Technological Forecasting & Social Change 78 (2011) 769–784

Contents lists available at ScienceDirect

Technological Forecasting & Social Change

Community foresight for urban sustainability: Insights from the Citizens Science for Sustainability (SuScit) project

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ARTICLE INFO

Article history:
Received 12 November 2009
Received in revised form 10 June 2010
Accepted 8 September 2010
Available online 9 October 2010

Keywords:
Community foresight
Citizens' science
Urban sustainability
Transition management
Up-stream engagement

ABSTRACT

A key strength of backcasting is arguably the emphasis it places upon envisaging longer-term distant futures, allowing participants and users to think beyond incremental changes in their current lived experience and to embrace the more radical and disruptive socio-technical changes which may be necessary to deliver sustainability. In so doing, however, backcasting may run the risk of obscuring significant differences in current lived experience, negating alternative problem framings and normatively derived views of what constitutes sustainability. This paper reports an innovative UK attempt to develop an inclusive 'bottom-up' community foresight process for urban sustainability research. Unlike most backcasting studies, the methodology was initially grounded in an exploration of the community participants' current lived experience and understandings of sustainability. Given the particular purpose of the study the primary outcome from the work was structured around the articulation of a 'community-led' agenda for urban sustainability research, rather than an explicit normative vision and transition pathway. However, the methodology could easily be adapted for use in other contexts, and showed potential to contribute to the formation of local 'transition arenas': facilitating network formation and building capacity for local sustainability initiatives and experiments.

1. Introduction

Backcasting, and the broader processes of transition management with which it has become associated, seeks to consciously mobilise and harness the performative power of shared visions of the future in order to steer socio-technical innovation towards sustainability. Together with the vision, backcasting requires the development of shared problem definitions, long-term goals and attention to prospective transition pathways. In transition management, these are used to frame the development of practical socio-technical experiments, and form the basis of a joint 'transition agenda' or 'arena' within which network formation and social learning take place [1].

Indeed, we know from the literature on technological expectations that shared visions, whether emergent or the formal product of foresight and scenario building processes, can play an important role in shaping the rate and direction of socio-technical change. Shared visions facilitate the formation and alignment of networks within which innovation takes place. They reduce uncertainties, frame priorities, and support and legitimate the mobilisation of scientific, financial, institutional and political resources around particular goals [2,3].

Moreover, a key strength of backcasting as a sustainability foresight tool is arguably the emphasis which it places upon envisaging longer-term desirable future. This arguably allows participants and users to think beyond incremental changes (in their environment, technology, socio-economic and cultural relations), and to embrace the more radical and disruptive socio-technical

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doi:10.1016/j.techfore.2010.09.002

changes which may be necessary to deliver sustainability. In so doing, however, elite backcasting processes may run the risk of obscuring significant differences in current lived experience particularly on the part of marginalised and socially excluded groups. Hence negating alternative problem framings and normatively derived views of what constitutes sustainability, underpinned by divergent values and socio-economic interests.

Authors such as Berkhout et al. [4] and Shove & Walker [5] have questioned the role of shared visions within transition management processes and argued that the 'Dutch Model' of transition management fails to adequately address the operation of power by vested interests, or the deeply political and contested character of sustainable development. From this perspective sustainability foresight and transition management are viewed as rather elite technocratic processes. With participation largely restricted to a limited circle of professional 'experts' from academia, government, industry and NGOs, they are seen as at risk of capture by particular interests and framings of sustainability. Proponents respond that transition management should not be about reinforcing the power of incumbent regime actors but about fostering diversity and creating space for front-runners and niche players [23].

However, the fact remains that such criticisms raise questions of participation and agency, which go to the heart of the sustainable development as a democratic political project. In this context it is worth recalling the words of Agenda 21.

> "One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making. Furthermore, in the more specific context of environment and development, the need for new forms of participation has emerged". [6]

Whilst it is certainly true that some foresight and backcasting studies can be criticised as closed elite processes. Within backcasting there is, however, also a strong tradition of developing participatory tools intended to 'open-up' and enrich stakeholder and citizen participation in integrated assessment, foresight and planning processes (for a review of this literature see Ref. [7]). Nonetheless questions over who has a voice – whose vision and framing of sustainability is empowered and embedded – in particular backcasting processes clearly deserve further critical attention.

This paper reports an innovative UK attempt to develop an inclusive 'bottom-up' foresight process to inform urban sustainability research. The 'Community Foresight' methodology developed through the Citizens Science for Sustainability Project has some elements in common with participatory backcasting, for example the incorporation of some simple visioning techniques. However, unlike most backcasting studies the methodology was initially grounded in an exploration of the community participants' current lived experiences and understandings of sustainability. Given the particular purpose of the study the primary outcome from the work was structured around the articulation of a 'community-led' agenda for urban sustainability research, rather than a specific shared vision and transition pathway. However, the methodology could easily be adapted for use in other contexts, and showed potential for the formation of local 'transition arenas': facilitating network formation, building capacity and engagement for local sustainability initiatives and experiments.

The paper is structured as follows. Section 2 briefly sets out the institutional and policy context to the SuScit project. Section 3 introduces the Mildmay area of Islington in North London where the action research for the project was undertaken. Section 4 describes the five-phase 'Community Foresight' methodology developed by SuScit. Section 5 provides an overview of the community-led agenda research agenda developed through the process. Section 6 reflects upon some of the practical and theoretical insights to be drawn from the work. Finally Section 7 draws together some conclusions, and notes the potential utility of the 'Community Foresight' methodology as a tool for urban transition management.

2. Citizens, science and sustainability

> "Agenda setting at the global, continental, and even national scale will miss a lot of the most important needs… the transcendent challenge is to help promote the relatively 'local' dialogues from which meaningful priorities can emerge, and to put in place the local support systems that will allow those priorities to be implemented" (International Council for Science 2002) [8].

Since 2003 the UK Engineering and Physical Sciences Research Council's (EPSRC) Sustainable Urban Environments (SUE) Programme[1] has invested some £38 M in a major programme of strategic interdisciplinary sustainability research. Early on in the development of the SUE Programme, however, despite strong links with national policymakers, local authorities, business and the NGO community it was apparent that the EPSRC had relatively poor links with the urban publics who would comprise the ultimate end-users and beneficiaries of much of its SUE research. At the same time within the UK scientific and sustainable development policy communities, more broadly, there were both: i) calls to move public engagement in S&T 'up-stream'; and, ii) a growing awareness of the linkages between environmental and social justice.

The debate over moving public engagement 'up-stream' – towards the basic science end of the innovation chain – came as a direct response to the decline in public trust in science and technology which stemmed from controversies such as those over

[1] www.epsrc.ac.uk/ResearchFunding/Programmes/PES/SUE/default.htm.