

Contribution #1 by Laura Murphy to PERN cyberseminar, February 2 - 13, 2009. This is an outline of trends in "Development" paradigms as they relate to P-E research, with emphasis on addressing the methodological issues raised in the background paper.

Development Paradigms (References) Shorthand definition	Relevant P-E Theories (from POV of this paradigm)	Methodological insights			
		Scale of analysis	Place for integrative Analysis of interactions	Normative aspects pertaining to "sustainability"	Inter- & Trans-Disciplinarity ..?!
<p>"Sustainable Development"</p> <p>(References: 1)</p> <p>: "meet the needs of present without...")</p> <p>1980s →</p>	<p>Linear</p> <p>Multiplicative</p> <p>Ecological Footprint</p> <p>Mediated (esp markets, institutions)</p> <p>Livelihoods</p>	<p>Social: local to global "community"; (developing country) national, regional, municipal (including rich-country)</p> <p>Temporal: short to long term (linear)</p> <p>Geographic: community, region, nation-state</p>	<p>Implicit: SD calls for balance of "social, ecological, & economic" aspects</p> <p>In practise: Quantitative models of economies/societies, demographic variables highlighted</p> <p>Participatory livelihoods analyses at local level</p>	<p>How to supply "needs" vs wants, preferences ("limits" of "resources")</p> <p>should aim to balance "social, ecological, & economic" aspects through relevant data, participation, and green accounting (but no clear methodology for linking quant & qual -these are often separate schools of thought/researchers)</p>	<p>Economics at the core: marginal shifts in behaviors, policies</p> <p>Market-based incentives, actions & Technical and bureaucratic solutions</p> <p>Political aspects are muted: benign policy-makers using scientific information to determine best action</p>
<p>Capabilities Approach/ Human Development</p> <p>(2: expanding valued "freedoms to do more, be more")</p> <p>1990s →</p>	<p>Mediated models (institutions)</p> <p>Sustainable Livelihoods</p> <p>Political Ecology</p>	<p>Individuals (philosophically)</p> <p>national level (analytically, i.e., HDI)</p> <p>global -universal shared humanity (and earth)</p> <p>Administrative units and populations</p>	<p>In terms of "freedoms" these are inter-related and require holistic approach, in theory (related to human rights); Ecological interdependence of all is a given (now)</p> <p>Qualitative approaches (values), Case studies of local livelihoods, environment</p> <p>Quantitative analysis of functionings as proxies for capabilities (survey, econometric research, indices, i.e. HDI)</p>	<p>The environment is fundamental to supplying freedoms as broadly interpreted and is to be 'sustained'—but:</p> <p>What aspects are to be sustained for whom? (resources, wilderness, cultural values, biodiversity..)</p> <p>What are the priorities among valued freedoms? (preferences, cultural norms) How does supply translate into freedoms? (conversion, consumption, values)</p> <p>Cultural values and historical knowledge count, as well as scientific information</p>	<p>Freedoms are socially shaped and political, requiring dialogue to reveal, through democratic mechanisms (constitution reform, legislation, accountability)</p> <p>Still an undeveloped theory in relation to environment (resources, ecosystems, intrinsic values)</p> <p>See Millenium Ecosystem Assessment for scenarios</p> <p>Climate change (UNDP 2008) Explicit call for action esp. on behalf of most vulnerable, deprived people</p>

<p>Post-Developmental Thought/ Development Alternatives</p> <p>(3)</p> <p>locally determined actions to overcome poverty, power imbalances (to promote human well-being)</p> <p>1990s→</p>	<p>Political Ecology</p>	<p>Small-scale social units: households, groups, community, institutions, government actors</p> <p>inter-relationships among actors in a network of influence and power</p>	<p>Inter-relationships are complex, power-laden, subtle: are revealed through place-based, multi-method, historically-grounded rich case studies</p> <p>Interactions revealed through real actions and unintended effects</p>	<p>Different lenses and voices in enter 'sustainability' debates <u>What</u> is being sustained for <u>whom</u>, and now?</p> <p>Inequality in supply of services and goods due to power imbalances</p> <p>Challenges conventional wisdom of implicit causality (i.e., poverty-degradation nexus);</p> <p>explicit attention to power at all of society in relation to relevant knowledge and access to goods</p>	<p>Population factors over-stated in relation to consumption</p> <p>Cases (any data) are not representative "best practises" nor generic relationships but reveal locally contingent relationships and experiences;</p> <p>Need explicit attention to power, i.e. redistribution of wealth, conflict resolution, not just technical solutions and scientific knowledge</p> <p>Positive cases of change can spur action, inspiration and imagination; some cases can challenge conventional wisdom and official policy (i.e., deforestation)</p>
<p>Development as Complex Adaptive Systems</p> <p>(4)</p> <p>Dynamic, non-linear, adaptive systems (to promote human well-being)</p>	<p>Systems feedback</p> <p>Industrial Ecology</p> <p>Social shaping of technology and environment</p> <p>Supply Systems (ISOE)</p>	<p>Human-natural systems at all scales (infectious disease, watersheds, agroecological regimes, municipalities, institutional networks, markets)</p> <p>Time frame pertinent to the system and its dynamics</p>	<p>Data-intensive quantitative modeling of agents/actors (i.e., ABM), SNA, large systems</p> <p>Qualitative insights into unpredictable systems and responses of systems, i.e., agencies, thresholds and tipping points</p>	<p>What is the system? (boundaries, properties)</p> <p>How is the 'system' to be sustained?</p> <p>What models are useful?</p> <p>What subjective points of view are relevant?</p> <p>"sustainability" outlined in Table on p 43 in Scoones et al</p>	<p>What is the problem? Not "population" necessarily but the system functioning and governance</p> <p>How to provision the system in the face of uncertainty, unpredictability, surprises ?</p> <p>Manage institutions (populations, society) for adaptability to change, i.e., reflexive management, social learning, avoiding trap of path dependency</p> <p>Find "pathways to sustainability"</p> <p>Politics is inherent in policy-making; many stakeholders, points of view</p>

References: These define the terms here, and also might stimulate more discussion around relevant theoretical and methodological directions for P-E research and Supply systems, esp references listed under 4 on complexity science and dynamic systems in relation to development.

1—WCED, 1987. Our *Common Future*; UN Commission on Sustainable Development, <http://www.un.org/esa/sustdev/index.html>

2—UNDP, 1990, *Human Development Report* (Original formulation of HD); Sen, Amartya, 1999. *Development as Freedom* (OUP); UNDP, 2008, Human Development Report (on Climate Change); Human Development and Capability Association Briefing Paper, 2006 (www.capabilityapproach.org); Millenium Ecosystem Assessment, 2005, Synthesis Report (<http://www.millenniumassessment.org/en/index.aspx>) ; also World Bank's "Voices of the Poor" (i.e., Narayan et al, 1999).

3—Escobar, Arturo, 1995, *Encountering Development*, Princeton; Ferguson, James, 1990, *The Anti-Politics Machine: Development and Bureautization in Lesotho*, Cambridge; Mosse, David, *Cultivating Development*

4—Scoones, Ian, and M. Leach, A. Smith, S. Stagle, A. Stirling, and J. Thompson, 2007. "Dynamic Systems and the Challenge fo Sustainability." STEPS Working Paper 1, Brighton, UK, STEPS Center. Downloadable at <http://www.steps-centre.org/ourresearch/dynamics.html>; Ramalingam, Ben, Harry Jones (with Toussaint Reba and John Young), 2008, "Exploring the Science of Complexity: Ideas and Implications for development and humanitarian practise." Overseas Development Institute (ODI) London, http://www.odi.org.uk/RAPID/Publications/RAPID_WP_285.html