Sustainable Consumption: towards a systemic transition

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Consumer society is a deliberate construct, socially engineered

"Our enormously productive economy demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction and our ego satisfaction in consumption. We need things consumed, burned up, worn out, replaced and discarded at an ever-increasing rate"

(Victor Lebow 1955).

overview

1. What is (sustainable) consumption?
   - Brief history and definition
2. What drives consumption?
3. Well-being, happiness, and inequality
4. Lock-ins and rebound effects
5. Towards systemic change
6. The role of technology and TA
7. Research: SCORAI and GRF-SPC

1. What is (un)sustainable consumption?

- Consumption is often seen as an individual act to satisfy wants and demands
- E.g. buying goods, eating food, living in houses, using energy and means of transportation
- In this process materials and energy are consumed, and waste is generated
- However, nowadays consumption in industrialized countries transcends the fair earth share of available ecocapacity (or global footprint)
- Rapid economic and population growth in China and India also threatens the ecosphere

United States of America

Associated Graph

Figure 1 tracks the per-person resource demand (Ecological Footprint) and resource supply (Biocapacity) in United States of America since 1961. Biocapacity varies each year with ecosystem management, agricultural practices (such as fertilizer use and irrigation), ecosystem degradation, and weather.

Climate change
Ocean acidification
Stratospheric ozone depletion
Nitrogen cycle (biogeochemical flow boundary)
Phosphorus cycle
Global freshwater use
Change in land use
Biodiversity loss
Atmospheric aerosol loading (not yet quantified)
Chemical pollution (not yet quantified)

Brief history and definition

- 1992: Rio Agenda 21: "[t]he major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries, which is a matter of grave concern, aggravating poverty and imbalances."
- 1994: Oslo declaration: "Sustainable consumption is the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations."
- 2002 Johannesburg Plan of Implementation: "[f]undamental changes in the way societies produce and consume are indispensable for achieving global sustainable development [and that] [a]ll countries should promote sustainable consumption and production patterns, with the developed countries taking the lead and with all countries benefiting from the process."

Brief history (2)

- 1998-2000: EU project strategies for the Sustainable Household (SusHouse) project: visioning and backcasting
- 2005-2008 EU SCORE! Project: multidisclipinary approach
- 2004-2012 Marrakech Process, led by UNEP: demonstration projects
- 2008-… SCORAI: NA Sustainable Consumption Research and Action Initiative; 1st major international conference June 2013
- 2011-…..GRF-SPC: Global Research Forum on Sustainable Consumption and Production; 1st major conference June 2012 in Rio
- 2012 Rio+20 conference: adoption of UN 10 Year Framework of programs on SPC.

Brief history (3)

- Sustainable consumption has developed from a rather narrow concept (how to influence consumer behavior) to a much broader research and policy program
- This includes:
  - Green products and immaterial product-service systems
  - connections between production and consumption
  - The consumerist culture
  - The economic growth paradigm and its challenges
  - Sustainable lifestyles
  - Socio-technical transitions
  - (in)equality
  - Well-being and happiness research
- Actors are: governments (policy); business; NGOs, civil society, faith-based groups; researchers

2. What drives consumption?

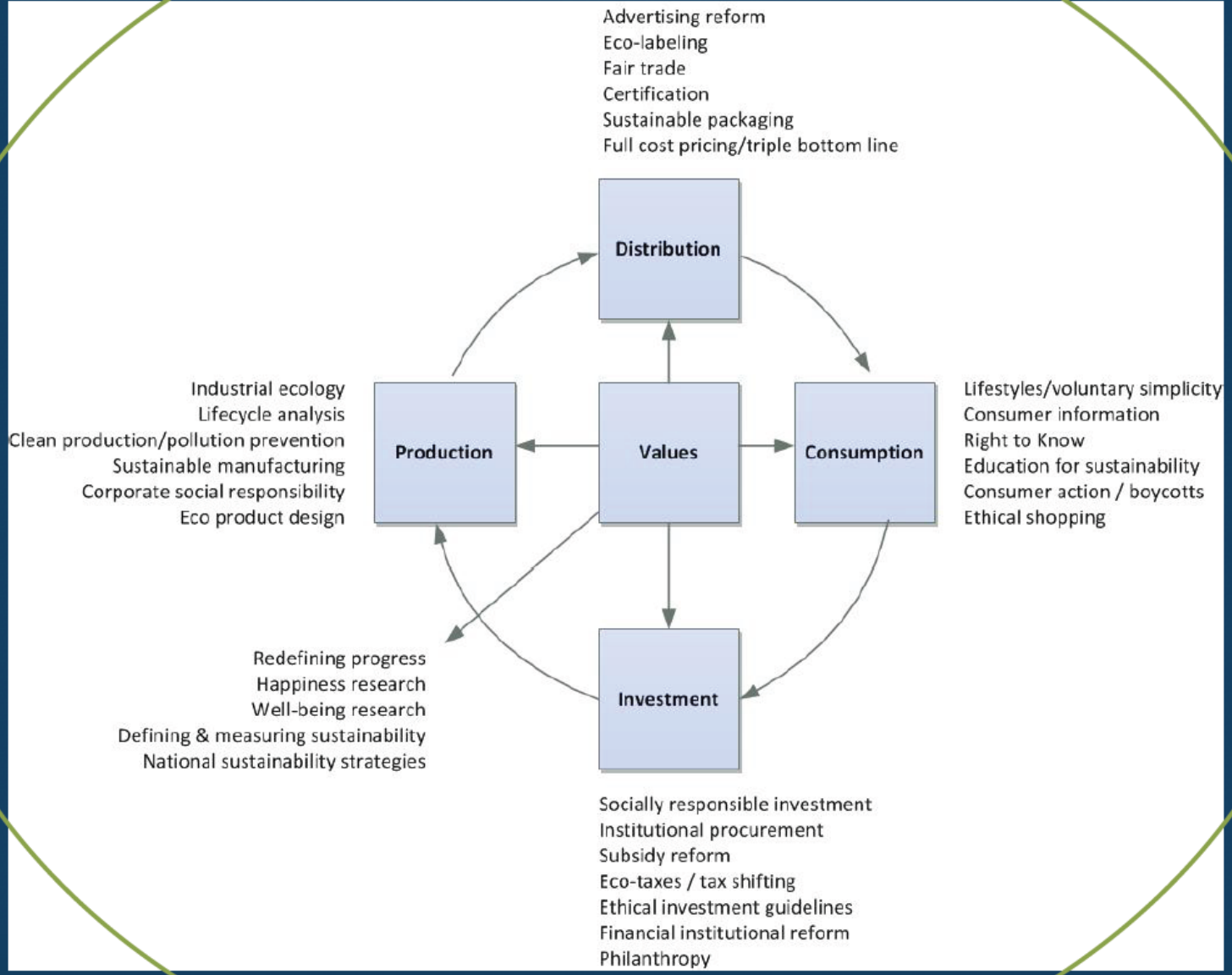
Consumption cannot be analyzed in isolation

Fundamental difference between basic needs fulfillment (needs) and wants

Drivers of (individual) consumption:

- Advertisements
- Peer pressure (keeping up with the Joneses)
- The “hedonistic treadmill”
- Status symbols
- Cultural identity
- “consumerist culture”
- Ideology of economic growth

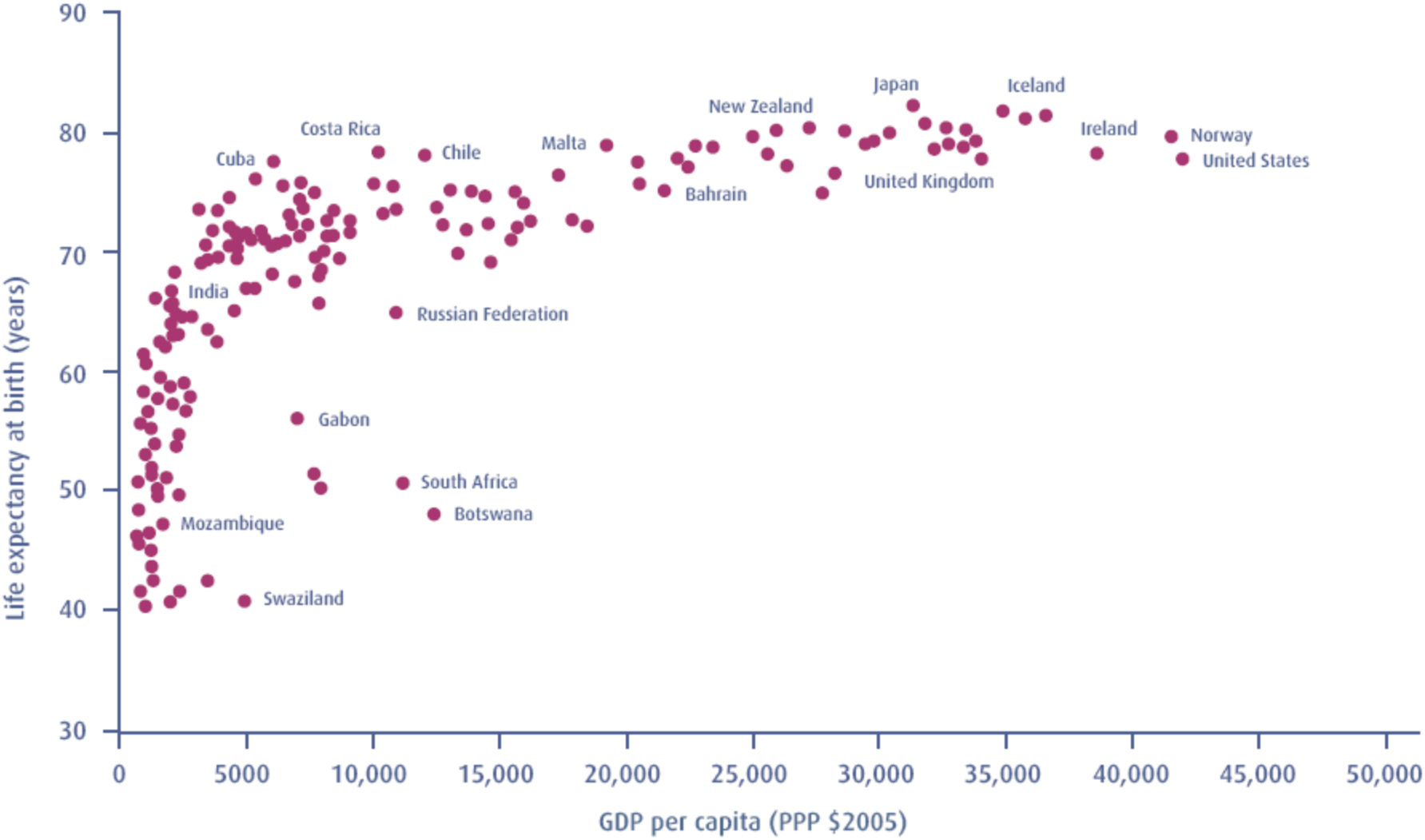
- Individual consumption is linked to the macro-economic system; which is based on unlimited economic growth
- Consumption drives economic growth, which creates jobs and wealth
- Economic growth is (partially) driven by technological innovations: they create productivity growth, which (in theory) would lead to shorter working weeks and more leisure time
- Consumption is thus part of a much wider system:


Advertising reform
Eco-labeling
Fair trade
Certification
Sustainable packaging
Full cost pricing/triple bottom line
Distribution
Industrial ecology
Lifecycle analysis
Clean production/pollution prevention
Sustainable manufacturing
Corporate social responsibility
Eco product design
Production
Values
Consumption
Lifestyles/voluntary simplicity
Consumer information
Right to Know
Education for sustainability
Consumer action / boycotts
Ethical shopping
Redefining progress
Happiness research
Well-being research
Defining & measuring sustainability
National sustainability strategies
Investment
Socially responsible investment
Institutional procurement
Subsidy reform
Eco-taxes / tax shifting
Ethical investment guidelines
Financial institutional reform
Philanthropy

3. Well-being, happiness, and inequality

- More material consumption does not lead to more happiness
- On the level of countries, above a certain threshold of GDP, happiness is stationary
- The economic growth paradigm and the present economic system has however lead to an increase in inequality
- Inequality is related to health and social problems
- Inequality is one of the drivers of (unsustainable) consumption

Figure 8 **Life expectancy at birth vs average annual income**[16]



Health and Social Problems vs. Income Inequality (9 indicators combined)

From: Wilkinson and Pickett "The Spirit Level"

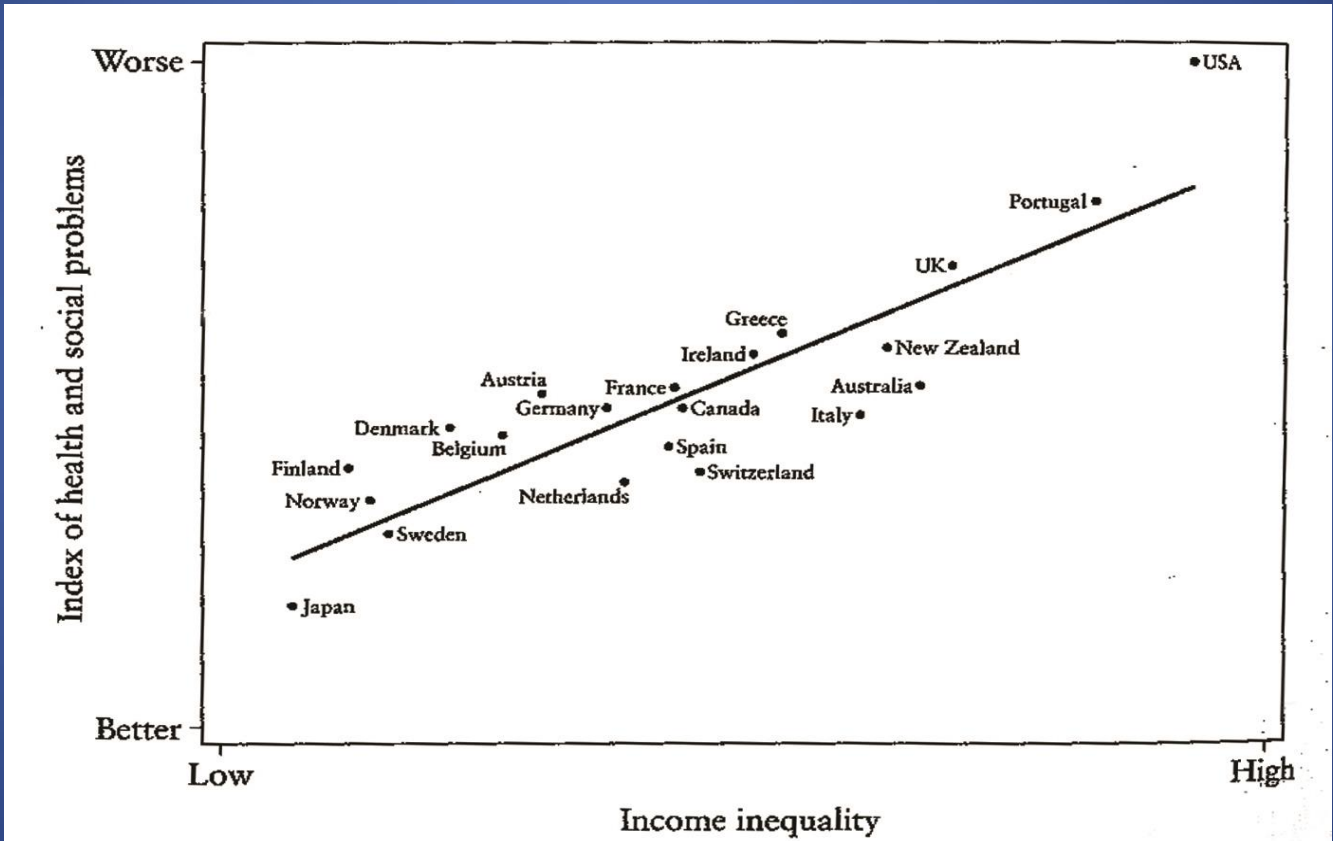
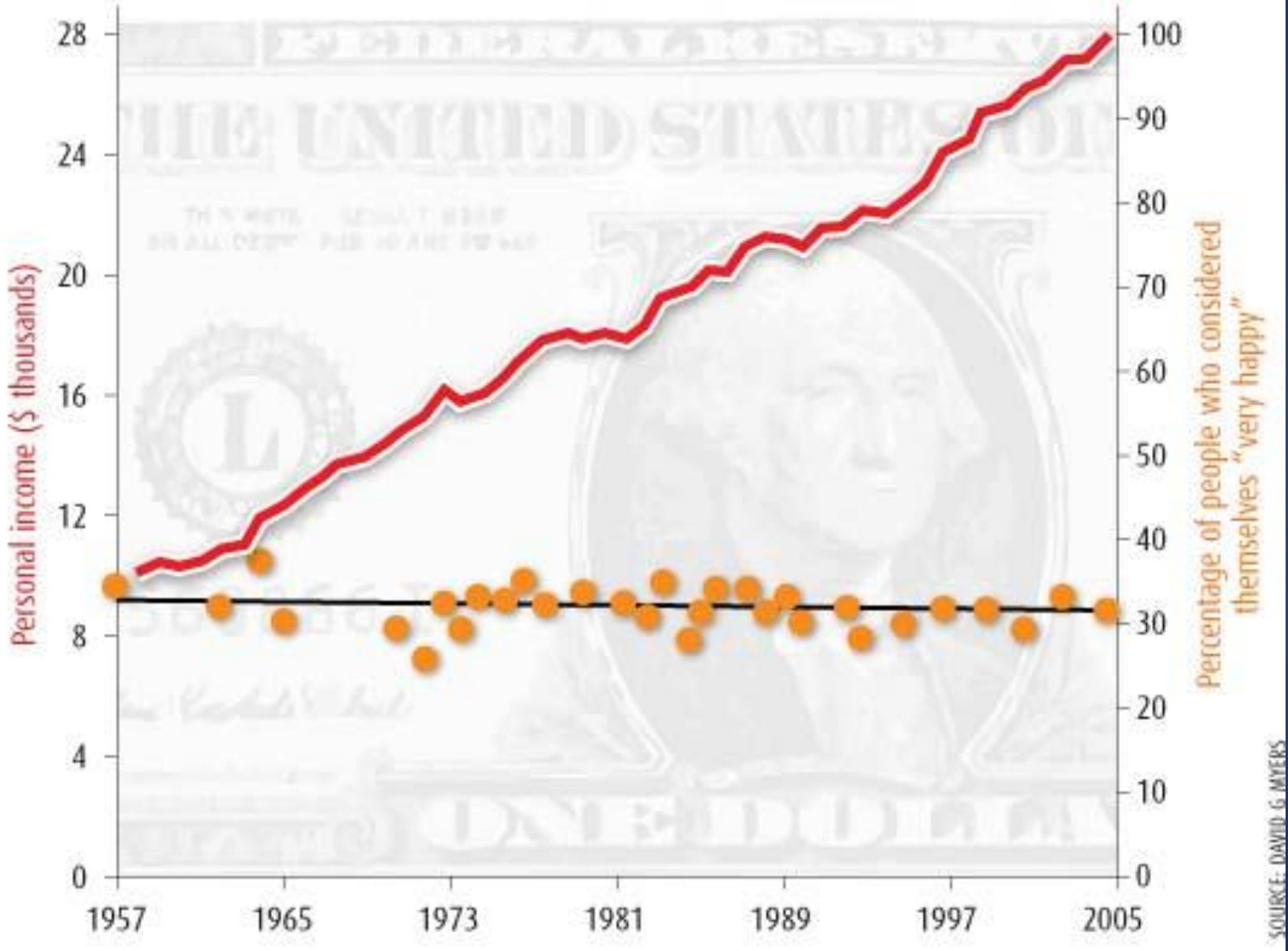
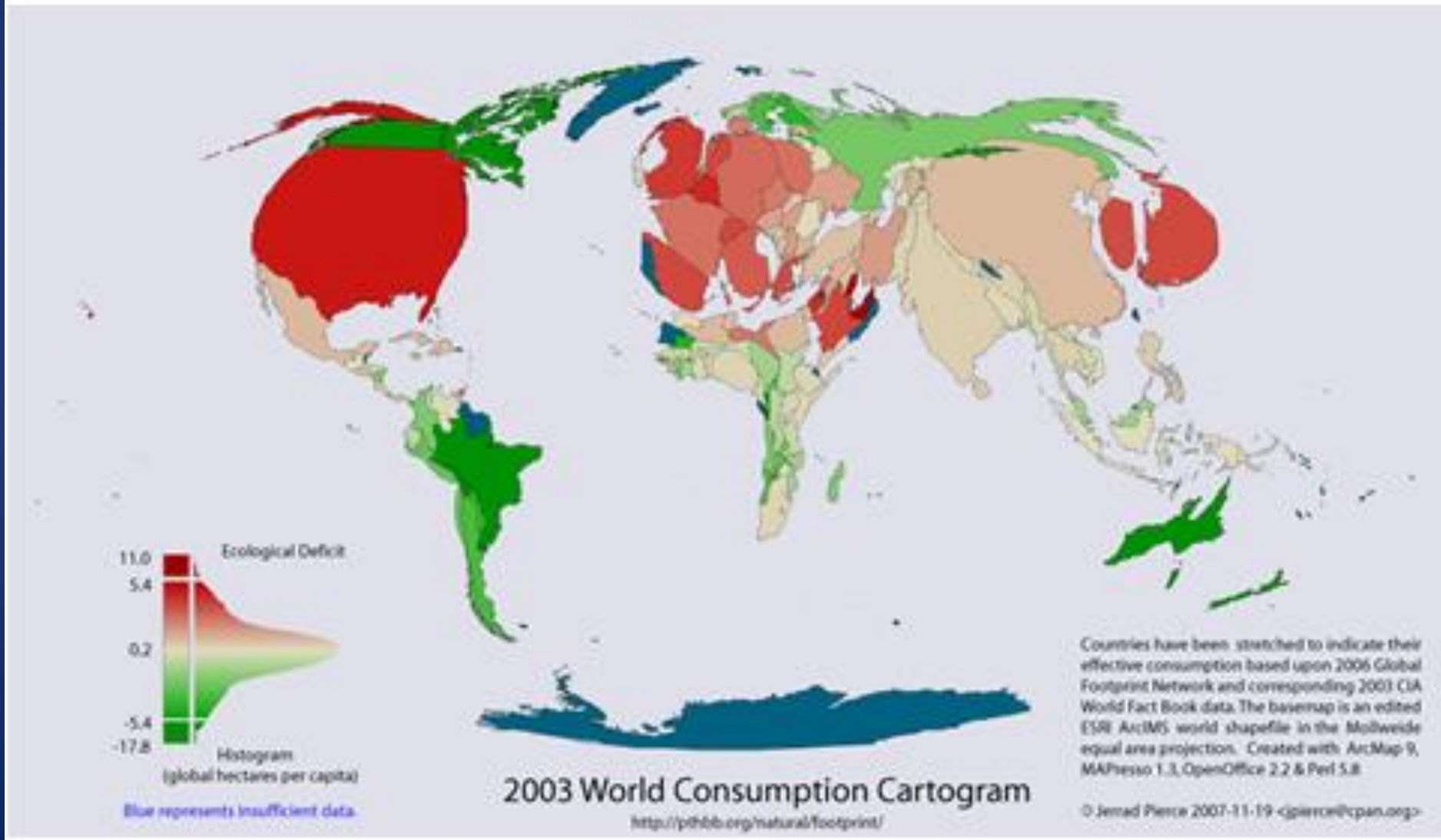


Figure 13.1 *Health and social problems are more common in more unequal countries.*

HAPPINESS IN LIFE vs ANNUAL INCOME

A rise in income has no effect on happiness




11.0
5.4
0.2
-5.4
-17.8
Ecological Deficit
Histogram
(global hectares per capita)
Blue represents insufficient data.
2003 World Consumption Cartogram
http://pthbb.org/natural/footprint/
Countries have been stretched to indicate their effective consumption based upon 2006 Global Footprint Network and corresponding 2003 CIA World Fact Book data. The basemap is an edited ESRI ArcIMS world shapefile in the Mollweide equal area projection. Created with ArcMap 9, MAPresso 1.3, OpenOffice 2.2 & Perl 5.8
© Jerrad Pierce 2007-11-19 <jpierce@cpan.org>


HAPPINESS IS SINGING IN THE CHOIR!
SCHULZ
Tm. Reg. U. S. Pat. Off.—All rights reserved
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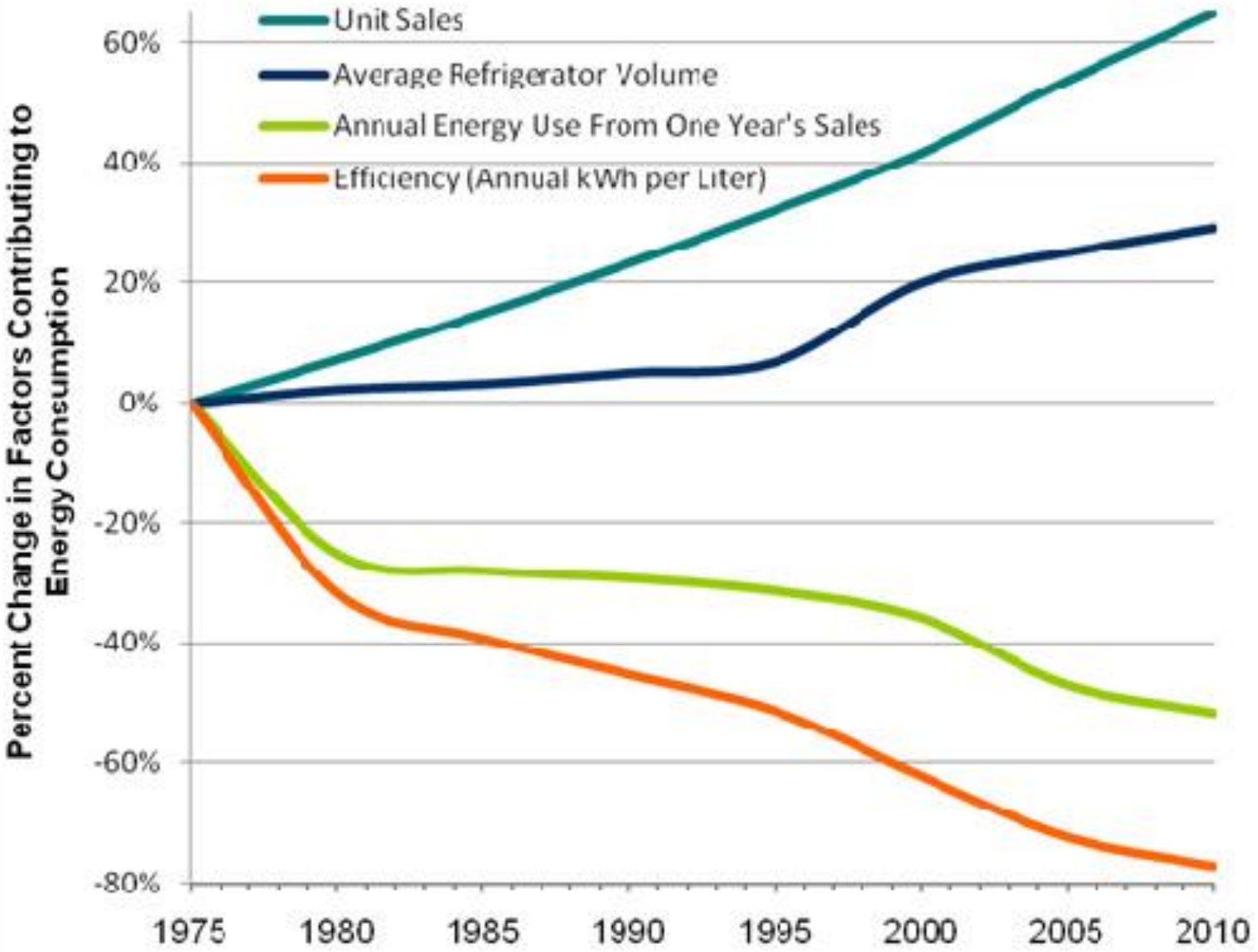
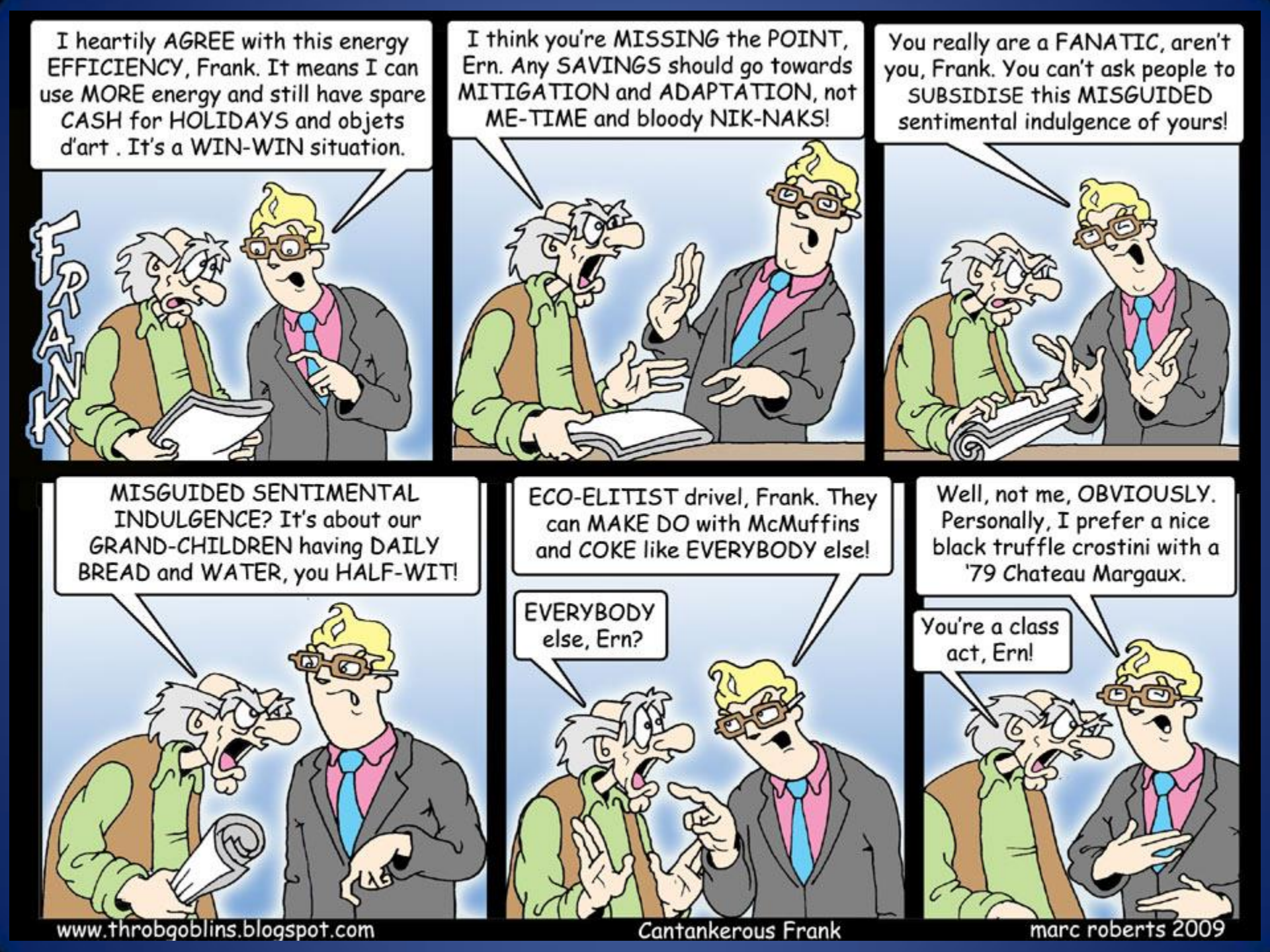
4. Lock-ins and rebound effects

- Consumption patterns are locked-in culturally, economically, technologically, infrastructurally, and institutionally
- To change them, economic incentives are not enough. Cultural changes and changes in institutions and values are also necessary
- Technology has created increases in efficiency; which often leads to rebound effects
- Next to efficiency we also need a measure of sufficiency

Achievements in EU Refrigerator Efficiency




I heartily AGREE with this energy EFFICIENCY, Frank. It means I can use MORE energy and still have spare CASH for HOLIDAYS and objets d'art . It's a WIN-WIN situation.
FRANK
I think you're MISSING the POINT, Ern. Any SAVINGS should go towards MITIGATION and ADAPTATION, not ME-TIME and bloody NIK-NAKS!
You really are a FANATIC, aren't you, Frank. You can't ask people to SUBSIDISE this MISGUIDED sentimental indulgence of yours!
MISGUIDED SENTIMENTAL INDULGENCE? It's about our GRAND-CHILDREN having DAILY BREAD and WATER, you HALF-WIT!
ECO-ELITIST drivel, Frank. They can MAKE DO with McMuffins and COKE like EVERYBODY else!
EVERYBODY else, Ern?
Well, not me, OBVIOUSLY. Personally, I prefer a nice black truffle crostini with a '79 Chateau Margaux.
You're a class act, Ern!
www.throbgoblins.blogspot.com
Cantankerous Frank
marc roberts 2009

5. Towards systemic change

- Influencing individual consumption: through education; information; product labeling; choice editing
  - Limited effectiveness; emotions rather than information
- Creating peer pressure: ecoteams
  - Limited target group (5%)
- New business models: green products; sustainable product-service-systems; greening the supply chain; green procurement; circular economy (recycling)
  - Business and government approach; does not challenge economic growth paradigm

Systemic change (2)

- New roles for consumers: as investors; as producers (Prosumers; Røpke); as innovators: grassroots innovations (Seyfang, Smith); Bounded Socio-Technical Experiments (Brown, Vergragt)
- Social movements: slow living; voluntary simplicity; transition towns; grassroots innovations; collaborative consumption; degrowth movement
  - Unclear how to mainstream them
- Challenging economic growth paradigm; alternatives for GDP as indicator for wellbeing
  - (mostly academics; some political support (Stiglitz, Sen, Fitoussi commission on economic indicators)
- Sufficiency instead of efficiency
  - (mostly academics; toxic for policy makers)

6. The role of technology and TA

- Technology has driven economic growth and efficiency increases, creating massive new products, and thus enabling present unsustainable consumption patterns
- Technological solutions alone are insufficient and, if they can overcome lock-ins, can lead to rebound effects. (renewable energy; green products, ICT)
- Technology could enable alternative lifestyles; smaller homes; collective transport, collaborative consumption
- Social media and ICT provide numerous examples of technologies helping provide sustainable solutions
- Open access and crowd sourcing are powerful examples
- This can be seen as a new form of CTA


zipcar
wheels when you want them
zipcar.com

Crowd sourcing & social media

7. Research: SCORAI and GRF-SPC

- More research is needed to evaluate how systemic change could be induced
- SCORAI (Sustainable Consumption Research and Action Initiative) represents the North-American research community (and some practitioners) engaged in sustainable consumption research.
  - Its next international conference is June 12-14 in Clark University, Worcester, MA, USA www.scorai.org
- GRF-SPC (Global Research Forum on Sustainable Production and Consumption) is the global community on SPC research, which also includes sustainable production.
  - Its website is http://grfscp.wordpress.com , where papers and presentations from the Rio 2012 conference can be found.
- We welcome contributions from the TA community; especially on how technology can enable systemic change.

Some readings

- Tim Jackson, *Prosperity without growth*, 2009
- M. Cohen, H. Brown, and P. Vergragt, eds. 2013 *Innovations in Sustainable Consumption: New Economics, Socio-technical Transitions, and Social Practices*. Northampton, MA: Edward Elgar
- Cohen, M., Brown, H., & Vergragt, P. 2010. *Individual consumption and systemic societal transformation: introduction to the special issue.* Sustainability: Science, Practice, & Policy 6(2):6-12. http://sspp.proquest.com/archives/vol6iss2/introduction.cohen.html

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