Transition Towns and Sustainable Development

Prospects for resilient communities in an age of climate change and ‘Peak Oil’

Dr. Stewart Barr
Outline

• Vulnerabilities and uncertainties in an age of climate change and ‘Peak Oil’;
• From global sustainability to local resilience
• Building local ‘resilience’ for the future;
• Transition communities and the challenges of a post ‘Peak Oil’ world.
Vulnerabilities and Uncertainties

In the UK

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<th>2020s</th>
<th>2030s</th>
<th>2040s</th>
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<th>2060s</th>
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<td>Severe risks to national infrastructure: coastal defences, sewage system, rail</td>
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<td>Modest increase in agriculture yields</td>
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<td>Floods like those of 2007 will be frequent</td>
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<td>Several UK species struggle to adapt.</td>
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<td>Heat wave of 2003 will be ‘normal’ by the 2050s</td>
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<td>By 2080, 4°C rise in average summer temperatures</td>
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<td>Temperature of the hottest summer days up by possibly 10°C</td>
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<td>Up to 40% reduction in summer rainfall</td>
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Vulnerabilities and Uncertainties

*IS GLOBAL WARMING OVER?*

It’s one of the hottest feuds in science – climate change zealots insist that we’re still destroying the planet but now another scientist warns the cast-iron evidence just isn’t there.

Scientist who said climate change sceptics had been proved wrong accused of hiding truth by colleague.

Of course this isn’t the end of sceptism … when I saw he was saying that I just thought ‘Oh my God’.

Doubts: Professor Judith Curry
10% probability level
Very unlikely to be less than

50% probability level
Central estimate

90% probability level
Very unlikely to be greater than

Change in summer mean temperature (°C) for the 2080s, Medium emissions scenario
10% probability level
Very unlikely to be less than

50% probability level
Central estimate

90% probability level
Very unlikely to be greater than

Change in winter mean precipitation (%) for the 2080s, Medium emissions scenario
Vulnerabilities and Uncertainties
Vulnerabilities and Uncertainties
From Global Sustainability to Local Resilience

• From considering distant and globalised concerns to local threats;

• From deploying reactionism to promoting activism and situated pragmatism;

• From ‘governing’ sustainability to place-based decision-making;

• Ideas of local resilience…
Building local ‘resilience’ for the future

• Resilience as a natural systems approach (Adger, 2000):

“[The]...ability of a system, from individual people to whole communities, to hold together and maintain their ability to function in the face of change and shocks from outside” (Hopkins, 2008, p. 12).
Building local ‘resilience’ for the future

“...In this way it may involve measures aimed at mitigation (prevention) and adaptation (one form of reactionism), but resilience is also an active, community-based, internally-driven and holistic approach that should, in theory, provide greater protection against external shocks” (Barr and Devine-Wright, in press, presenter’s emphasis).

“...By shifting focus away from an ultimate end goal of sustainability, to an ongoing process of enhancing resilience, managers, planners, council members, and residents can examine the community in its entirety, the interrelations among the various elements within a community, and how these elements collectively enhance community resilience and ultimately move a community toward sustainability” (Callaghan and Colton, 2008, pp. 932-933, presenter’s emphasis).
Resilient Communities (Hopkins, 2008)

**Not adding Resilience**
- Centralized recycling
- Ornamental tree plantings
- Sourcing organic food internationally
- Imported 'green building' materials
- Low-energy buildings
- Carbon offsetting
- Ethical investing
- Buying choral CD’s
- Sky sports
- Consumerism

**Adding Resilience**
- Local composting
- Productive tree plantings
- Local procurement specifying local production, supporting emerging and new industries
- Specifying local building materials
- The local ‘Passivhaus’
- Local community investment mechanisms
- Local currencies
- Singing in the local choir
- Playing football
- Reciprocity
The ideal ‘Sustainable Community’

“A group of people who share common culture, values and / or interests, based on social identity and / or territory and who have some means of recognising and (inter)acting upon these commonalities” (Dictionary of Human Geography, 2009).
In this Context...

“A sustainable community:
Utilises nature’s ability to provide for human needs,
without undermining its ability to function over time;
Ensures the well-being of its members, offering and encouraging tolerance, creativity, participation and safety;
Empowers people with shared responsibility, equal opportunity and access to expertise and knowledge with the capacity to affect decisions which affect them;
Consists of businesses, industries and institutions which collaborate as well as compete, are environmentally sound, financially viable and socially responsible, investing in the local community in a variety of ways”

(Rogers and Ryan, 2001, 282)
Transition communities and the challenges of a post ‘Peak Oil’ world

THE TRANSITION HANDBOOK
From oil dependency to local resilience

Rob Hopkins
Founder of the Transition movement

“If your town is not yet a Transition Town, here is the guidance for making it one. We have little time, and much to accomplish.” — Richard Heinberg, author of Peak Everything
Key attributes of Transition

• Sustained and tangible social transformation;

• Place-based communities:
  “Have a desire to advance ecological sustainability, community self-reliance, and social well-being in Vancouver? To grow more food? To connect with others in your community to create positive local responses to things like climate disruption, depletion of natural resources, and economic instability?”

• A re-connection with nature and natural systems;

• A non-political framework for governing;

• Inner Transition:
  “in many instances the greatest resilience for the community is, it is argued, to be found in an inner changing of the self that becomes open to change and alive to the possibilities of new ways of living in a post-Transition world” (Barr and Devine-Wright, in press).
Transition Priorities

• Energy descent planning;
• Local food growing and community supported agriculture;
• Reduced consumption and a reliance on local procurement;
• Environmentally sustainable mobility;
• Active discussion of Transition through regular community meetings and open space events...
‘Governing’ Transition

“Successful Transition Initiatives need an unprecedented coming together of the broad diversity of society. They dedicate themselves to ensuring that their decision making processes and their working groups embody principles of openness and inclusion...The intention of the Transition model is not to centralise or control decision making, but rather to work with everyone so that it is practiced at the most appropriate, practical and empowering level, and in such a way that it models the ability of natural systems to self organise” (Transition Network, 2012).
Challenges for Transition

• Working within or outside the Neo-liberal economic framework: the challenge of consumption;
• Being part of everyday political, social and economic realities in localities;
• Presenting a united message through consensus decision-making;
• Focusing on the controversies of ‘environment’... and the ‘opportunities’ of economic crisis;
• Vision(s): governance, scale, power, democracy, boundaries of the future.
A Dystopian future?