find his place in a **cyclical ecological system**



Barry Commoner (May 28, 1917 – September 30, 2012) was an American biologist, college professor, and politician. He was a leading ecologist and among the founders of the modern environmental movement.

**1971**

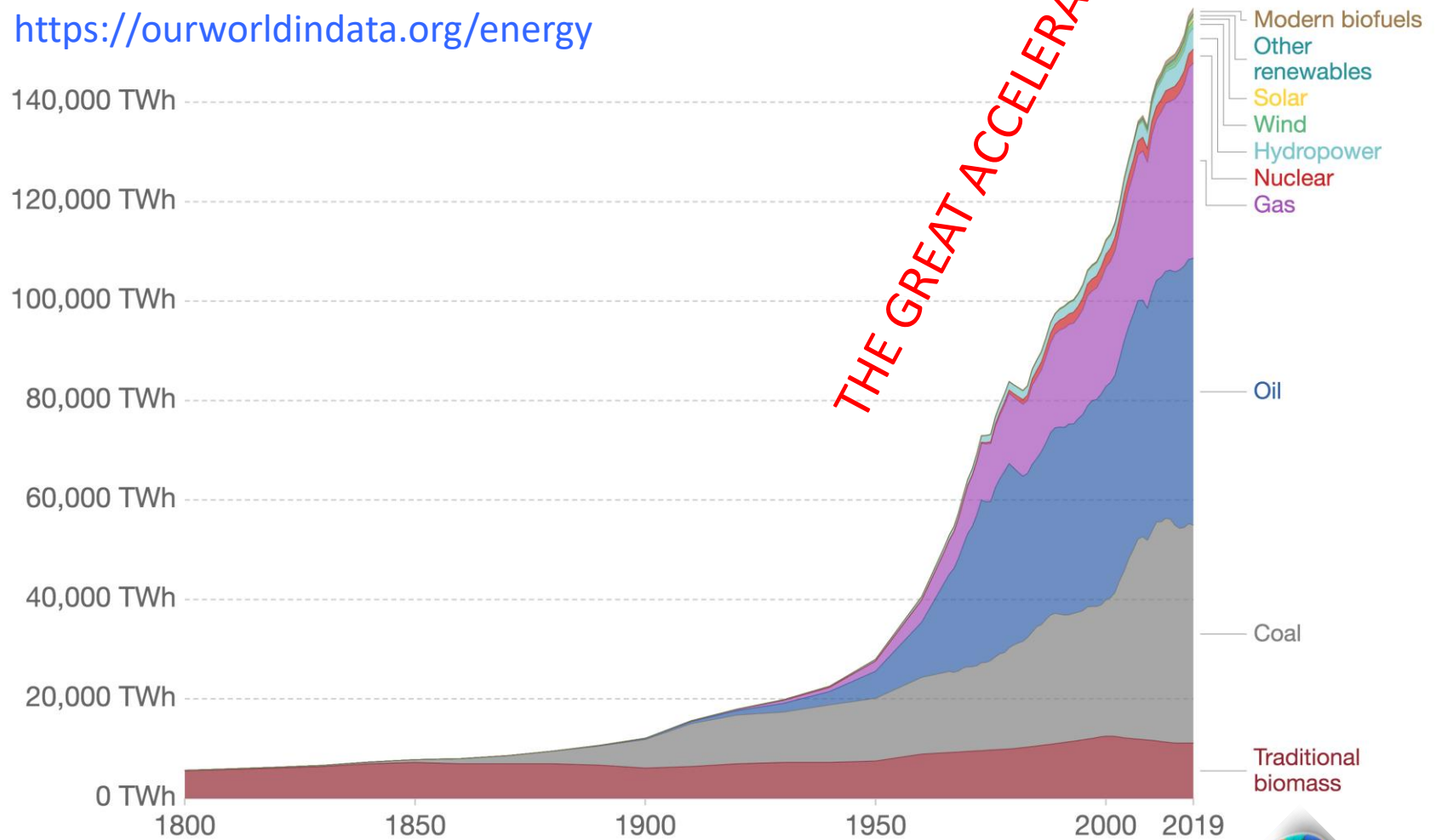




# ENERGIA PRIMARIA distinta per fonte a livello mondiale, periodo 1800-2018 Terawatt-ora annui, TWh

<https://ourworldindata.org/energy>

Our World  
in Data



Source: Vaclav Smil (2017) and BP Statistical Review of World Energy

OurWorldInData.com CC BY

## Great acceleration in material consumption





# The Great Acceleration: An Environmental History of the Anthropocene since 1945

by J. R. McNeill, Peter Engelke

Let us see the video

[The great acceleration](https://www.youtube.com/watch?v=1JAOXTowjdY)

<https://www.youtube.com/watch?v=1JAOXTowjdY>



# The parable of the broken window

When a **child accidentally smashes a window**, and then it has to be replaced,  
**does this accident constitute a benefit to society**,  
due to the economic activity of repairing and replacing the window?



French economist Frédéric Bastiat  
«That which we see and  
**that which WE DO NOT SEE**» 1850



- This goes to the bin.



Multimedia Centre  
European Parliament

# Planned obsolescence:

Event date: 29/06/2017

## Why things don't last



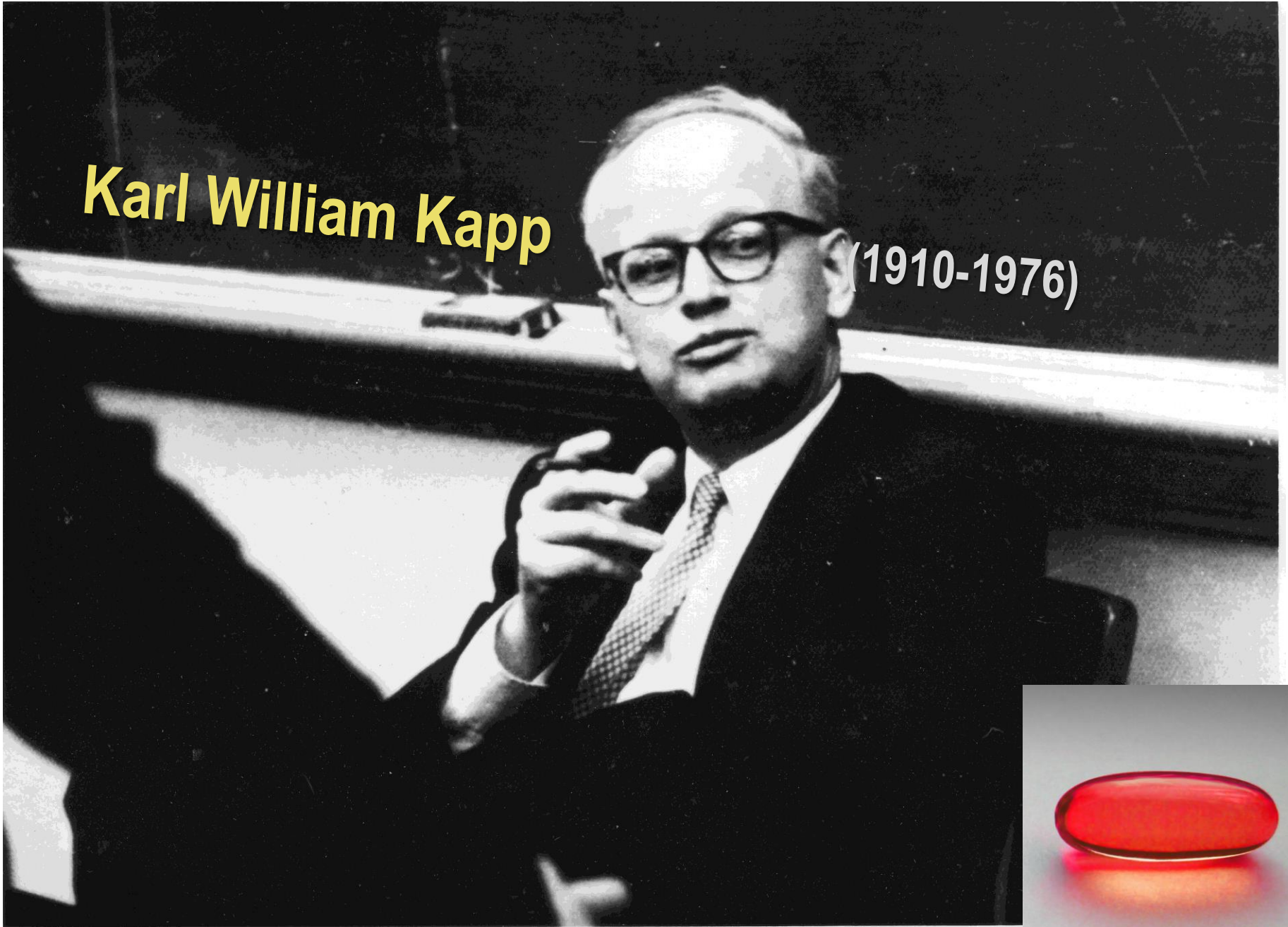
Smartphones, printers, washing machines, dishwashers, coffee makers:

# Come intervenire

- Non solo cambiare i comportamenti

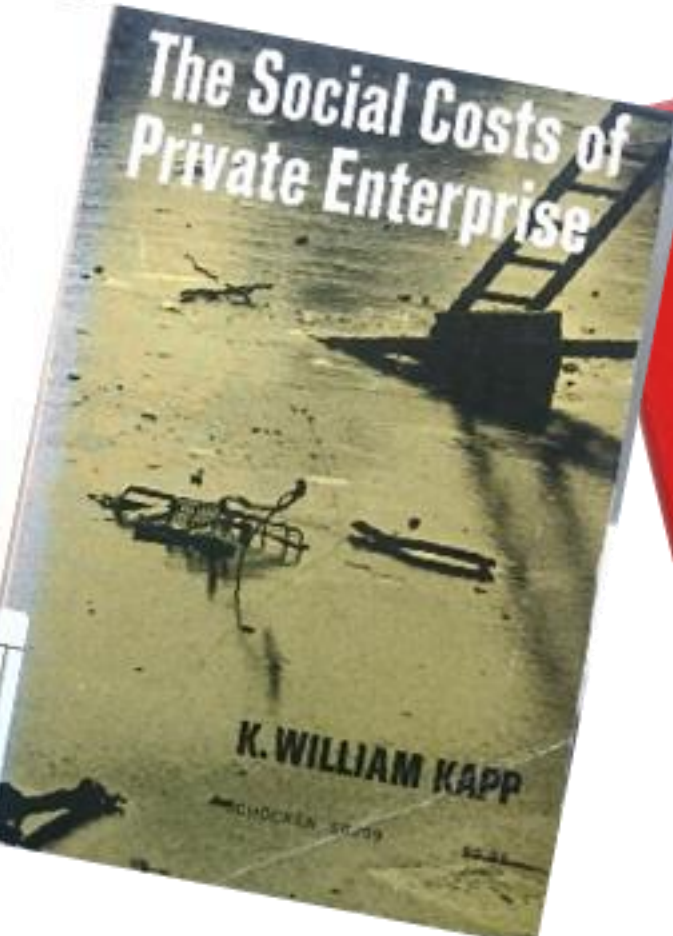
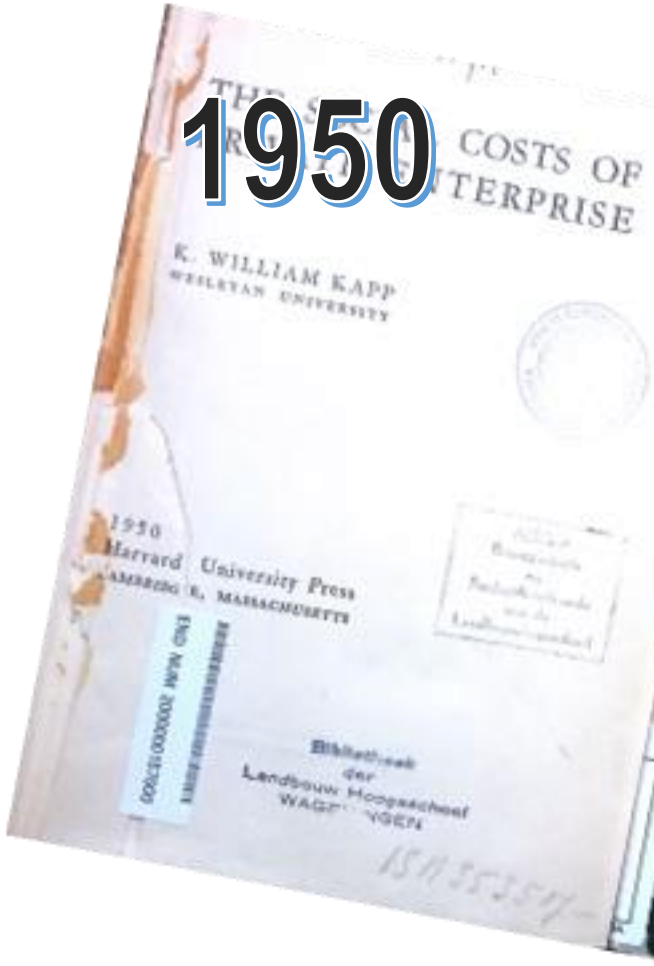
**Karl William Kapp**

**(1910-1976)**





1950



1963

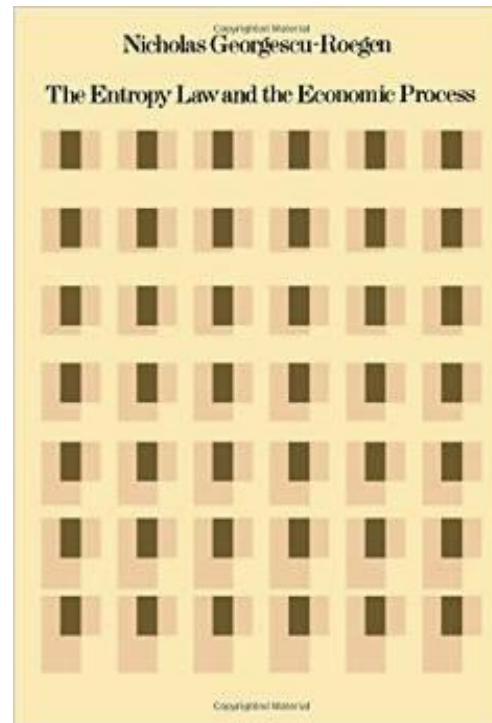


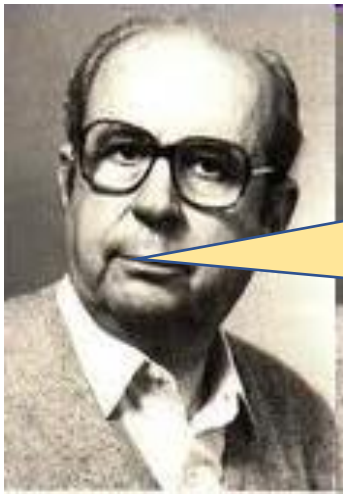
# Nicholas Georgescu-Roegen

Costanza, Romania, 1906 – Nashville, Tennessee, 1994



*The Entropy Law and the Economic Process*  
(1971)





It would be foolish to propose a complete renunciation of the industrial comfort of the exosomatic evolution

all WASTE of Energy  
- by OVERheating, OVERcooling,  
OVERspeeding, OVERlighting, etc.  
should be carefully avoided



An important prerequisite for a good life is a substantial amount of leisure in an intelligent manner



# ESEE 2022 Conference Pisa

14-17 June 2022, Pisa, Italy

14<sup>TH</sup> CONFERENCE OF THE EUROPEAN SOCIETY  
FOR ECOLOGICAL ECONOMICS

Will Achilles catch up with the Tortoise?

[Home](#) ▾ [Programme](#) ▾ [Plenaries](#) ▾ [Presentation and registration](#) ▾ [Welcome!](#) ▾ [Organisation and patronage](#) ▾

A photograph of a tortoise, likely a Galapagos tortoise, in its natural habitat. The tortoise is positioned in the lower center of the frame, facing right. It is surrounded by green, leafy plants and some dry, brown grass. The ground is dark and appears to be gravel or soil.

**Will Achilles catch up with the tortoise?**

**It's high time for transformative action on sustainability**