

## **The Ambivalence and Complexity of Sustainability**

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In this summary, I offer an outline of observations that reflect on the plenary task of discussing the ‘ambivalence of sustainability goals’ and on aspects of the workshop discussion paper. Further exemplification will draw on recent projects concerned with sustainable technologies and the distributional and justice dimensions of environmental intervention.

### **Ambivalence**

To begin with the meaning of ambivalence. Its dictionary definitions include the condition of ‘having mixed feelings or contradictory ideas about something or someone’ (Oxford); ‘the simultaneous existence of two opposed and conflicting attitudes, emotions etc..’ (Collins). In Freudian psychoanalysis ambivalence is manifest in love/hate relationships towards somebody or something. A condition of tension, contradiction and disagreement. How does this sense of ambivalence (there are others) then translate to thinking about the meaning and ‘steering’ of sustainability?

For many people, institutions and political actors the pursuit of sustainability, both in its normative conceptualisation and its practical implications, embodies ambivalence - multiple tensions, contradictions and indeterminacies which can pull simultaneously and sequentially towards both the sustainable and unsustainable characteristics of lifestyles and alternative futures (such as the enduring love/hate relationship with the car and petroleum economy). Whilst clinically problematic in its more extreme schizophrenic forms, ambivalence is arguably a healthy, ‘normal’ characteristic both

for individuals faced with dynamic and uncertain conditions and for societies working with liberal notions of democracy, debate and deliberation. Ambivalence is in this sense intrinsic to reflexivity and the very stuff of liberal politics – difficult, but preferable to absolutist dogmatism and unquestioning certainty.

For managerial approaches to sustainability, concerned with strategising, plan making and goal setting, ambivalence is, though, demonstrably problematic. Following the line taken both explicitly and implicitly in the workshop discussion paper, if we do not clearly know the goals that are being pursued, then strategising, planning and the management of transitions towards those goals will be very difficult to put in place, implemented and monitored. If there is no agreement on what sustainable development is, then how can it be pursued?

It is important though to not overplay the problematisation of ambivalence. It is neither particular to sustainable development, nor necessarily an undesirable characteristic to be either reduced or despaired over. This argument relates both to the nature of sustainability and of the complexity of the processes in which steering seeks to intervene.

## **Sustainability**

So how can the ambivalences of sustainable development and its associated ‘goals’, be to some degree deproblematised?

First, and as noted at various points in the discussion paper, sustainable development is an essentially political concept, and therefore to be contested and struggled with. As Jacobs (1991) observes *“many political objectives are of this kind – liberty, social justice and democracy. These concepts have basic meanings and almost everyone is in favour of them, but deep conflicts remain about how they should be understood and what they imply for policy”* (p60). As we are still struggling with the understandings and practices of ‘liberty, social justice and democracy’ despite their long credentials, it is hardly surprising that we cannot so quickly resolve the meanings and goals of sustainability. Furthermore, even though there is disagreement over such fundamental political objectives and guiding principles, they have clearly not been abandoned as

unachievable ambiguities. Reid (1987) makes a similar point and in likening the pursuit of sustainable development to the pursuit of justice emphasises the everyday and pragmatic inevitabilities of ambivalence “*No one openly advocates unjust practices – any more than people come out in favour of unsustainability. Nevertheless some act unjustly, many are caught up in social and economic systems that are unjust and the majority ... tolerate injustice in society at large if they themselves are not too directly or too drastically affected by it*” (pg xvi).

Second, sustainable development can be conceived not as a goal in the sense of a definable utopian ‘end state’, but as a continual adaptive process of ‘working towards’ and of formulating and reformulating what is wanted, what is needed and what can be achieved (Becker and Jahn 1999). It is, in this sense, dynamic rather than static, provisional rather than final, and needs to be worked at conceptually as well as practically through time. It follows that it may be the quality, depth and productivity of process which counts, rather than the setting and achievement of descriptive and measurable sustainability goals.

Third, it is implicit in the two previous points that there is not one sustainability but a multiplicity, conceived and pursued with different meanings, balances and priorities in different settings and at different scales (ibid). There is a need therefore both for a ‘language of plurals’ and for recognition of the distributed and differentiated nature of what is at stake. As recognised in the discussion paper this is not necessarily a problem, but ‘an asset’ providing different resolutions and solutions in different spaces for engagement and intervention. There is no ‘one size fits all’ or condition under which there will be an evenness and homogeneity of responsibility or consequence (Swyngedouw and Heynen 2003; Walker and Bulkeley 2006).

In this vein it can be argued that like many other framing and enrolling discursive terms - community, empowerment, social capital, environmental justice to name but a few – sustainable development has ‘functional malleability’ (Gledhill 1994). Its vagueness, ambiguity and ambivalence are its strength, to some degree, as well weakness. There is therefore an ambivalence to the ambivalence of sustainability, presenting both strength and weakness, obstacle and potential.

## **Complexity**

In order to characterise the world in which the ethical, political and practical pursuit of sustainable development, and associated steering, is being attempted, it is useful to draw on the metaphors and concepts of systems and complexity (Urry 2005). Social science informed systems thinking (Byrne 1998, Cilliers 1998, Urry 2003, Urry 2005) emphasises the complex, self-organising, nonlinear characteristics of social, technical and natural interactions. Since every system is understood to take all other systems as its environment, systems co-evolve as they complexly adapt to their environment; small events can lead to large scale changes in systems and ‘tipping points’ radically shift paths of development; emergence as a fundamental characteristic of complex systems, means that outcomes cannot be explained by adding up the properties of individual components or their interactions. Social and natural worlds are not autonomous, independent and near equilibrium; but rather interdependent and coevolving, subject to discontinuities and shocks stemming from various dynamic sources.

In such a state of systemic socio-ecological complexity and instability, ambivalence appears endemic. Small actions made with sustainability principles or objectives at stake, can have unpredictable non-linear and unreliable outcomes. Steps that are taken at one point in time, may fail to exhibit repeatable outcomes and consequences. Uncertainties of many forms are amplified, while prediction and the mapping of future pathways appears ever more futile.

Under such conditions, it is easy to slip into a ‘geography of grey landscapes’ (Suteneau 2005) in which normative goals and the shaping of the human condition appear utterly beyond reach, subject to unpredictable crises and the self-organising whims of systemic co-evolution and interaction. We reach an ambivalence of a different form (in its colloquial meaning), in which utter uncertainty or indecisiveness as to which course to follow, breeds cynical and apathetic disinterest. However, the slide from an ambivalence of contradiction, tension and ambiguity to an ambivalence of apathetic disinterest is not inevitable, or the only available destination (Byrne 2005). A more optimistic view of the potential for moving towards a ‘better’ and more sustainable world may also be found.

First, if we accept that outcomes are emergent and that systems can radically change at tipping points, then it is entirely possible that a world which is considered at some future time to be more sustainable than now (or maybe even in some utopian condition) may emerge without, or indeed despite, the efforts of steering measures. Just as Urry (2005) speculates that it may have been only a relatively small set of 'causes' which directed capitalism towards a post-Fordist welfare consumerism, rather than towards the worldwide social revolution envisaged by Marx, so a more sustainable world may be one of the many possible emergent outcomes of complex adaptive processes of change. It may be that there is 'the possibility for a pattern of actions to occur to put the key in the lock and make a major turning point occur' (Abbott 2001; 257), and there is no necessary reason why that turning should be for the bad rather than the good.

Second, and less fatalistic, it is possible to conceive of methods of 'chaos control' in which an unstable system which is sufficiently understood can be acted upon to guide or control it with the use of very little necessary energy. Information and understanding become the crucial resources with which to know when, where and how to act (Suteanu 2005). Similarly it may be that with skillful institutional design, it becomes possible to reduce and structure complexity to such an extent that the world does become manageable and agencies charged with its governance rendered collectively accountable and at least momentarily powerful. For example, even though Jessop (2003) warns in many ways against simplistic notions of the governance of complexity, and the inevitably provisional, local and partial nature of successful governance, he does suggest that a plurality of governance mechanisms emphasizing dynamic and adaptive social learning and coordinating mechanisms working '*across different social forces with different identities, interests, and meaning systems, over different spatio-temporal horizons, and over different domains of action*' (p16) may provide a way forward.

It is also possible to over-emphasise the complexity and instability of a world in which not everything is equally complex and there is simultaneously both order and chaos. Working under and within conditions of provisional order may enable the steering of predictable change to be achieved for some phenomena, at some places and times, and

for the ambivalence of complexity to be at least temporarily set aside. Such local provisionality serves to reinforce the need for sustainable development to be viewed as an adaptive, continual 'working towards', in which the shaping of underlying societal values may be of more lasting endurance than the unstable achievements of steering and management measures.

## References

- Abbot A (2001) *Chaos of Disciplines*. University of Chicago Press, Chicago.
- Becker E and Jahn T (1999) *Sustainability and the Social Sciences*, Zed, London
- Byrne D (1998) *Complexity Theory and the Social Sciences: an Introduction*. Routledge, London.
- Byrne D (2005) Complexity, Configurations and Cases, in *Theory, Culture and Society* 22(5): 95-111.
- Cilliers P (1998) *Complexity and postmodernism: understanding complex systems*. Routledge, London.
- Jacobs M (1991) *The Green Economy*, Pluto Press, London
- Jessop, B (2003) 'The Governance of Complexity and the Complexity of Governance: Preliminary Remarks on some Problems and Limits of Economic Guidance', published by the Department of Sociology, Lancaster University, Lancaster LA1 4YN, at <http://www.comp.lancs.ac.uk/sociology/papers/Jessop-Governance-of-Complexity.pdf>
- Reid D (1987) *Sustainable Development: an introduction*, Earthscan, London
- Suteanu C (2005) Complexity, science and the public- The geography of a new interpretation, *Theory, Culture and Society* 22(5): 113-140.
- Urry J (2003) *Global Complexity*. Polity Press, Cambridge.
- Swyngedouw, E. and Heynen, N. (2003) Urban political ecology, justice and the politics of scale, *Antipode* 35 (5), 898-918
- Urry J (2005) The Complexities of the Global, *Theory, Culture & Society* 22(5): 235-254.
- Walker G and Bulkeley H (2006) Geography of Environment Justice, *Geoforum* (forthcoming)