



Sufficiency, Efficiency and Sustainable Consumption

Welcome to the Anthropocene!

**Presentation at the Second International Conference of the
Sustainable Consumption Research and Action Initiative**

Transitions Beyond a Consumer Society

June 15 – 17th, 2016 , University of Maine , Orono, Maine, USA

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“We are very far from having made the moral, political, and psychological adjustments which are implied in this transition from an illimitable plane to the closed sphere”

Kenneth Boulding, 1966

Now, half a century further, where do we stand?



Welcome to the Anthropocene



Geology's new age



The status quo





The orientation “faster, higher, more”

- penetrates all spheres of life, from schools and universities to employment and even voluntary and unpaid work.
- causes a race for resources, causing resource scarcities, violence and wars.
- doesn't make people happy: life satisfaction stagnates while GDP increases...

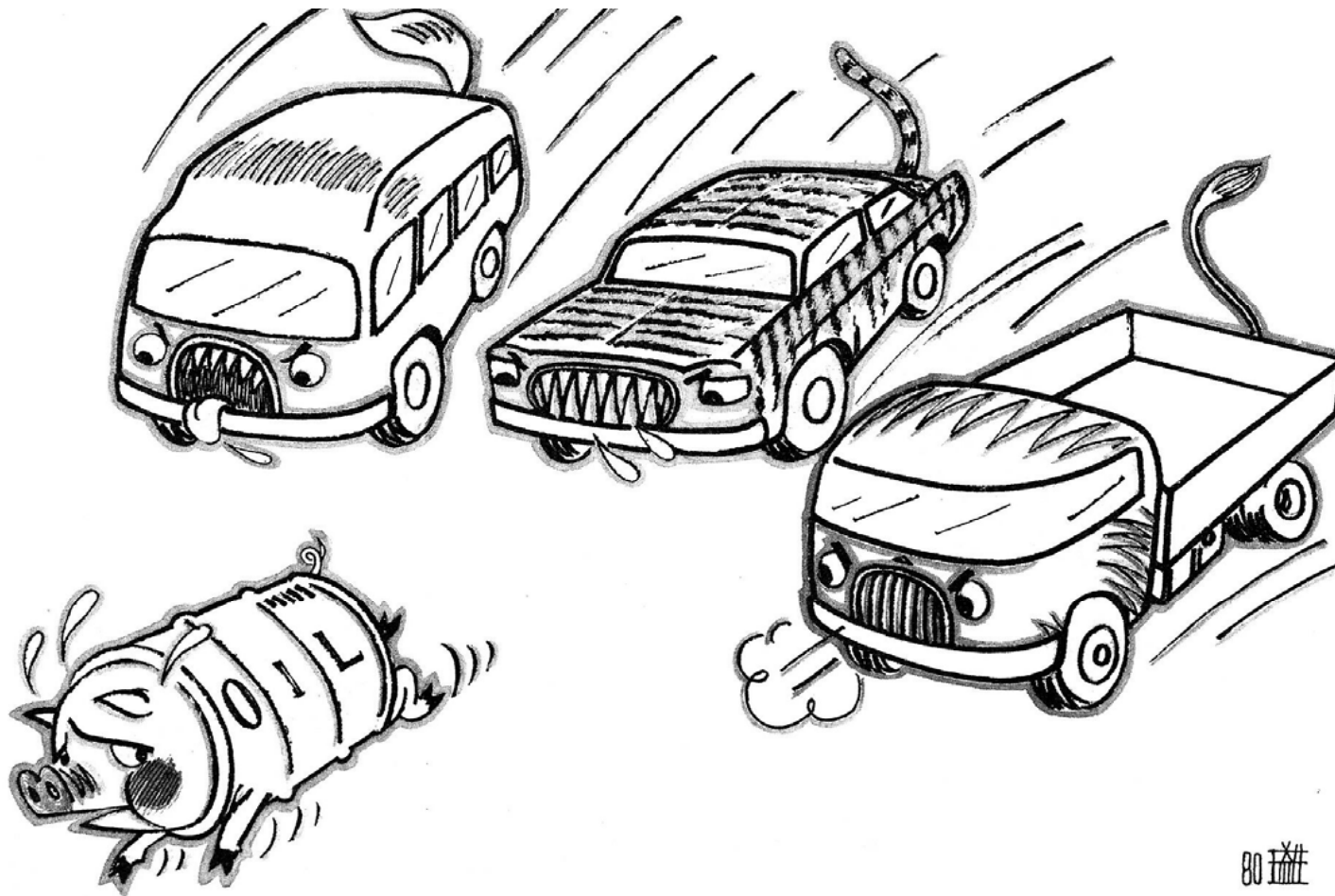




And the race goes on...

Blood for oil is no solution, human rights vio-

lations for scarce metals and minerals neither.



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The dynamics of *unsustainable* consumption

Today, too many people
Use money they don't have
To buy things they don't need
To impress people they don't like.

Can't we do better than that? **SERI**





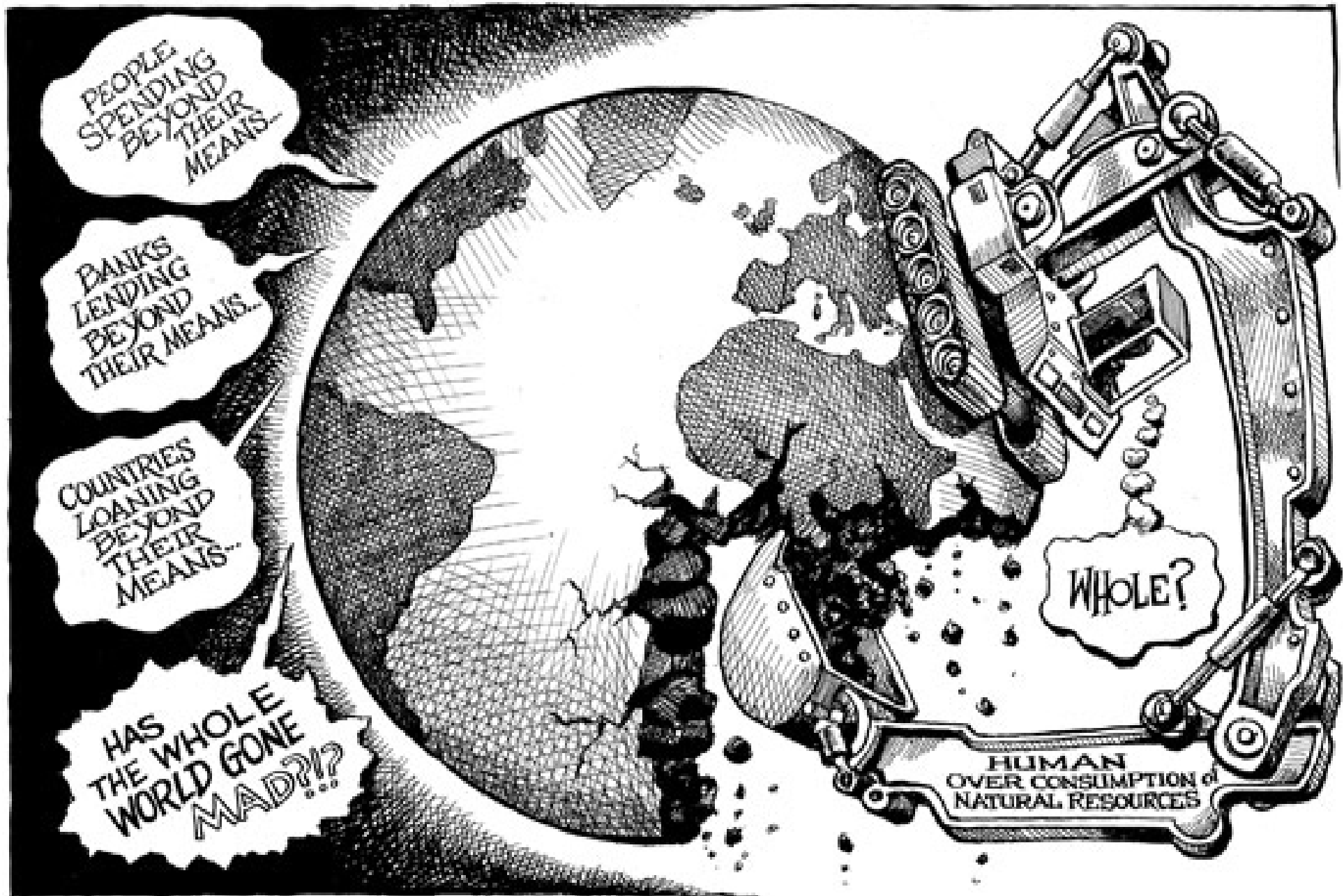
The Price We Pay is Dear

We are plundering the Earth, leaving hardly any usable (i.e. low-entropy) resources for future generations.

We are damaging, even irreversibly, life-sustaining ecosystem services.

We are undermining social cohesion, civic freedoms and peace.

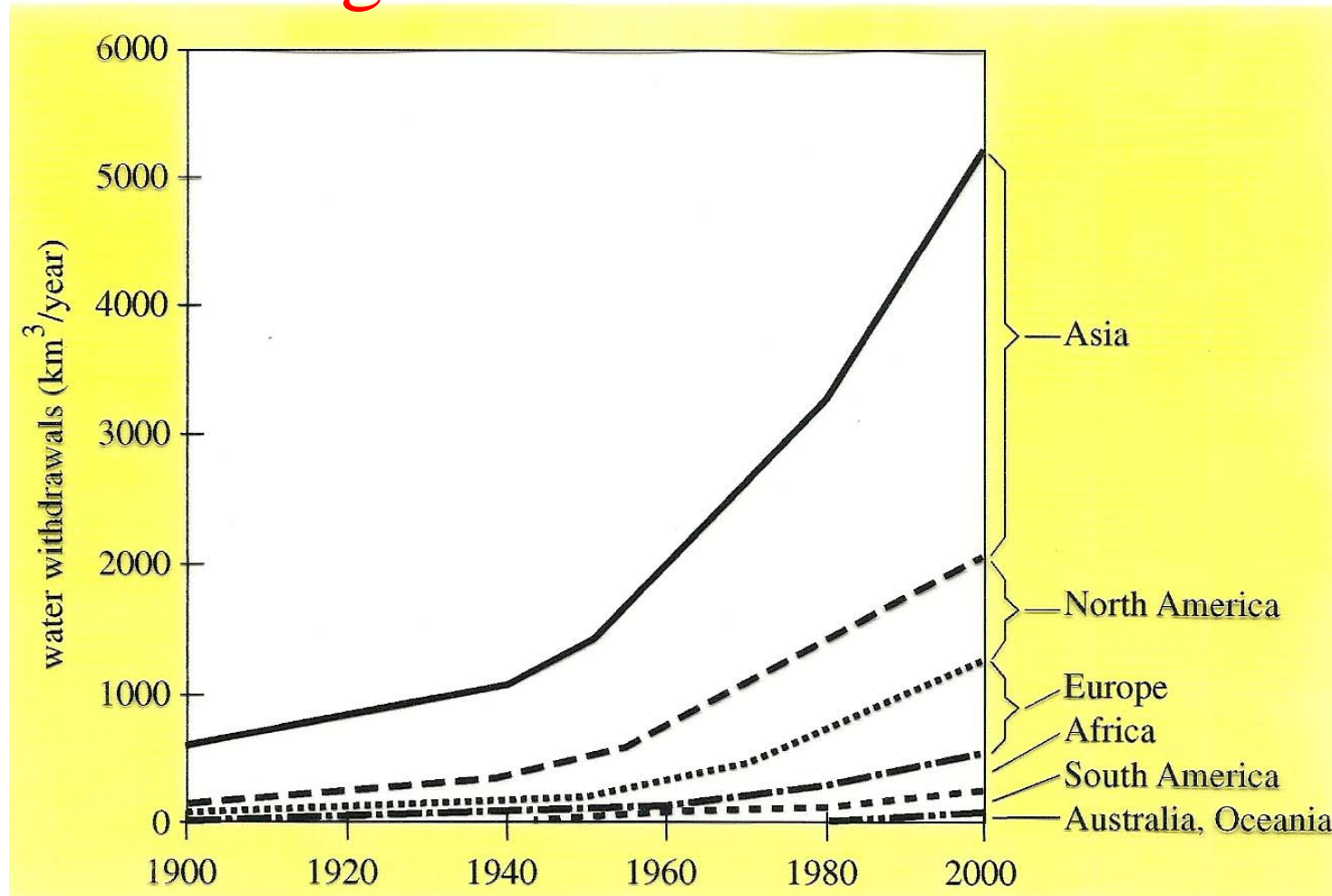




Evolution of water withdrawals

through the twentieth century

Water consumption is reaching planetary limits,
threatening conflicts under climate change



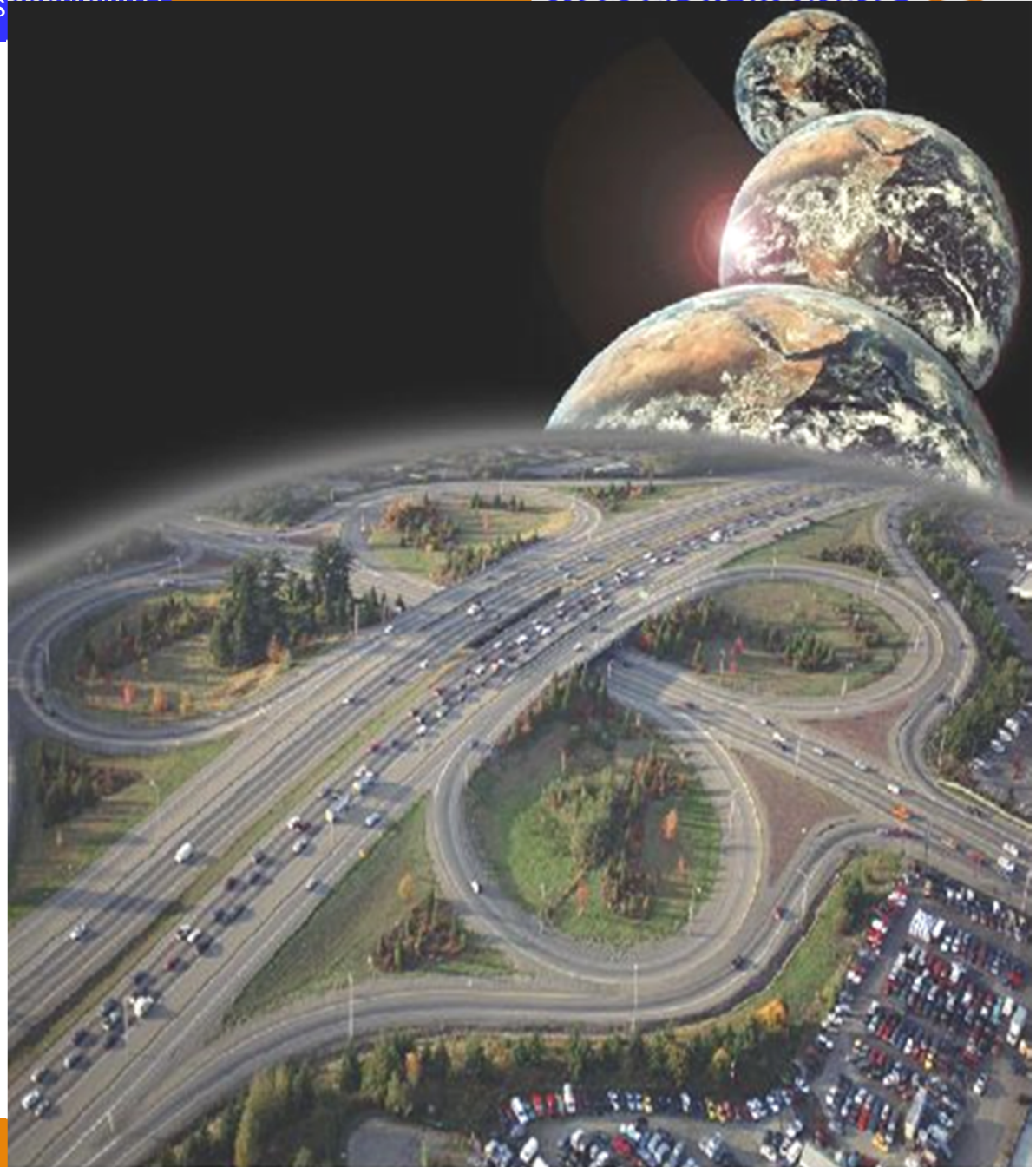


Late adapters...





**Globalising US
consumption
patterns
would require
the resources
of four Earths
and still
deprive future
generations**





Efficiency

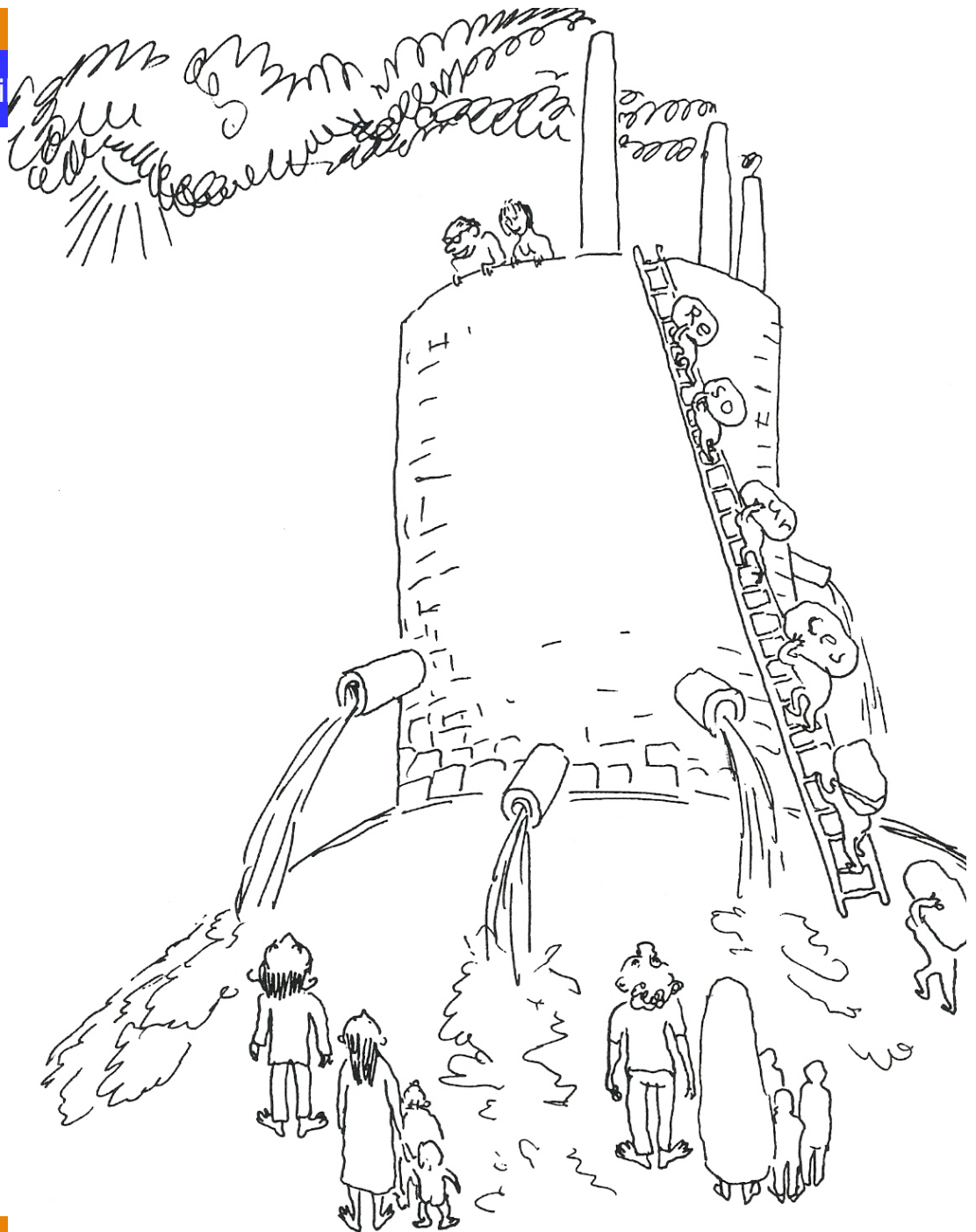




Efficiency
reduces
resource
demand and
waste
generation.



**Resource efficiency
means less demand,
less supply conflicts,
similar services, less
waste and pollution,
and often more jobs**





Modern resource efficiency technologies combine emission reduction and recycling



Metal dust recovery system, enforced by regional kings „to avoid damage to neighbouring fields and grazing grounds“.

Source: Agricola, G. (1556). De re metallica

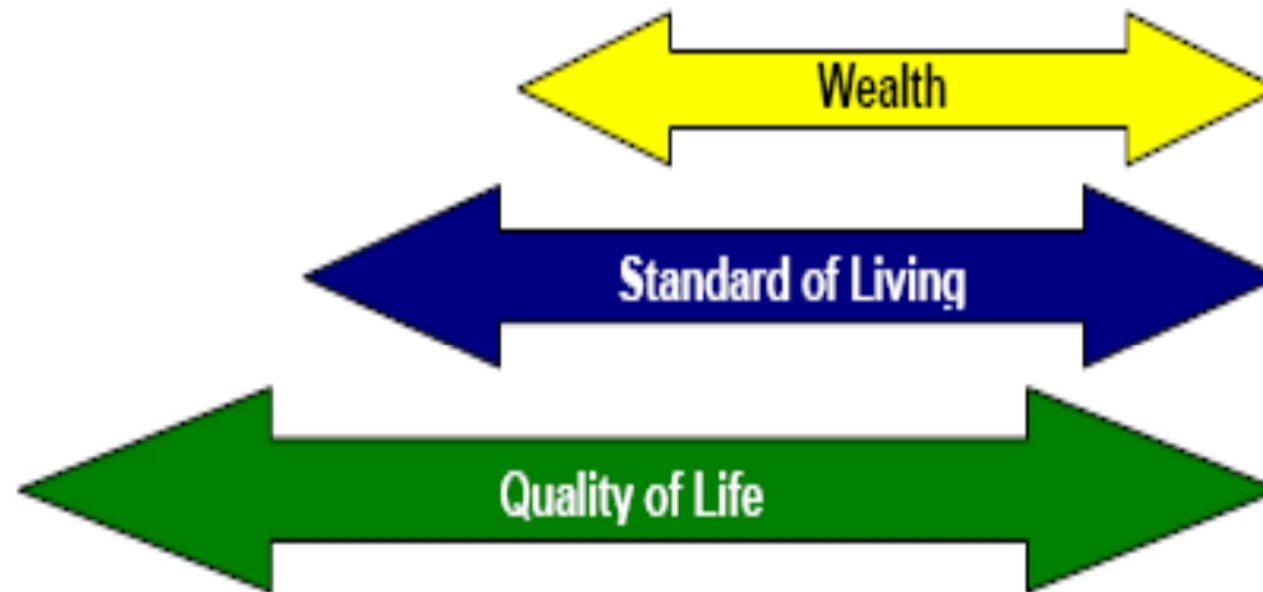




Factors contributing to the quality of life

Sustainable Consumption

$$\text{Quality of Life} = \frac{\text{Satisfaction}}{\text{Service}} \times \frac{\text{Services}}{\text{Product}} \times \frac{\text{Products}}{\text{Resource use}} \times \text{Resource consumption}$$



Sustainable Production



Sufficiency needs new Efficiencies

Consumer satisfaction =
Resources activated

Consumer satisfaction x Services consumed x
Services consumed Services generated

Services generated x Physical input
Physical input Resources activated





Increase resource use efficiency

Satisfaction efficiency x Supply/use efficiency
x Production efficiency x Provision efficiency



Consumer satisfaction x Services consumed x
Services consumed Services generated

Services generated x Physical input _____
Physical input Resources activated





Conventional Efficiencies

The *provision* efficiency, reducing the amount of activated but unused material, the “ecological backpack”, can be improved by more efficient technologies, or by finding use options for by-products so far considered waste, it is a business affair (primary sector plus mining).

The *product* efficiency increases with engineering and design improvements (eco-design), and with product service systems PSS providing not the products as such but the services they generate. This kind of re-thinking products offers new business opportunities.



Ignored Efficiencies

- **Supply/use efficiency** is closely related to the *standard of living*. Even if a product is efficient in offering its services day and night, the use efficiency can be extremely low if most of the time the product is not used.
- Efficient supply and use enables consumers to **derive more satisfaction from less goods**, through the **efficient provision** of access to flows of goods and services, probably often collectively owned (individually, by cooperatives, or public authorities). An **efficient use** pattern (the good not standing idle for extended periods) is key to use efficiency.



The Taboo Efficiency

Satisfier efficiency:

Satisfiers are goods and services which are in line with consumers' needs and support their individual and social identity.

Human needs can be considered an anthropological constant, while satisfier choice varies with factors like culture, wealth and the products on offer (Max-Neef et al. 1989). They comprise subsistence, protection, affection, creation, identity and freedom. Many needs are best satisfied by non-commercial services, such as care in a family or amongst friends, and not by products.

The level of life satisfaction (quality of life, well-being) depends on the satisfaction of the limited needs, not of infinite wants.

Satisfaction provides the psychic income (Fisher 1906)



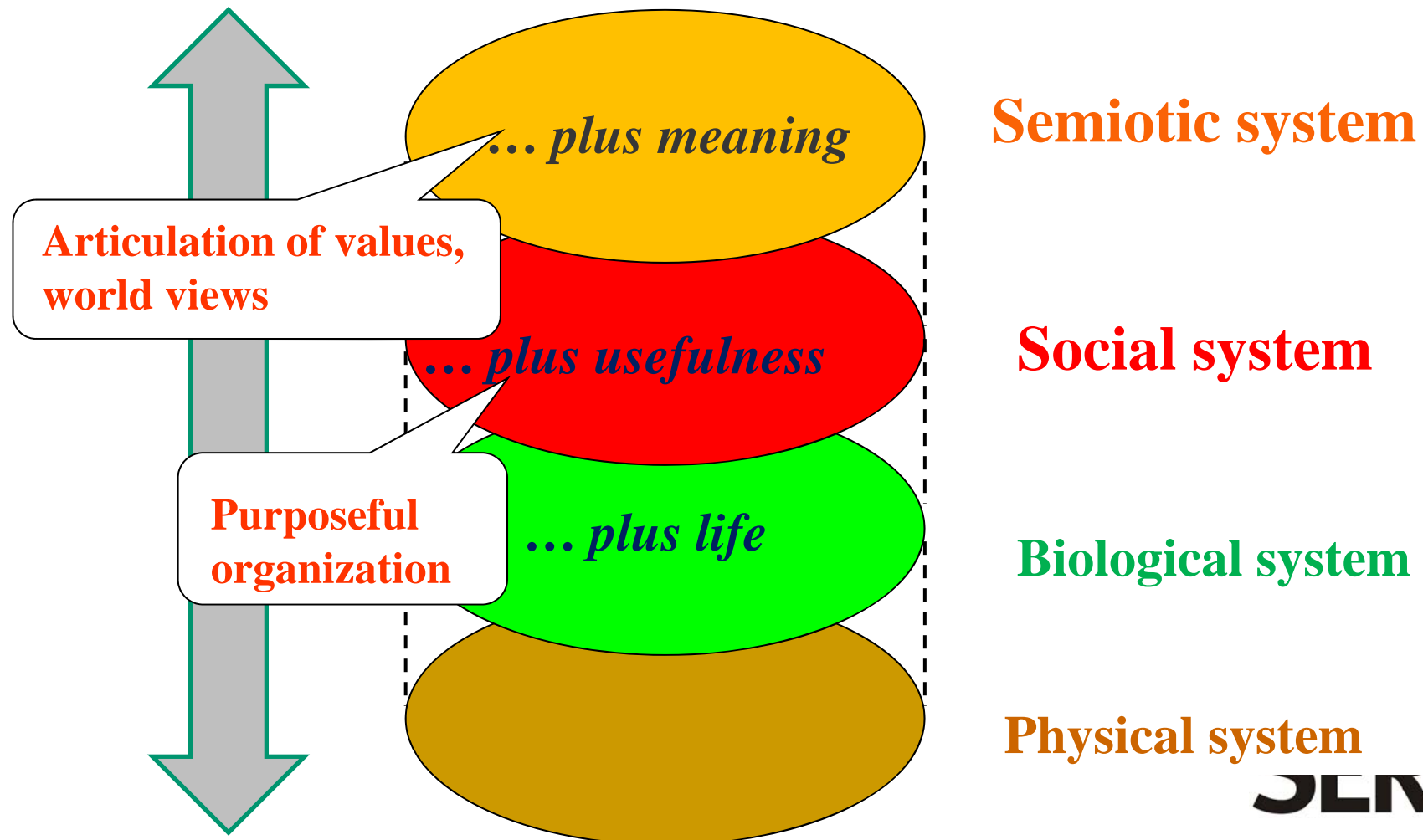
Fisher (1905)

- Not the stock of goods owned is crucial, but the services accessible are.
- The moment for counting consumption is when the services are enjoyed, not when the service providing machines are bought.
- Not all services can be measured in monetary terms, in particular not those provided by human affection (see Max-Neef's needs definition).
- He struggled to find a common denominator other than money, but neither happiness nor utility do the job: incomparability prevails.



Orders of system complexity

After M.A.K Halliday (2005)



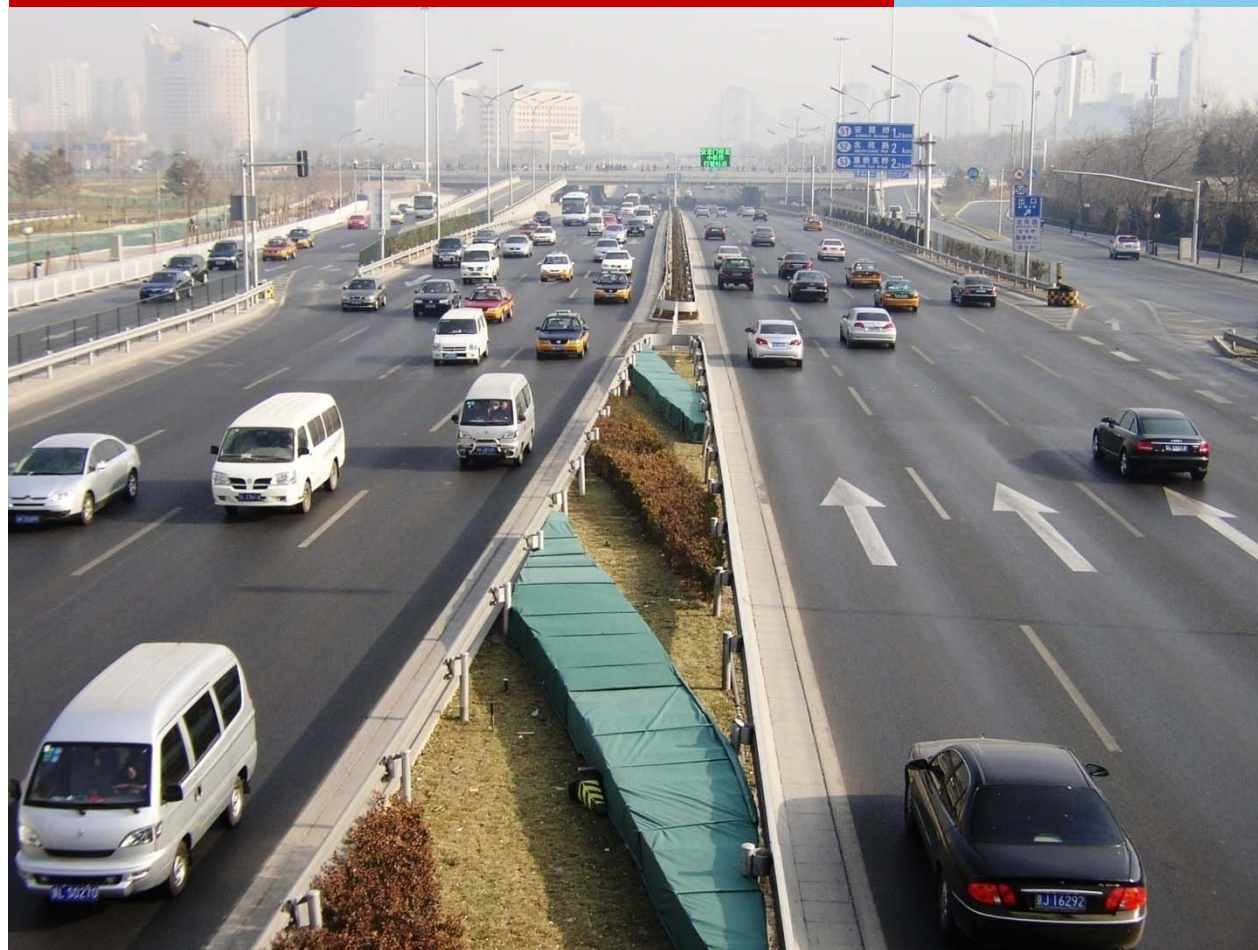
	Hunter & Gatherer Societies	Agrarian Societies	Industrial Societies	“Green” Societies
Energy [GJ/cap x a]	10-20	~65	223	< 120
Material Consumption [t/cap x a]	~1	~4	22	< 10

The data for industrial societies refer to Austria 1990 (Fischer-Kowalski & Haberl 1997); the energy consumption includes 42 GJ agricultural biomass, much of which is used for food. The estimated sustainable energy consumption is based on a recent study of a non-fossil energy future in Denmark (Lund, 2011) concluding that it is possible continuously to use 90 GJ in the energy system; to this must be added a certain amount of energy (here: 30 GJ) from agricultural biomass for food etc. in order to make the numbers comparable. To make material consumption sustainable at least a similar reduction is probably needed, although this very much depends on the kinds of material used. Both numbers depend on stabilised populations, and on the assumption that by far the largest amount of the energy and materials continues to be extracted within each country itself. In countries with higher population concentrations the numbers in the last column are likely to be lower, and this may influence other countries indirectly, if support is needed. Specific resource scarcities (see the discussion on ‘Peak Oil’ or on Rare Earths) are not taken into account in this figure. An equitable sharing of resource access would reduce the permissible consumption further, for a variety of important industrial metals and minerals even by a factor 4 to 5 or more (Schmidt-Bleek, 2009).





**Besides innovation,
ex-novation is
urgently needed.**



**Of course efficiency,
circular economy,
and renewable
resources offer a
potential reduction:**



**Maybe by a factor 4 to 5, i.e.
exactly what 3% growth will
eliminate within 50 years...**





Suboptimisation is no solution

(i.e. doing in the best possible way what should not be done at all)

Optimisation

includes giving up bad old habits and solutions, even if they have become self-evident routines over years and decades.





It's not enough to do things better – we must do better things





Efficiency is indispensable...

...for buying time. But it is no solution.

Efficiency knows no

- environmental limitations (Green Growth!)
- distributional justice and social security
- life satisfaction, good life, work-life balance
- Sustainable consumption, better but less

Efficiency is part of the rat race, the treadmill of production and consumption.

Changing course needs more...





Sufficiency





Living within our environmental space

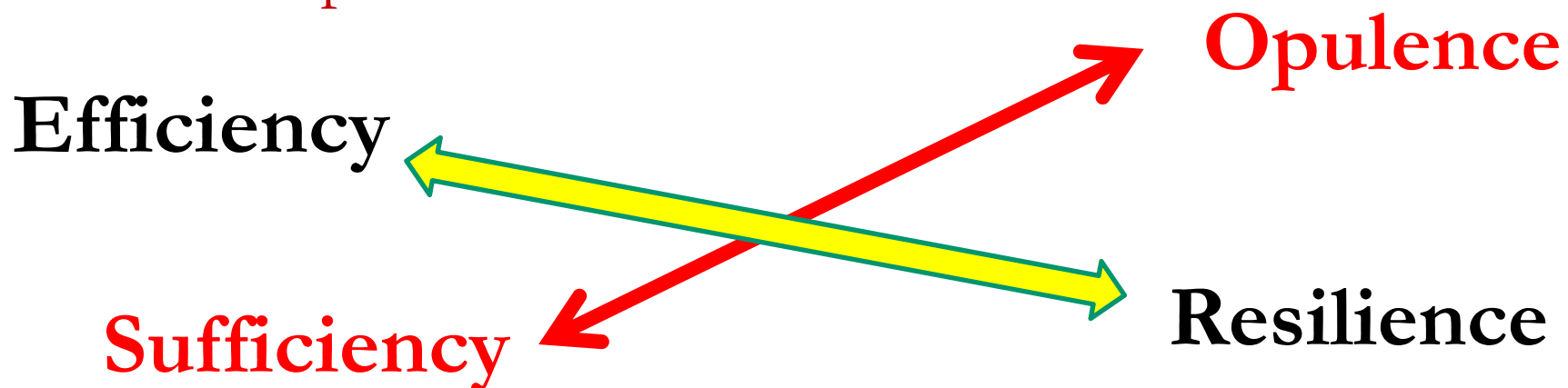


Efficiency and Sufficiency – Consumers' Responsibility?

Ending Overconsumption

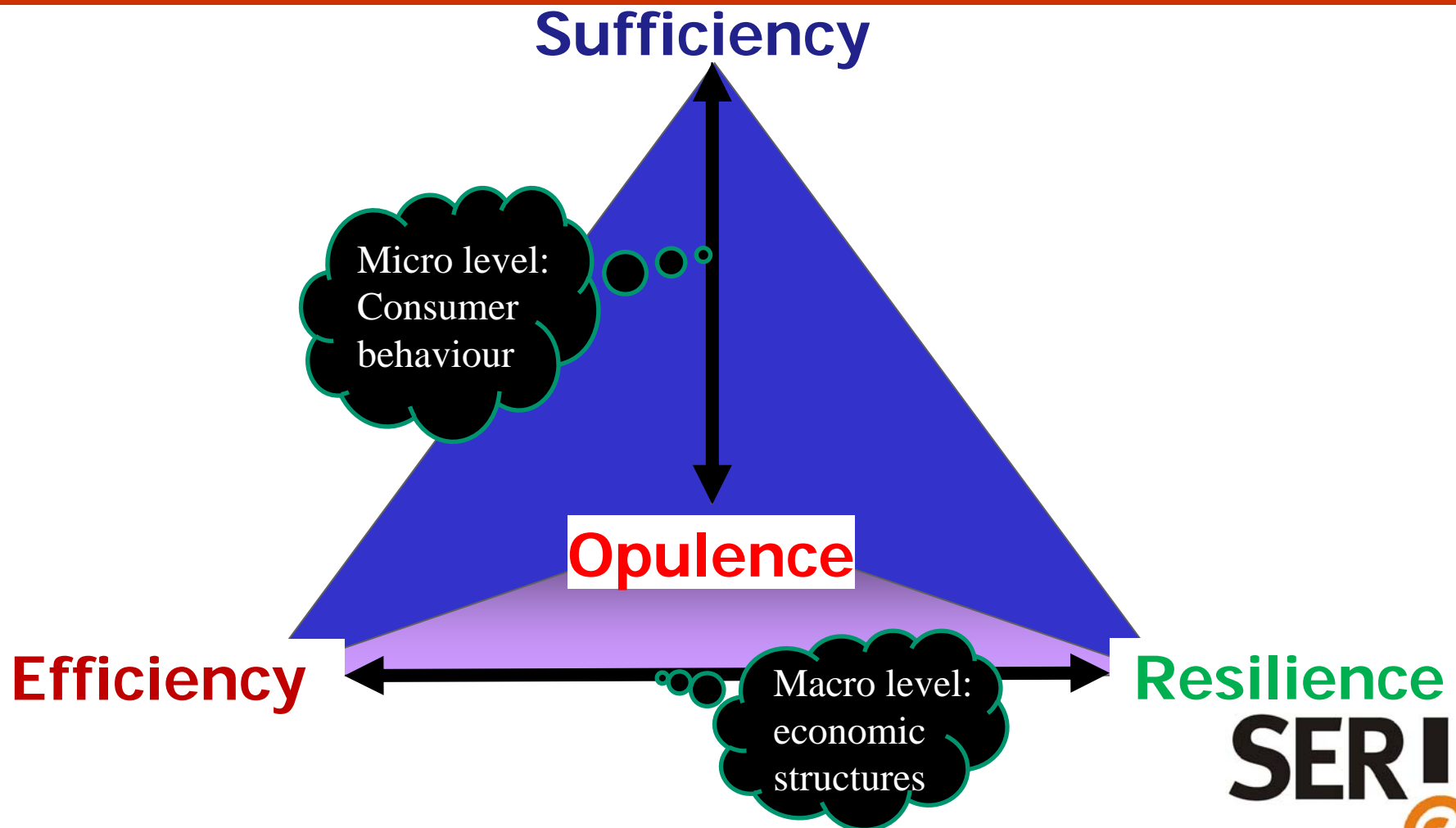
However, there is no individualistic solution, no “right” life within “wrong” structures.

Not respecting human needs is a safe receipt for failure.



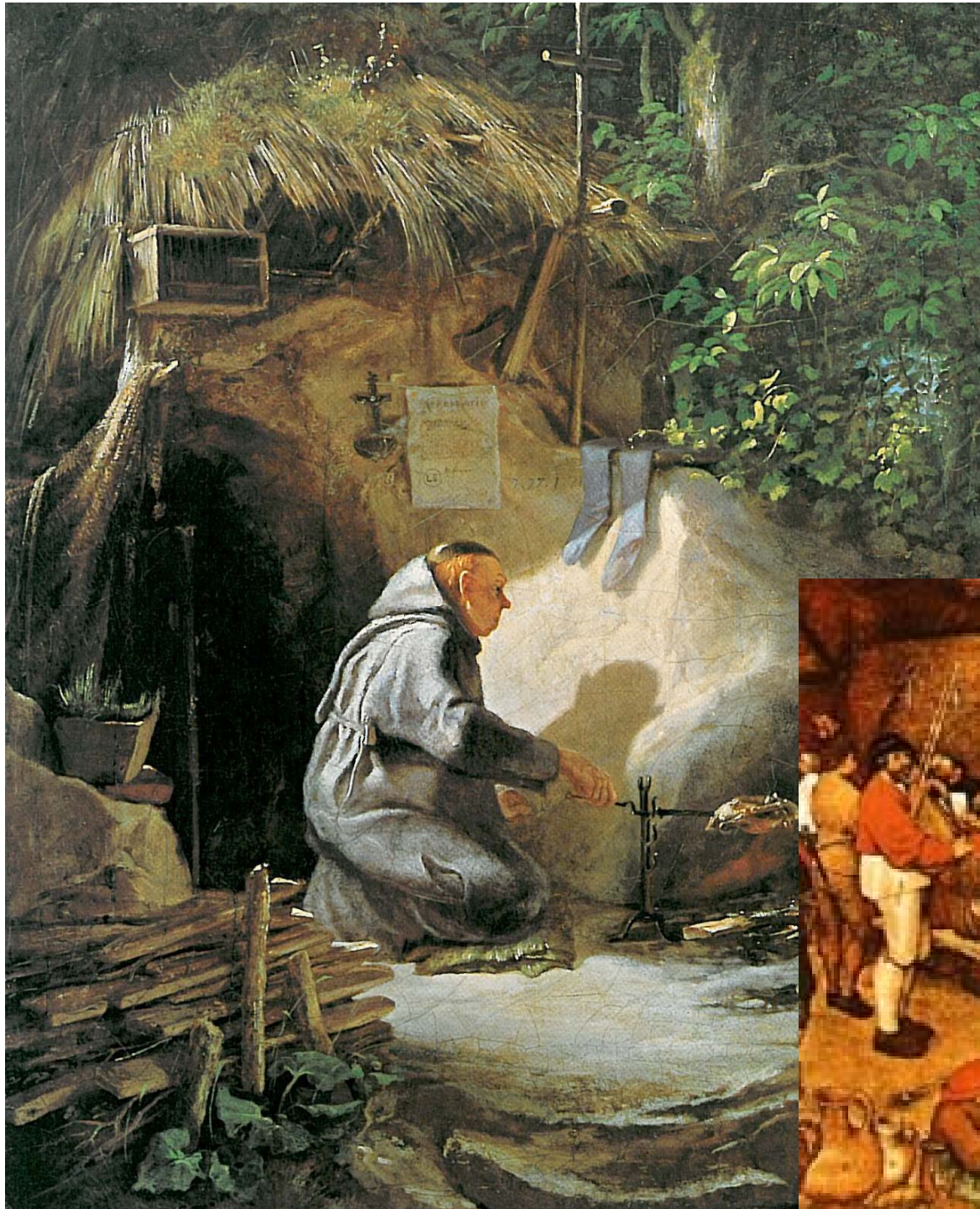


Balancing: Efficiency vs. Resilience (macro) and Sufficiency vs. Opulence (micro)





Sufficiency and Opulence



Motivations of Consumption

Beckenbach et al. (2012)

Consumers have different motivations to consume, some individual, some collective. For successfully promoting strong sustainable consumption, it is necessary to distinguish the different motivations.

Catching-up consumption refers to the unmet needs in particular of low income groups. The means of satisfaction and the level aspired can be very different, depending on the respective society and the economic system.

Conformist consumption responds to the desire to match the status of the social reference group, not being identifiable as an outsider or otherwise discriminated for the absence of certain goods which signal group membership. Smart phones and branded clothing, although initially not an essential need, can have this role, turning the ability to exhibit such goods into a social necessity.



Motivations of Consumption

Beckenbach et al. (2012)

Positional consumption refers to the same peer groups as conformist consumption, but with the desire not only to conform to common cultural standards, but to be superior. Goods can be owned, rented, borrowed or stolen – visibility is more important than ownership details.

Defensive consumption is the result of efforts to compensate for the deterioration of the prevailing living conditions. The mortgage-based consumption binge following long-term income stagnation in the USA before the collapse of the bubble, is probably the most prominent example.

Compensatory consumption is defensive and caused by socially bad working conditions (lack of self-determination, permanent control, interference of superiors, lack of recognition).



Good work is about more than money



Sufficiency is Enoughness

Enoughness is the anti-thesis to ever faster, higher, more. It implies support for have-nots, and limitations for overconsumers.

It requires addressing the motivations of consumption, by social security for catching-up consumers, distributional justice, decommodification of status and good work for all.

Symbolic functions often play a major role in the formation, expression and communication of the given, chosen or aspired identities. The reputation of a certain good with the relevant peer groups plays a decisive role.

Non-market goods and services, mutuality-based or altruistic social relations, and the public goods provided by the environment play a key role for life satisfaction.





No Enoughness Without Fairness

- Wilkinson & Pickett have shown that income polarisation is closely correlated with criminality, violence and overcrowded jails, education problems and the erosion of family values, and more elements of social disintegration.
- Sufficient levels of equality are a necessary condition for the freedom of choosing a life (A. Sen), to lead a good life, to be satisfied, to emphasise “being” over “having”.



We need...



Limitations

and

Justice!



Sufficiency Policy





Three Conditions of Change

- **Personal affordability:**
Knowledge and motivation, the individual willingness to change
- **Social affordability:**
Acceptance, even better desirability of changed consumption patterns in the eyes of relevant peer groups
- **Economic affordability:**
Access to suitable alternatives, without disproportional excess effort (price, transaction cost)





The Political Level

- **Sufficiency is no new policy field,** but an organising principle cutting across almost all fields. It changes politics by replacing the orientation, redefining progress from growth and speed towards satisfying human needs.
- **It is about freedom and civic rights,** about guaranteeing to each citizen the right to live a resource-light life if she so chooses to.
- **It introduces limitations,** recognising that restricting the freedom of some (to overconsume) is the condition for the freedom of all to lead a dignified life.





The Societal Level

- **Peer groups can make it or break it,** they are a decisive factor setting limits to individual behavioural change. So group processes must change, plus individuals.
- **Authorities:**
In hierarchical societies and business environments, individual freedom of choice is limited. **Sustainability policy creates the opportunity space needed.**
- **Family:**
The most intimate social environment shapes wishes, desires and the imagined ways of fulfilling them. Family agreement is crucial for changing life styles.





The Personal Level

- **Cognitive level:**
The individual willingness to change requires knowledge about alternatives and reasons for change. Education provides information.
- **Emotional level:**
Feeling the desirability of changed consumption patterns, that is the “right” thing to do now.
- **Reflexive level:**
Insight into the benefits of resource-light consumption, of affluence in time instead of money, of quality of life instead of quantity of goods, etc.





Sufficiency for a Good Life

A critical element for a good life is to be **a fear-free life**, within safe conditions, **physically and socially**, and without serious concerns for the future. Thus **future-proofing societies** is a key element of providing the opportunity for leading a good life to its members.

A study from Sweden finds that materialistic mind sets are correlated with

- A lower level of life satisfaction, and
- Higher resource consumption and environmental pollution.





How much is enough?
“It is only in the backwards countries of the World that increased production is still an important objective; in those most advanced, what is needed is better distribution.”

John Stewart Mills (1857), Principles of Political Economy, Book IV





An assault on our sacred cows: economic growth

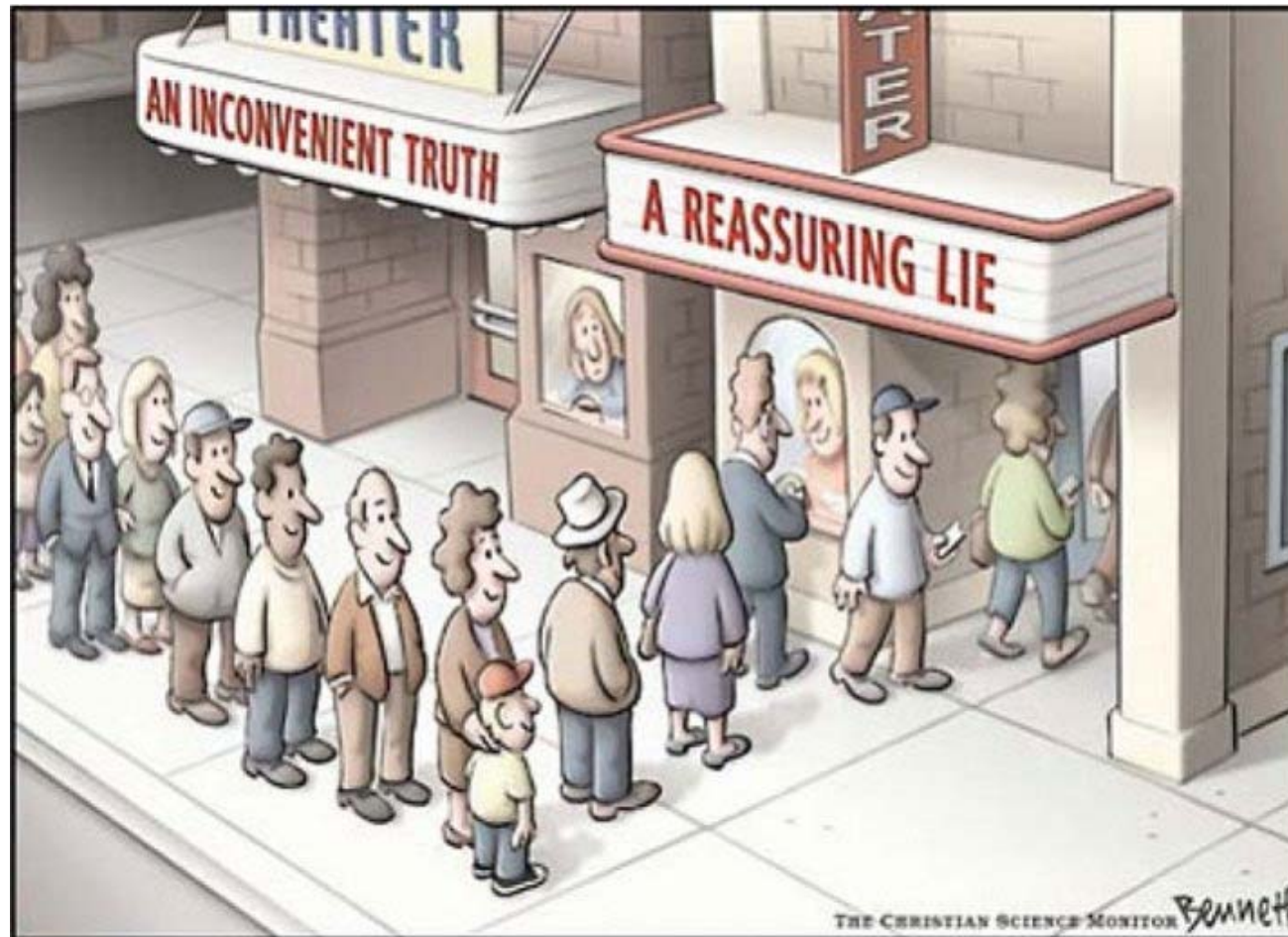
We need a change of paradigms

- from growth mania to first socially sustainable **degrowth**, and then a **steady state economy**,
- from resource squandering to **resource use capping**,
- from production efficiency to **satisfaction efficiency**,
- from **household consumption** growth to sufficiency,
- from more to better, from a better life to a **good life**.





Economic growth cannot go on forever





Another assault on our sacred cows: private property

For many goods, like cars, **private ownership is the most inefficient way of providing services**: access, not ownership is key, stocks of wealth are less important for a good life than the access to flows of services.

Given the limitations from degrowth, **substituting access to services for ownership becomes a condition for maintaining the standard of living**.

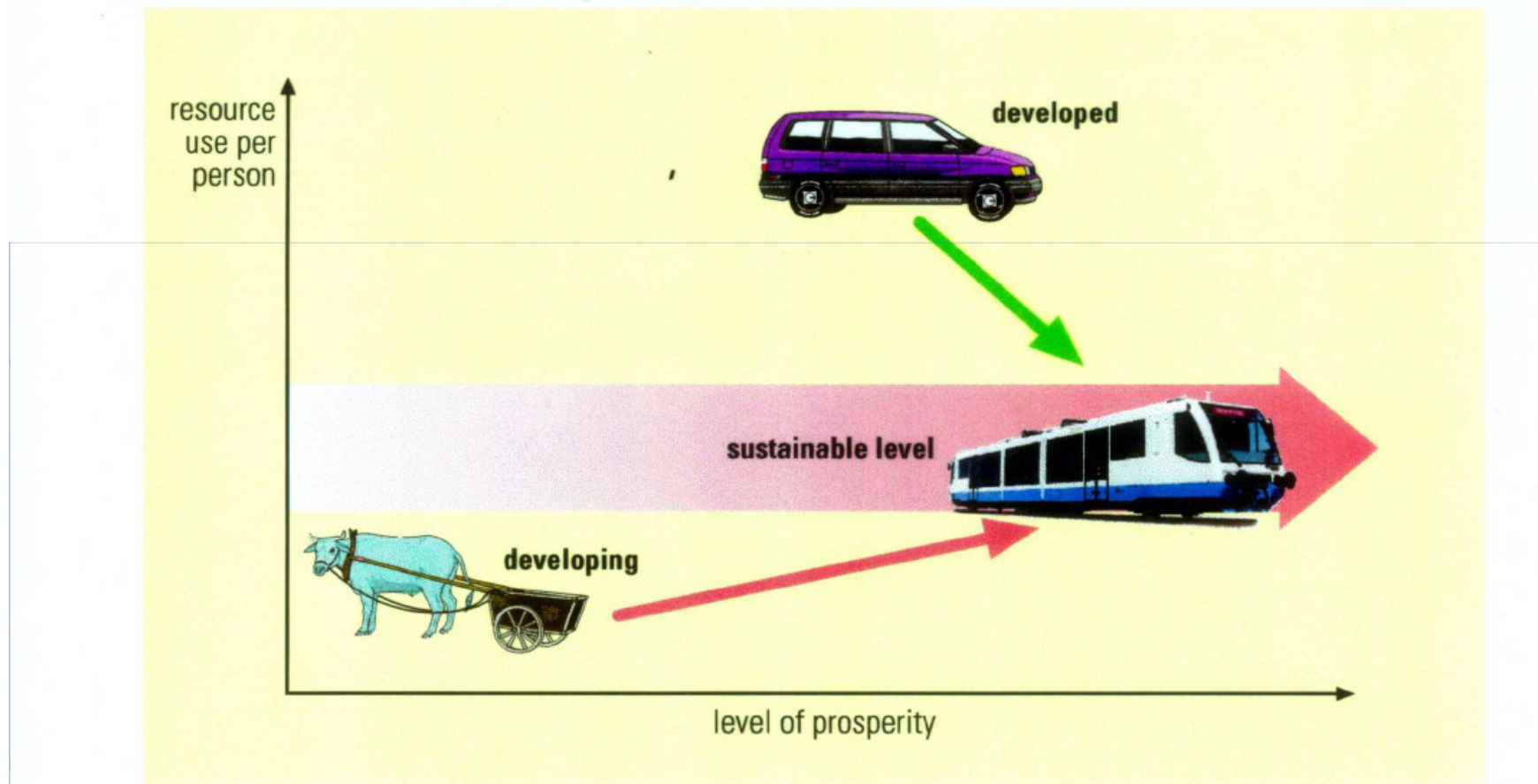
Which goods are **market goods, merit goods, common pool or public goods** is a **political** decision a society has to take.





Global Sustainable Consumption Requires Convergent Development

Sustainable development model





...and on Free Trade

It can help balance different resource endowments, but in a plunder economy with unfair prices, guaranteed access, free transfer of profit and investor protection clauses it is another way of forced access to other nations riches, no mutual support by rather neo-colonial exploitation instead of using own resources more efficiently.



Sufficiency offers a better life, within the limits of Environmental Space, than just...





**If we
don't
change
our world
views,
collapse
may be
imminent**

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The world of tomorrow will be much more similar to the one of today than we hope, but the world of today is already dissimilar from what we perceive

A. Andersch

For this presentation, and more, see

<http://seri.academia.edu/JoachimHSpangenberg>

*Thank you for
your attention*





Annex: Transitions





Ten lessons I

1. Incremental change will not be enough, it will have to be **holistic and simultaneously at all fronts**.
2. To be effective, **change cannot be incremental** but will have to be radical, addressing the roots (Latin: “radix”) of the problems.
3. What is **lacking** amongst decision makers is a longer-term perspective, the insight into the irreversibility of development, and the resulting **sense of urgency and the willingness to fight for the common good**.
4. A transition requires not only the physical composition of our societies to be changed, but as well our **institutions, habits and world views**.





**Willingness
to fight for
the Common
Good needs
teeth**





Ten lessons II

5. Established authorities are an improbable breeding ground for innovative ideas, but **those ideas will have to penetrate all layers of society.**

6. There is more than one way to future-proofing our societies. While intercultural learning is important (from European philosophers via Chinese neo-Confucianism to Latin American Buen vivir movements), the aim should not be a cultural homogenisation: **diversity is strength.**

7. However, we have to **avoid retro-projective idealisation** – Pachamama was a goddess bringing life and death, and pre-industrial life was a social hardship including slavery and harsh gender hierarchies.





3 Alternatives



Ten lessons III

8. Freeing our minds from the (partly unconscious) guidance by respected role models, and instead inventing a new world (view) of our own would be another step in **completing the unfinished enlightenment.**

9. **Arguments alone will not be enough** to overcome popular myths, neither against “believers” not against interests. **Change it is a question of power**, requiring societal mobilisation.

10. For all these steps **there are already grassroots agents**, but **a broader, unifying and generally accepted framework is missing.**

