Scenarios and international environmental assessments

(PART 2)
17 April 2009
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Alterra
Global Scenarios

Conventional Worlds
- market forces
- policy reform

Barbarization
- fortress world
- breakdown

Great Transitions
- eco-communalism
- new sustainability
## Archetypal Social Visions

<table>
<thead>
<tr>
<th>SCENARIOS</th>
<th>ANTECEDENT</th>
<th>PHILOSOPHY</th>
<th>MOTTO</th>
<th>COMMENT ON METAPHOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Worlds</td>
<td></td>
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</tr>
<tr>
<td>Market Forces</td>
<td>Smith</td>
<td>Market optimism; hidden and enlightened hand</td>
<td>Don’t worry, be happy</td>
<td>Onward! Keep the shops and casinos open.</td>
</tr>
<tr>
<td>Policy Reform</td>
<td>Keynes/Brundtland</td>
<td>Policy stewardship</td>
<td>Environment and equity through better technology</td>
<td>Improve the navigation system. Call a meeting.</td>
</tr>
<tr>
<td>Barbarization</td>
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<td></td>
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<tr>
<td>Breakdown</td>
<td>Malthus</td>
<td>Existential gloom; population/resource catastrophe</td>
<td>The end is coming</td>
<td>Remember the Titanic! We’re sinking exponentially.</td>
</tr>
<tr>
<td>Fortress World</td>
<td>Hobbes</td>
<td>Social chaos; nasty human nature</td>
<td>Order through strong leaders</td>
<td>Beware of mutiny! Secure the first class deck.</td>
</tr>
<tr>
<td>Great Transitions</td>
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<td></td>
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<tr>
<td>Eco-communalism</td>
<td>19th C. social utopians, Gandhi</td>
<td>Pastoral romance; human goodness; evil of industrialism</td>
<td>Small is beautiful</td>
<td>Abandon ship! Sail to tranquil ponds in small boats.</td>
</tr>
<tr>
<td>New Sustainability</td>
<td>Any volunteers?</td>
<td>Sustainability as progressive global development</td>
<td>Human solidarity, Look! A passage to a better sea, if…</td>
<td></td>
</tr>
<tr>
<td>Paradigm</td>
<td></td>
<td></td>
<td>Que será, será</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My brother-in-law, yours (probably)</td>
<td>Muddle through; no grand philosophies</td>
<td>Que será, será</td>
<td></td>
</tr>
</tbody>
</table>

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Society is a ship in troubled waters.
Barbarization

Environment

Inequity

Resentment

Conflict

Xenophobia
Bending the Curve

Peace
- Major Conflicts
  - 1980: 30
  - 2020: 1
  - 2060: 1

Freedom
- Social Equity
  - 1980: 1
  - 2020: 1
  - 2060: 1

Development
- Hunger
  - 1980: 1 billion
  - 2020: 1 billion
  - 2060: 1 billion

Climate
- CO₂ (ppm)
  - 1980: 300
  - 2020: 550
  - 2060: 550

Ecosystems
- Forests (ha)
  - 1980: 3
  - 2020: 4.5 billion
  - 2060: 4.5 billion

Water
- People in stress
  - 1980: 5 billion
  - 2020: 5 billion
  - 2060: 5 billion
Limits of the Reform Path

Policy Reform is feasible, in principle – the necessary technologies and policies are available

But daunting, in practice – gradually bending highly unsustainable trends imposes immense challenges

The critical uncertainty – where would the political will come from?

Reform may not be enough.....
New Sustainability Paradigm

A values-led scenario
• Quality of life
• Human solidarity
• Ecological sensibility

A pluralistic scenario
Proximate and Ultimate Drivers

Proximate Drivers
- Population
- Economy
- Technology
- Governance

Ultimate Drivers
- Values and Needs
- Knowledge and Understanding
- Power Structure
- Culture
Risky Bequest

- Ecosystem surprises
- Inequity and poverty
- Domestic and international tensions

A risky bequest....
Planetary Transition

- Global environmental change
- Information technology
- Collapse of USSR, hegemony of capitalism
- WTO, multinationals, “Davos Man”
- Earth Summit, NGOs, “Seattle Woman”
### How effective have these two examples been?

<table>
<thead>
<tr>
<th></th>
<th>Policy relevance</th>
<th>Scientific credibility</th>
<th>Political legitimacy</th>
<th>Societal relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IPCC</strong></td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>?</td>
</tr>
<tr>
<td><strong>SRES</strong></td>
<td>Tied to political process (UNFCCC), but only emissions</td>
<td>Author selection, scientific review procedures</td>
<td>Regionally balanced teams, policy review procedures</td>
<td>+?</td>
</tr>
<tr>
<td><strong>GSG</strong></td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+++?</td>
</tr>
<tr>
<td></td>
<td>Input into less influential CSD, UNEP, broad set of aspects</td>
<td>Uses same knowledge base, but small team, “scientific advocates”</td>
<td>Small team, “scientific advocates”</td>
<td>Questions fundamental system behaviour</td>
</tr>
</tbody>
</table>
Thanks for your attention!

It’s not a good idea to take a forecast from someone wearing a tie

(Nicolas Taleb, author of “The Black Swan”)
The future is always present, as a promise and a lure.

Karl Popper
Change Agents

- Intergovernmental organizations
- Transnational corporations
- Civil society
- An aware and engaged public
Tools for Transitions

Market Forces
- well-being
- throughput
- consumption

Policy Reform
- dematerialization wedge

Great Transition
- lifestyle wedge
- dematerialization wedge
- poverty spring
- equity magnet
Dimensions of Transition

- Technology
- Governance
- Economic
- Social
- Demographic
- Knowledge
- Values