

Envisioning a Sustainable and Desirable Future

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Over-View of Lecture

- Why is envisioning necessary?
- The current vision and an alternative
- Guided by this alternative vision, how would we confront today's economic crisis?



An Economists Perspective

- Economics is defined as the allocation of scarce resources among alternative desirable ends
- First question an economist must ask: What are the desirable ends?
- Society needs a shared vision of a desirable future before we can judge the effectiveness and efficiency of any economic system

A Systems Perspective: Leverage points for changing complex systems

- Technical
 - Technologies (e.g. green tech.)
 - Instruments (e.g. green taxes, getting the prices right)
- Institutional
 - What are the rules and structures that drive the system?
- Conceptual: Vision of what is possible and what is desirable
 - POSSIBILITY: (paradigm or world view): What is the fundamental nature of the planet, of humans, of human society?
 - DESIRABILITY (goals): What do we want to achieve?
- Change our vision and institutional and technical changes

Yogi Berra's Perspective

 "If you don't know where you're going, you will end up somewhere else." Yogi Berra



Changing the Vision

- What is possible
 - How the world is: Laws of physics, ecology and human nature
- What is desirable
 - How the world should be: Human needs and psychology
 - How do we decide? Where should our vision come from?

Who Decides what is Possible?

From ideology

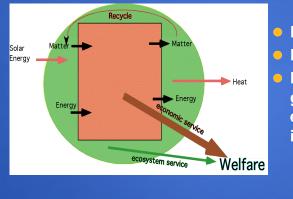
- Faith based assumptions about limitless planet
- Faith based assumptions about human behavior
- Faith based assumptions about markets

• To science and values

- Biophysical laws and limits
 - Uncertainty and ethical obligations to future
- Empirical studies of human behavior
- Allocative mechanisms determined by goals, physical characteristics of resources, behavior and institutions

From Ecosystem as Part	
Economy	
Ecosystem Extraction Waste	

...to Ecosystem as Whole

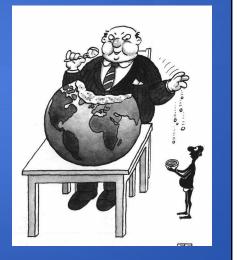


Laws of physics
Laws of ecology
Endless physical growth of the economy is impossible

From Rational Greed...

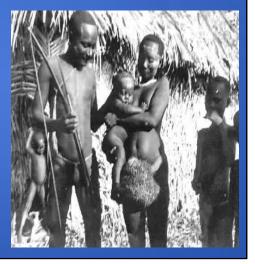
Homo economicus

- Rational, self interested
 - "homogenous globules of desire"
 - Neither emotional nor spiritual
- Insatiable



Are we insatiable?

- The Hunter-Gatherer economy
 - 90% of human history
 - Accumulation = death



... To Caring Cooperation

• H. comunicus

- concern for fairness and community preferences
- H. naturalis
 - concern for sustainability and whole system preferences
- Behavioral economics



Who Decides What is Desirable?

FROM

- Corporate propaganda
 - \$652 billion per year dedicated to advertising in 2000 (IAA)
 - Consumption as sole desirable end
 - Goal is to make us unsatisfied
- Corporate influence on government

TO

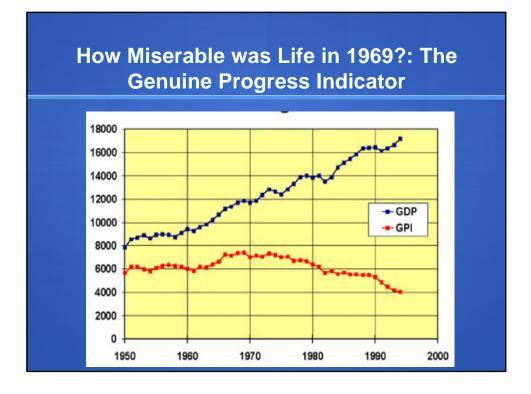
- Shared vision through democratic consensus
 - Representation from all sectors in society
 - One person, one vote, not one dollar, one vote
- Process, not outcome
- Envisioning a sustainable and desirable America

From Economic Growth to Quality of Life

- Current goal: ever increasing economic growth
- Appropriate goals: life expectancy, health, education, happiness, satisfaction with life as a whole
- GDP is *cost* of achieving these benefits
 - Would maximizing medical expenditures be a reasonable goal?
 - Endless physical growth of the economy is undesirable

From Sacrifice to Satisfaction

- Sustainability does not require sacrifice
- Per capita income in US (adjusted for inflation) in 1969 was 1/3 of today's GDP, and poverty was lower
- US could live at 1969 standard with 1/3 of current energy use, resource depletion
 - With proper incentives in place, we could do even better



From Competition to Cooperation

- Non-rival resources
 Cooperation more efficient
- Non-excludable resources
 Cooperation essential
- Solving the peak oil problem
- Solving climate change
- Solving biodiversity loss, resource depletion
- Stabilizing the economy

From Market Goods to Public Goods

- Public goods (non-rival and non-excludable) now contribute more to well being (at the margin) than private goods
 - Climate stability, ecosystem services
 - Public health (controlling contagious disease)
 - Economic stability
 - Education
 - Information on how to provide and protect public goods
- Wealthy nations could dedicate 2/3 of their GNP to global public goods without sacrifice

From Chrematistics to Oikonomia

- Chrematistics: "manipulation of property and wealth so as to maximize short-term monetary exchange value to the owner"
- Oikonomia: "management of the household so as to increase its use value to all members of the household over the long run"

Daly and Cobb, "For the Common Good"

"We might be lost, but we're making great time"

Yogi Berra



Diagnosis: Current vision

- recession: two quarters with no growth in GDP
- Energy shortage
- No mention of poverty, misery, unemployment, etc.
- No concern for ecological crises: Climate change, biodiversity loss, resource depletion, etc.
- Growth takes precedence over environment, equity, stability, etc.

Diagnosis: Alternative vision

- Unrestrained growth of the economy drives crises
 - Physical growth \rightarrow ecological problems
 - Financial growth \rightarrow inequality and instability
- Smaller economy is good, lower quality of life is bad
 - Poverty and unemployment
 - Unequal distribution
 - Instability
- Energy surplus and ecological collapse

Domestic Solutions in Current Vision

- Institution: the Fed; Instrument: monetary policy
 - lower interest rates
 - massive bail-outs for fabulously wealthy
 - Only affects private sector, market production
- Institution: Government; Instrument: Fiscal policy
 - Lower taxes
 - Rebate stimulus to promote consumption
 - Only affects private sector, market production

Domestic Solutions in Alternative Vision

- Institution: the Fed; Instrument: monetary policy
 - Strict regulation, increased reserve requirements
 - Don't allow financial sector to create money countercyclical instrument required
- Institution: Government; Instrument: Fiscal policy
 - Targeted investment in public goods, public technology
 - job creation, poverty alleviation
 - Fiscal policy integrated with monetary policy
 - Financed through seigniorage

From Private Ownership to Common Management

Common Asset Trusts

- Just distribution of resources created by nature or society as a whole: common ownership
- Managed by trust with legal mandate to manage for this and future generations
- Cooperative provision/management of nonrival resources
- Can use cap and auction, taxes, etc.
- CATs at scale of problem, from watershed to planet

From Plutocracy to democracy

- Markets based on one dollar, one vote, lead to concentration of wealth and resources
- Common asset trusts based on one person, one vote, lead to just distribution of wealth and resources

Global Solutions in Current Vision

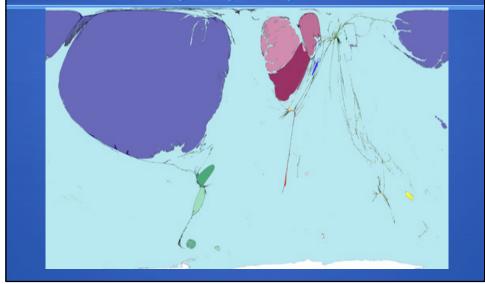
 Bretton Woods laid groundwork for production and trade in private goods

- Peace also a goal
- Private property rights to everything
 - Patents on non-ozone depleting compounds
 - Patents on life and vaccines
- Market globalization creates economic growth
 - The more the rich consume, the better off the poor become

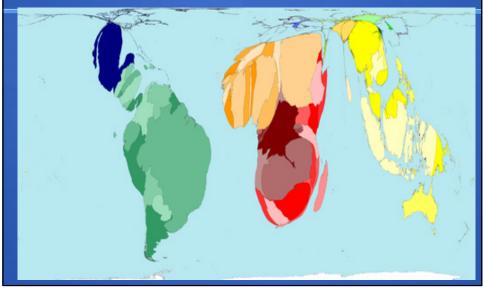
Global Solutions in Alternative Vision

- New Bretton Woods
 - New problem is to facilitate provision of global public goods: Sustainability
- Must also address just distribution: Common ownership of common assets (shared inheritance of nature and culture)
- Public investment in public goods
 - technologies that promote public goods, free dissemination
 - Global payments for restoring ecosystem services
- Can begin unilaterally

Countries Sized in Proportion to Royalty Payments



Countries Sized in Proportion to Forest Loss



New Institutions and Technological Change

- We need technologies that provide and protect public goods
 - Alternative energy
 - Non-ozone depleting compounds
 - Sustainable farming
 - Public health, etc.
- The more people that use these, the better
 - Should not be priced
- Markets will not provide these
- Technological optimism demands institutional change, patent free public provision

Conclusions

In a no-growth economy

"There would be as much scope as ever for all kinds of mental culture, and moral and social progress; as much room for improving the Art of Living, and much more likelihood of its being improved, when minds ceased to be engrossed by the art of getting on."

• John Stuart Mill, Of the Stationary State