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Eco only goes with social - social only goes with eco

- A Marxian approach of social ecology

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Ethical & esthetical &….

- In **Greek** philosophy: identity of the **true**, the **good**, and the **beautiful**
- Georg Wilhelm Friedrich **HEGEL**: the **whole system; contradictions, dialectics, development**
- Karl **Marx** added **material basis, distribution and power**

(Social) Ecology can be framed within these concepts

“Pedagogical tact as an example of ecological aesthetics” (former presentation)

- Reminds to Asian philosophical concepts that focus on holistic views:

- Confucian moral concepts
- Indian (Buddhist) notions of mindfulness

- Correlation with "Laudato si" of Pope Francis

Material basis, system & development

- Ecology embraces material basis, system view and development
- Ecology has a strong **material basis**, in which **laws of nature** reign. - We cannot negotiate about this basis (in contrast to economy): e. g. GHG→ climate change
- We are on the edge of the abyss but that is "**man made**" – caused by certain power relations and inequality – but this is also **Good News**: it can be changed (otherwise it would be unchangeable)

Exploitation of man AND nature

- **Exploitation of man** correlates with **exploitation of nature**
- Big (irrevocable) harms to ecosystems occurred already in former “imperial” societies (e. g. deforestation in Mediterranean regions
- But the **systemic destruction** (also on the global level) began with **capitalism**
- See **Polanyi**: a capitalist market economy is a disembedded economy, "**disembedded" from society** and able to follow its own logic
- Here: a capitalist market economy is also largely ***disembedded from nature***

The disembedding from nature

…is caused by the heart of the capitalist logic:

- **the (seemingly infinite) accumulation of capital is some continuous growth of capital (the "valorisation of value", an (seemingly infinite) increase in value**
- **In economic terms: profit making by externalisation of cost**
- **Necessary is REembedding of capital at least by strong regulation**

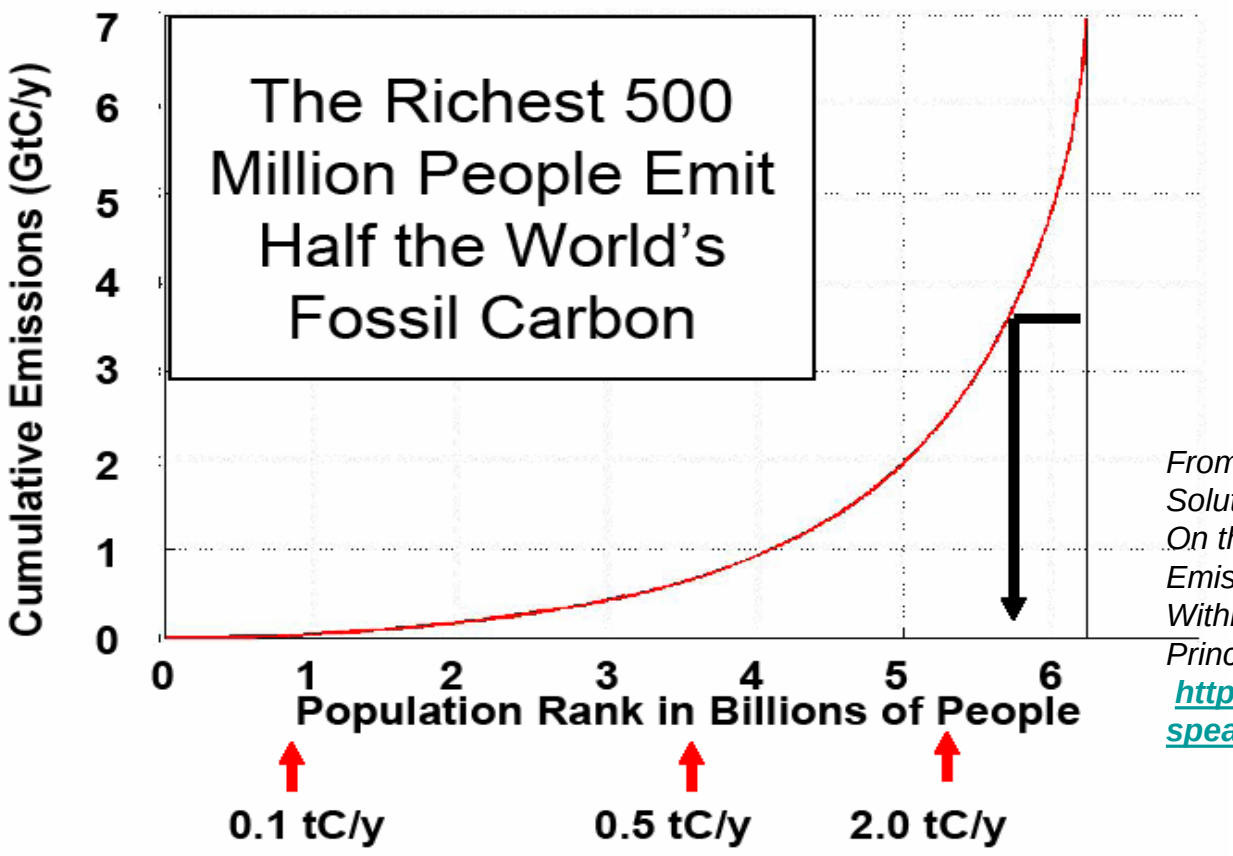
“This changes everything - Capitalism vs climate”

Climate change as the “greatest market failure” (STERN)

There are many arguments that a solution of climate change under capitalist market conditions will not be possible

Causation of climate crisis and global distribution

DISTRIBUTION MATTERS!



From: Pacala S.W.: Equitable Solutions to Greenhouse Warming: On the Distribution of Wealth, Emissions and Responsibility Within and Between Nations. Princeton, at IIASA, November 2007
http://www.iiasa.ac.at/iiasa35/docs/speakers/speech/ppts/pacala.pdf

Correlation between income and emissions

Income as proxy for class

Empirical correlation of stratification along income for consumption and emissions per capita

Evidence of <u>differentiated emissions/consumption of the traffic services</u> a day for Austria: quartiles (income):

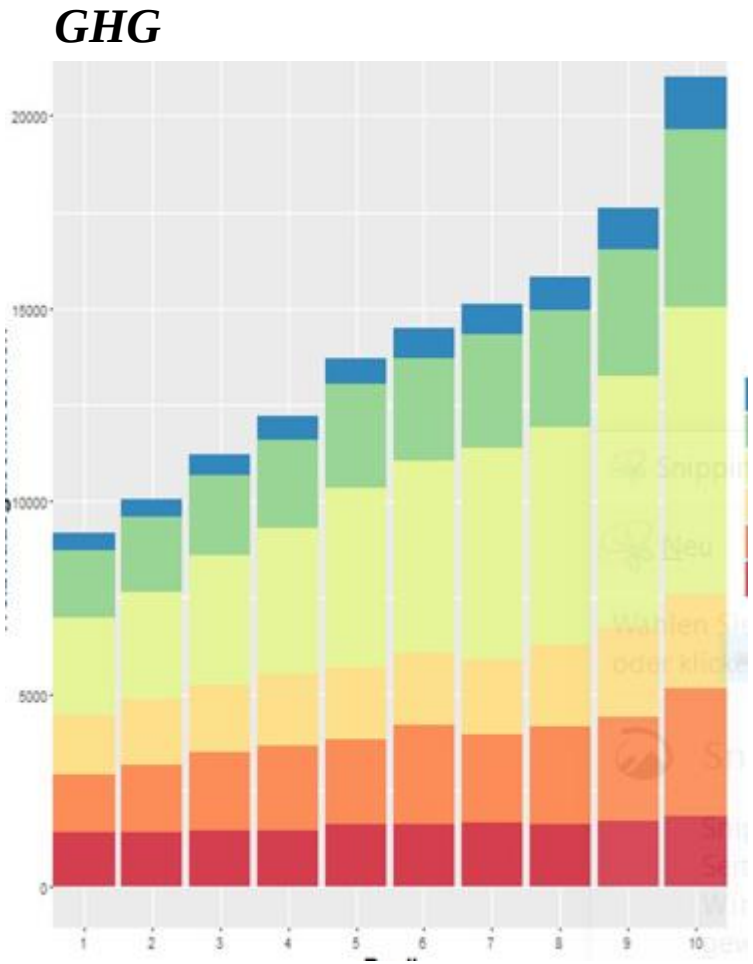
DISTRIBUTION MATTERS!	20 km
2nd quartile	40 km
3rd quartile	53 km
4th quartile	80 km

(see: Steininger K., Gobiet W. (2005): Technologien und Wirkungen von Pkw-Road Pricing im Vergleich, Wegener Center Graz, Bericht 1/2005, p 20f

GHG emissions along deciles (household income) – Austria for different spheres

Blue: services
Dark green: various
Light green: mobility
Light orange: energy
Orange: habitation
Red: food

DISTRIBUTION MATTERS! Deciles



Correlation between income (Wealth) and exposure to negative environmental effects

DISTRIBUTION MATTERS!

Socially differentiated exposure:
Empirical correlation of stratification along income for exposure

- **E. g.: Harassment by traffic exhaust emission different for income and wealth**

- **Persons at risk of poverty evaluate their exposure to negative environmental effects in all fields (noise, air quality, green space…) worse to others**

Implication on health

1. Health conditions differ substantially along classes and strata:

E.g. in Germany the expectation of life in the upper quintile of income is 8,3 years **longer for women and 10,8 years for men than in the lowest quintile,**
and the expectation of healthy years differs still more the gap is 13,3 years for women and 14,3years for men

2. WILKINSON-PICKETT: INDIVIDUAL health depends on the (in)equality of the whole society. Because most in very unequal societies are in a negative stress:

- ***Richer ones fear to loose their status and***
- ***Poorer ones driven to catch up***

Nine levels of the socio-ecological dimension of distribution

(Pro rich pro-poor)

1. (Real)**Access and use of "natural services"**
2. Vulnerability/Imposition by environmental degradation and damage by exposition and alternatives to escape
3. Risk and uncertainty by future pollution

Eg floods, landslides, storms, heat stress, accident hazards

4. Causing environmental degradation and damage (current and historical)

5. Costs bearing - burden sharing, direct and indirect incidence of environmental measures. E.g. CO2 tax

6 Possibilities to influence environmental policy measures

7. Co-benefits: Benefits from positive changes by environmental policies

8. positive indirect impacts of environmental policies

z. B. Air quality improvement

9. Adaptation effects to positive changes in the environmental situation – e.g. due to the rise in land prices

Concrete distribution issues are underexposed in the climate policy discourse.

If lower income groups are relatively more disadvantaged by different forms of socioeconomic and socio-ecological inequality,
these groups will experience an increase in the socio-ecological burden when climate change continues

On the other side positively: SO lower income groups WILL EARN MORE GAINS BY EFFECTIVE CLIMATE POLICY

DISTRIBUTION MATTERS!

Climate policy is pro-poor

7 of these 9 levels of the socio-ecological dimension of distribution are asymmetric in favor of upper income levels: with pro-rich effects:

Only level 6 and 7 - the positive impact of environmental and climate policies and co-benefits are pro-poor.

So the overall impacts of climate policy are basically pro-poor, especially when at the costs of environmental measures (e. g. by taxes) the pro-rich effects can be mitigated, eliminated or reversed by a per capita bonus or other compensations

Climate policy is pro-poor

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CLIMATE
SUMMIT
WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?
• ENERGY INDEPENDENCE
• PRESERVE RAINFORESTS
• SUSTAINABILITY
• GREEN JOBS
• LIVABLE CITIES
• RENEWABLES
• CLEAN WATER, AIR
• HEALTHY CHILDREN
• ETC. ETC.
11/7/19 USATODAY
JOEL PETT

The end

Extensions:

Basics of climate policy

2°C target
Copenhagen accord & Paris Treaty

because of irreversibility and uncontrollable implications when > **2°C**

➔**fixed** volume of future GHG emissions

How to allocate this volume of remaining GHG emissions? =Which **distribution** among countries and persons?

Missing link of climate policy

2°C target
(Copenhagen Accord & Paris Treaty)

➔ fixed volume of future GHG emissions

+

CBDR
(Rio 1992 and Rio+20)

basic distribution principle

(Common but differentiated responsibility)

=X (*but which concrete implementation?)*

The equation for the missing link of climate policy

2°C target
(Copenhagen accord & Paris Treaty)

fixed volume of future GHG emissions

\+

CBDR
(Rio 1992 and Rio+20)

basic distribution principle (Common but differentiated responsibility)

\+ **X**

= **climate stabilization**

The missing link of climate policy:

Equal rights !

2°C target
(Copenhagen accord & Paris Treaty)

➔ fixed volume of future GHG emissions

+

CBDR
(Rio 1992 and Rio+20)

Common but differentiated responsibility)

+

Equal rights

=climate stabilization

Concepts of equal rights in the context of climate change (1)

- Heuristic approach

- The starting points for the view of equality and fairness in connection with the climate change can come e. g. from:
  - ❖ **ethical moral reasons,**
  - ❖ **obligations from international documents,**
  - ❖ **concepts of the sustainable development.**

- Or from the fact that necessary international contracts simply will not come into being otherwise

- Fundamental principles of distribution
- can be e. g. – (pre- scientific/political/ethical):
  - ❖ Parity
  - ❖ Proportionality
  - ❖ Priority

Concepts of equeal rights in the context of climate change (2)

- In principle we can see procedual, effort-oriented and results-oriented principles of equality and fairness

- Oxfam e. g. uses 3 princples:
  - **Fairness,**
  - **capability,**
  - **simplicity**

- CICERO-ECZ stress
  - **guilt,**
  - **capacity und**
  - **need**

Profit rate devalues future

- Via discount rates ("time preference rate"), future values are transformed to present values (future harms or positive effects).

$$\$X=\$X/ (1+r)^n$$

r:= discount rate n:= number of accounted years

- Mechanism of **compound interest** !

- Usually in practical terms in **cost-benefit anal**yses discount rates are assumed as high as the **average profit rates of about 5-6%.**

- Discount rates, which are not close to zero, devalue future damage (or positive effects) beyond the immediate next few years or decades to a value close to zero. See the diagram.

- So mitigation of climate change would hardly be worthwile. Future in general or the life basis of life for future generations almost completely is devalued (e. g. the calculations of Nordhaus on climate change).

Discounting central for distribution

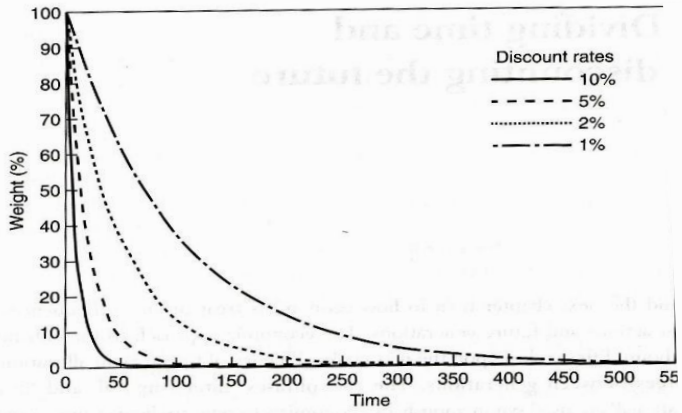
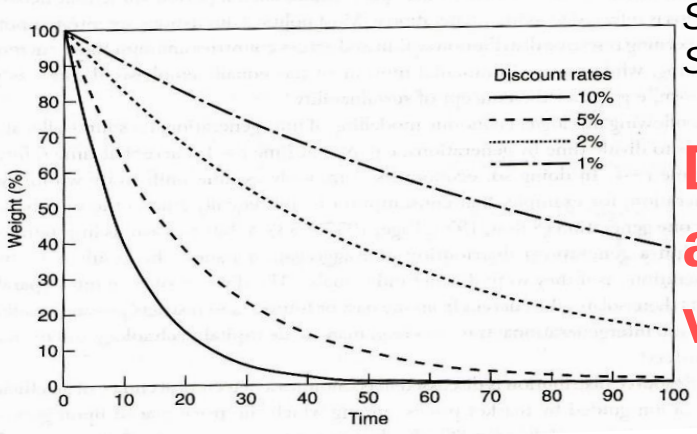


Figure 8.1 Reducing the weight of future events



Time

Figure 8.2 Weighting for 100 years of disounting

within about 40 years, at which point values (flows of costs or benefits) would add almost nothing to the summed discounted value arising from a project. Even the lower rates of 1 or 2 per cent limit time horizons to a few hundred years with events then having little or effectively no weight in decisions. Figure 8.2 shows the impact within a 100-year time horizon. For example, under the 10 per cent rate half the

C. Spash (2002)

Spash, C.L. (2002): Greenhouse Economics. Routledge, Seite 202

Discount rates in the height of avarage profit rates push the value of future near zero

Sustainability by zero-profit rate ?

- The well-known Stern-Report on climate change is citicized by mainstream economics due to “too low” discount rates: Stern report would so implicate „too high“ values of future harms (**Nordhaus*)** and „alarmism“
- (but Stern Report is to criticize for other reasons)

So:

- Only when the decisions on investments no longer dependent on the profit rate; or when the profit rate / discount rate is near to zero, a sustainable development is possible

*Nordhaus, William: Critical Assumptions in the Stern Review on climate Change.
http://www.sciencemag.org. SCIENCE Vol. 317, 13 July 2007