



Lombardi, R.D., Porter, L., Barber, A. and Rogers, C. *Conceptualising sustainability in UK urban Regeneration: a discursive Formation.* Urban Studies . ISSN 0042-0980

<http://eprints.gla.ac.uk/42799/>

Deposited on: 05 November 2010

Conceptualising Sustainability in UK Urban Regeneration: a Discursive Formation

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Abstract

Despite the wide usage and popular appeal of the concept of sustainability in UK policy, it does not appear to have challenged the *status quo* in urban regeneration because policy is not leading in its conceptualisation and therefore implementation. This paper investigates how sustainability has been conceptualised in a case-based research study of the regeneration of Eastside in Birmingham, UK, through policy and other documents, and finds that conceptualisations of sustainability are fundamentally limited. The conceptualisation of sustainability operating within urban regeneration schemes should powerfully shape how they make manifest (or do not) the principles of sustainable development. Documents guide, but people implement regeneration—and the disparate conceptualisations of stakeholders demonstrate even less coherence than policy. The actions towards achieving sustainability have become a policy ‘fix’ in Eastside: a necessary feature of urban policy discourse that is limited to solutions within market-based constraints.

Introduction

Urban regeneration has a substantial impact on all three dimensions, sometimes known as pillars, of sustainability: society, economics and environment; it is therefore an activity of considerable importance to achieving a more sustainable society. The UK government has integrated the goal of sustainability into urban regeneration policies, yet the proliferation of definitions and conceptualisations of sustainability render the term so poorly understood and slippery that it can be easily pressed into the service of almost any ends. It can, as a result, rather neatly service the ‘growth-first’ and ‘develop-at-almost-any-cost’ philosophies that remain dominant in the UK. We contend that despite a raft of government policies, practice-based studies, models and demonstrators of best practice, checklists and indicators, sustainability has yet to make a serious influence on the approach to the redevelopment of land. More importantly, as we investigate closely in this paper, the conceptualisation or ‘rationality’ of sustainability operating within specific urban regeneration schemes powerfully shapes how those schemes make manifest (or do not make manifest) the principles of sustainable development. To move towards more sustainable developments, one must overcome the challenge of developing an integrated and nuanced understanding of sustainability to translate the concept into implementation.

Our paper seeks to answer the following key questions

- (1) How does the conceptualisation of sustainability vary across a single regeneration project—that is, how clear are the concept and its resultant goals?
- (2) Where are these conceptualisations positioned on a spectrum of sustainability? Is it weak, supporting techno-fixes implemented in the name of sustainability with little change required to personal values or lifestyle choices, or is it strong, moving towards transformation and a fundamental change to existing socio-political structures?

(3) Does the conceptualisation differ in any marked way between documents that guide regeneration and the people who implement it?

(4) In addition, although not a major focus of this research, we will address in the discussion section how people perceive the sustainability ‘problem’, if one exists and how they perceive the ‘actions’ required to address it.

This paper draws on a case-based research study of the regeneration of the Eastside quarter in Birmingham, UK. Birmingham City Council (BCC) adopted a sustainability agenda in the early 2000s for the Eastside quarter, when funding became available through European Regional Development Funds (ERDF) for a major infrastructure project (see Porter and Hunt, 2005). The paper reports on a detailed analysis of the discourse of sustainability as it operates in relation to Eastside, both within and beyond public policy circles. The paper finds that, due to a very narrow definition of sustainability and an approach of technological ‘add-on’ to urban regeneration with little lifestyle change required, weak sustainability has in fact become a policy ‘fix’ in Eastside (following While *et al.*, 2004): a feature of contemporary urban policy discourse made out to appear as if it addresses systemic social and environmental problems in urban development, but is really just ‘more of the same’.

We begin with a targeted review of theoretical perspectives on ‘sustainability’ and its relationship to urban regeneration policy in the UK. We consider this to be an important activity in sustainability research, as the term itself is somewhat poorly theorised. The paper then introduces Eastside as a regeneration quarter and the methodology adopted in our research. We report on the key findings, and provide a mapping of sustainability rationalities operating in Eastside and an assessment of their influence in urban regeneration programmes.

Theorising Sustainability

Definitions of sustainability, which have proliferated exponentially since the term was coined (Elliott, 1994), span views from across the political spectrum from those advocating ‘growth-first’ policies (UK Government, 1999; OECD, 2001), to those who reject the very notion of sustainability on the basis of its anthropocentrism (Naess, 1989; Lovelock, 1988) and those who

seek to reveal how the accumulation of money and technology in core areas of the world-system occurs at the expense of the natural resources, environment, and health of their peripheries (Hornborg, 2009, p. 246).

The overutilisation but simultaneous undertheorisation of sustainability as a term means that it can lend itself to a vast array of very divergent goals. Some have argued that its ambiguity may have enabled the concept to gain widespread acceptance (Giddings *et al.*, 2002). Is sustainability, then, “laden with so many definitions that it risks plunging into meaninglessness, at best, and becoming a catchphrase for demagogy, at worst” (NSF, 2000, p. 1)?

Critical commentaries point to the power of interpretation and meaning in shaping (or mis-shaping) agendas for action: one’s conceptualisation of a problem will influence priority setting, policy implementation and action-taking (Ehrenfeld, 2000). Contradictory perceptions and priorities may be an obstacle to addressing sustainability issues (Bai, 2007). Owens and Cowell offer the following comment upon this persistent problem

If sustainable development genuinely offered tangible synergies between economic, environmental and social objectives, a persistent implementation deficit would be surprising. That such synergies remain elusive suggests that the ‘deficit’ cannot simply be read as a set of predictable obstacles to, and delays in, translating aspirations into practice. Instead, it points to a more fundamental dislocation between competing interpretations of what it means for development to be sustainable (Owens and Cowell, 2002, p. 25).

If, as Owens and Cowell (2002) suggest, the ‘problem’ of sustainable development resides in the interpretation of the term, of “what it *means* for development to be sustainable”, then analyses of how sustainability is made ‘real’ in policy- and decision-making settings become crucial.

Throughout the divergent sustainability literature is a persistent attempt to discern ‘better’ sustainability methods, forms of information, processes and outcomes. However, as numerous scholars point out, it is a largely pointless exercise to assess the different approaches to sustainability as if they operated in a political and power vacuum (see for example the critiques of Redclift, 1987; Owens and Cowell, 2002; Lane and McDonald, 2005; Crabtree, 2006). Moreover, as Hornborg (2009) contends, the work of industrial capitalism cannot be seen as isolated from its specific location in the global flows of resources and unequal exchange. Thus

technologies are never ‘merely’ material strategies for getting certain kinds of work done; they also tend to embody tacit assumptions about their own rationality and efficiency (Hornborg, 2009, p. 241).

If it is not conceptually sound to approach the phenomena of land development and urban public policy as if they were ‘natural’ activities occurring in an apolitical world of even resource exchange, then neither is it conceptually sound to approach sustainable development in that way. Owens and Cowell pose an alternative and potentially very useful focus for investigation of

how different forms of rationality become bound up with alternative conceptions of sustainability, and how they are deployed in the politics of land use change (Owens and Cowell, 2002, p. 49).

Our contribution in this paper is to provide some exploratory findings about the operation of sustainability conceptualisations within live urban development projects. In doing so, we aim to generate some insights into how such conceptualisations, or rationalities, both arise from and then consequently shape how urban regeneration policy and practice are done. The following sections discuss two models of sustainability that frame our analysis of our case study data: the relationship among the three dimensions; and the weak–strong continuum. We then turn our attention to how sustainability has been ‘made real’ in urban policy, with an eye towards understanding its potential to shape outcomes.

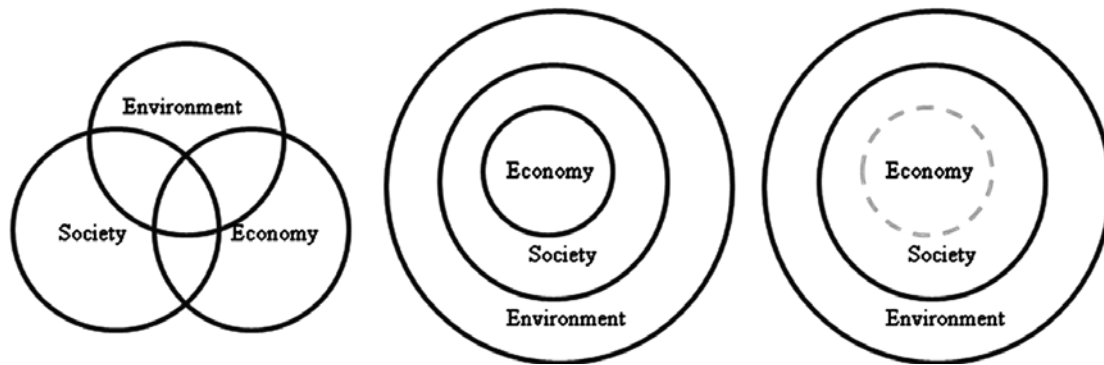


Figure 1. Various conceptualisations of sustainable development. *left*: the most common interlocking rings implying three independent dimensions where sustainable development is achieved in the overlapping region; *centre*: the nested model indicating a hierarchy of dependency, with economy being a social construct completely contained within human society, and human society's dependence on the natural environment for survival (water, air and food) acknowledged by encompassing society within environment; *right*: dual nested model removing the arguably nebulous distinction between human society and human economy, all confined within environmental limits.

Three Pillar Models of Sustainable Development

The most commonly *stated* definition (although rarely implemented) is that put forward by Brundtland (WCED, 1987). The underpinning philosophy for Brundtland's conceptualisation of sustainable development stems from an understanding that critical global environmental problems were primarily the result of poverty in the global South and the grossly disproportionate patterns of consumption and production in the global North; in other words, a thoroughly socioeconomic theorisation. Since Brundtland published her committee's report, it has become (almost) common parlance that sustainability has something to do with social equity and economic development, in addition to environmental protection. It is broadly accepted in the literature that the three 'dimensions' of economy, society and environment need to be present (Rydin *et al.*, 2003; Mazza and Rydin, 1997; Haughton and Hunter, 1994; Moffatt, 1995; Reid, 1995; Counsell and Haughton, 2003). Their relative relationship, however, is debated (see Figure 1): the commonly known diagram of three interlocking rings puts sustainability at the intersection of all three, implying that each pillar has, in some sense, an independent existence. Viewing the dimensions independently allows actors to separate humans from environment and prioritise one part over the whole (Counsell and Haughton, 2003; Giddings *et al.*, 2002). Such a view has been associated with a reliance on technological fixes to address sustainability concerns, as the environment is posited as separate from human society. More recently, the heuristic of three nested rings (sometimes referred to as the Russian doll model) has been proposed (O'Riordan *et al.*, 2001; cited in Dixon, 2006; Giddings *et al.*, 2002), putting economy at the centre as a societal construct and the environment as the outermost ring providing the life services that enable the other two (Daily, 1997; Millennium Assessment, 2005). It has been argued necessary to remove the artificial separation between economy and society in the heuristic of three nested rings in recognition of the non-reciprocal nature of humanity's dependence on the environment (Giddings *et al.*, 2002): the planet would survive without humanity just fine, but humans cannot survive without the planet. Thus, human society (including its economic activities) can simply be categorised as such, with no further distinction required. Recognising this dependence leads to a more integrated approach to analysing sustainability dimensions and opens up the possibility for a fundamental examination of the nature of human society.

Table 1. Characteristics of weak and strong sustainability, mixed with characteristics of modernity and sustainability paradigms

<i>Weak sustainability/ modernity paradigm</i>	<i>Strong sustainability/ sustainability paradigm</i>
Status quo	Transformation
Technological fix with minor or no changes to lifestyle choices	Fundamental reassessment of values and lifestyle choices
Prioritise economic issues; deal with environmental issues as needed	Integrated, holistic approach to three dimensions
Technical progress and optimism	Technological scepticism and precautionary principle
Perfect substitution of natural manmade capital	Limited substitution of natural and manmade capital
Manage business risk within existing free-market system	Transform market system

Source: adapted from Ehrenfeld (2000).

Weak–Strong Sustainability Continuum

The sustainability literature may also be approached from the standpoint of a weak–strong continuum spectrum of sustainability, referring to the degree to which individuals are required to change their lifestyle and behaviours in the name of sustainability (see Table 1). As with the three independent dimensions point of view, weak sustainability is associated with reliance on technological fixes with little change required to personal values or lifestyle choices. In contrast, as with the nested dimensions heuristics, strong sustainability would include a fundamental reassessment of values resulting in revamping behaviours. Rees (1995) marks three stages along this spectrum: *status quo* (change can be achieved within the present structures), reform (fundamental reform is necessary, but without a full rupture of existing social structures) and transformation (the roots of the problems are the very economic and power structure of society, and thus a radical transformation is needed). In this discussion and analysis, we use the terms *status quo*, reform and transformation (or transformative) in a similar fashion.

The weak–strong debate, according to Hopwood and colleagues, is “conducted mainly around environmental issues rather than taking account of socio-economic consequences” (Hopwood *et al.*, 2005, p. 40). However, in prioritising social and human needs over exceeding environmental limits for weak sustainability (Klostermann and Cramer, 2006), the social issue is explicitly included. Springett (2003) further incorporates equity, futurity and equality in strong sustainability, making explicit the need for radical changes (i.e. transformation); he describes weak sustainability as a focus on eco-efficiency and managing business risk within the existing system (i.e. *status quo* bordering reform). In this way, Springett (2003)

explicitly captures both the social and economic dimensions previously excluded in some discussions of the weak–strong sustainability continuum. Ward (2003) further postulates the need for greater participation and more equitable distribution of benefits for more sustainable urban redevelopment.

Hopwood and colleagues (2005) ‘map’ interpretations of sustainability by plotting a variety of views on sustainable development against a range of environmental and socioeconomic issues (two separate axes, see Figure 2). Their data include documents (Meadows *et al.*, 1972), organisations (World Bank, OECD) and movements (Ecofeminist, Ecosocialist). The language used by Hopwood and colleagues in their mapping correlates well with the language used to describe the weak/strong (or modernity/sustainability) continuum and the *status quo*–reform–transformational continuum in the literature. They describe their axes as follows

The socio-economic axis covers the level of importance given to human well-being and equality and the environment axis covers the priority of the environment from low environmental concern through techno-centred to eco-centred. The central shaded area of the map indicates the range of views within the sustainable development debate: combining socio-economic and environmental issues. There are views outside this area concerned with either environmental or socioeconomic issues while ignoring the other (Hopwood *et al.*, 2005, pp. 41–42).

In this structure, then, the three dimensions discussed earlier have been reduced to two axes, through the combination of the social and economic, similar to the dual nested model presented in Figure 1(right-hand diagram). The weak–strong continuum is reflected through the distance of a data point from the origin (bottom left hand corner of the chart), with weak (or *status quo*) being closest to the origin.

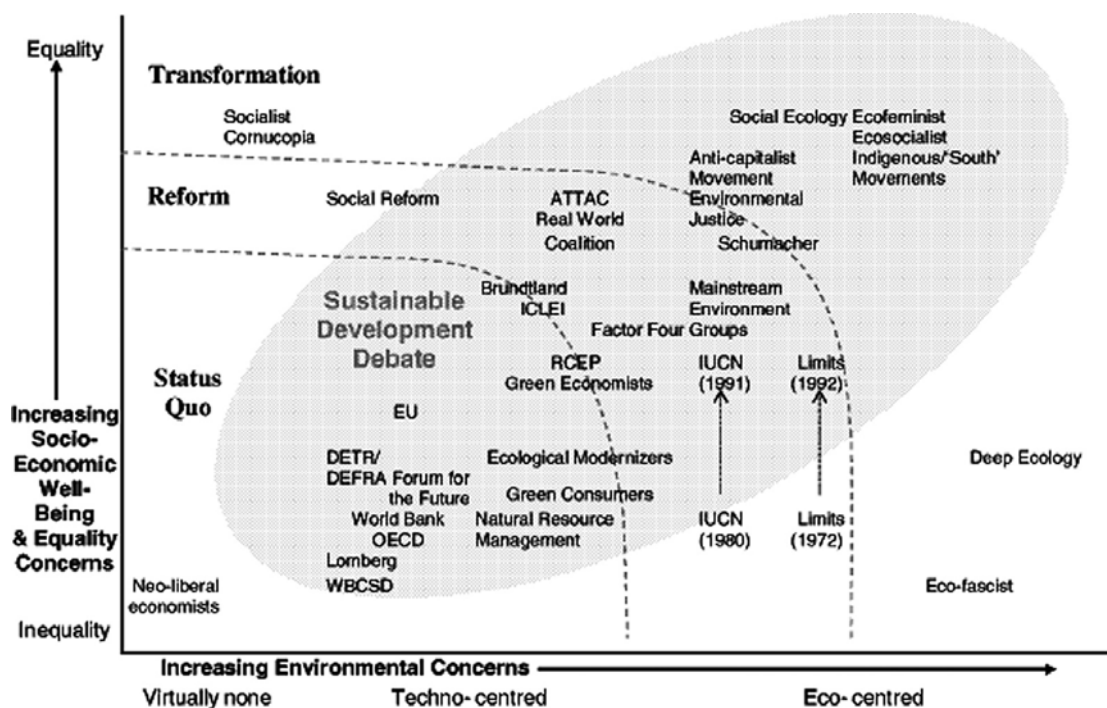


Figure 2. Mapping of views on sustainable development from Hopwood and colleagues. *Source:* Hopwood *et al.*, 2005, Figure 1.

Sustainability as a concept, then, is elastic and its elasticity can be theorised in ways that offer insights into the effect and operation of differing rationalities. The weak–strong continuum, as Couch and Dennemann (2000) show, highlights how almost anything can be classified as sustainable development, even the building of highways on the basis that it creates jobs and stimulates the economy—regardless of its perpetuation of the *status quo* dependence on personal transport. Others conclude that the view of governments and businesses as supporters of sustainability is dominated by a decidedly neo-liberal and managerial approach to the concept (see While *et al.*, 2004; Healey, 1998), which seeks to achieve sustainability through better information to influence consumer values and behaviours (i.e. such that change is driven through the existing market structure), improved management techniques and new technology operating through the market system (Hopwood *et al.*, 2005, p. 42). This ‘*status quo*’ form of sustainable development fits neatly into the paradigm of Western modernity as described by Ehrenfeld (2000) emphasising technological progress and optimism, scientific knowledge, individual autonomy and the free market. A *status quo* perspective is also enabled by the common overlapping three-pillars conceptualisation of sustainability (Figure 1, left): although technological fixes are actions taken within the human sphere (of society and economy), they do not require a fundamental reassessment of values and lifestyle choices. Ehrenfeld’s ‘sustainable paradigm’, in contrast, is based on technological scepticism and the precautionary principle, socially constructed constitution of knowledge, new forms of responsibility balancing democracy and freedom (Ehrenfeld, 2000, p. 237). Consistent with strong sustainability and the nested pillar heuristic recognising humanity’s dependence on environment (Figure 1, centre and right), the ‘sustainable paradigm’ is interdependent and systems-oriented, recognising limited substitutability between the human and non-human spheres (perfect substitutability implies that two tractors—manmade capital—are just as good as one tractor and one field to plough—natural capital) and requiring stronger action on our part to protect that balance.

Our normative concern, then, is that sustainability has become so elastic that it is now *de rigeur* for politicians and business leaders alike to invoke the notion of sustainability everywhere, and to justify almost any end-point on the basis of continuing economic growth (the economic pillar), or “in modern parlance the trickle-down theory” (Hopwood *et al.*, 2005, p. 40), even though when the WCED reconvened five years after the fact, “calls for growth were strikingly absent” (Goodland, 1995, p. 4). Discussion of the role of economic growth has evolved from growth in gross domestic product to consideration of development—that is, increasing living standards (Burningham and Davies, 1995). This is further evidenced by the change in language in the UK sustainable development policy from 1999 calling for ‘high and stable levels of economic growth’ (DETR, 1999) to the goal in 2005 as

a sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing (DETR, 2005, p. 15).

If the conceptualisation of sustainability by the actors involved in urban regeneration is a powerful factor, possibly determinant, in the decisions and outcomes of any urban regeneration project, then analyses of the operation of those concepts, or rationalities, of sustainability are critical. We would expect to find, then, that *status quo* conceptualisations of sustainability would play a very powerful role in reducing sustainability objectives to growth-oriented and market-based outcomes and solutions. Conversely, more transformative conceptualisations of sustainability would be

expected to push urban regeneration approaches towards more fundamental shifts in social structures and behaviours. Before we test these ideas, we highlight the context in which sustainability has become an integral part of urban policy in Britain.

Sustainability and Urban Policy

The term sustainability now permeates nearly all aspects of urban public policy. There are definitions for: sustainable regeneration (Bennett and Patel, 1995; Fordham, 1995; Chanan, 1999; Rydin *et al.*, 2003; SDC, 2002, 2003), sustainable cities (Haughton and Hunter, 1994; Haughton, 1999) and sustainable communities (ODPM, 2003; Chartered Institute of Housing and RTPI, 2003). Studies have looked at the various definitions of sustainability that are operating within this plethora of sustainability urban policies. Many studies have found, perhaps not surprisingly, a relatively limited understanding of what sustainability means as a concept in public agencies and a relatively weak implementation of key principles in practice. Some conclude that there has been a *status quo* approach—that sustainability acted mostly as a

garnish sprinkled over other pre-existing policy commitments, rather than involving a more fundamental rethink of policy approaches (Evans *et al.*, 2003, p. 49).

Thus, despite the proliferation of ‘green’ charters, plans, policies and strategies at local government level over the past 20 years (Jones, 1996), the translation of sustainability awareness into practice is proving difficult for policy-makers especially at the local level (Berke and Conroy, 2000). Some research has concluded that this weak translation is the result of a skills and knowledge gap—for example, the varying abilities of local planners and policy-makers to institute key principles and methodologies in their plan-making (Counsell, 1998; English Partnerships, 2004; ODPM, 2004). Others have found that particular types of policies simply fail to get implemented: for example, growth-restrictive policies (an economically focused reform approach) tend not to survive within policy circles very long; nor do ‘social equity’ elements which emphasise reform changes in the social dimension (Owens and Cowell, 2002; Giddings *et al.*, 2002). For the former, this is often due to the belief that economic growth is necessary to fund the environmental programmes so often associated with sustainability (Springett, 2003) or the perception that cities and their redevelopment are treated as strictly economic entities despite the inequitable distribution of benefits arising from the redevelopment (Ward, 2003). Moreover, great spatial variation in policy type points to the localisation of sustainability objectives and targets: in a study of policies across England, Owens and Cowell (2002, p. 24) found a greater prevalence of policies directed at the precautionary principle and restricting growth in the south, whereas in the north, where economies are ailing and political imperatives favour growth, the policies are differently weighted.

During the 1990s, central government in the UK began to give formal support to the sustainable development agenda, resulting in the emergence of centralised planning systems that formalised sustainable development principles and, in particular, enshrined their objectives in the planning system. In the UK, this came in the form of the Environment White Paper of 1990 which was first given statutory basis in the Town and Country Planning Act 1990 and then revised through the Planning and Compulsory Purchase Act (2004) which requires both regional and local authorities preparing spatial plans to do so with the “objective of contributing to the achievement of sustainable development” (S39.2). A diversity of interests, including a number of pressure groups, came to see planning as the key to delivering sustainability, such that

the planning system itself became the primary forum for the debate about sustainability and how to achieve it (Owens and Cowell, 2002). The theoretical and practical impetus and language for delivering sustainability through planning in the UK appear to come from the influential agenda of New Urbanism. As a result, planning has renewed its interest in urban form, particularly concerning questions of density and land use mix. In the planning world, then, sustainability has become another language for curtailing urban sprawl, building on brownfield sites and achieving higher densities and better mixes of use within a scheme or neighbourhood. Research has shown the importance of urban form on different patterns of transport use, loss of habitat and loss of green space (Breheny and Rookwood, 1993).

However, as Rydin and other commentators point out, there are enormous difficulties with attributing causal properties to urban form (Rydin, 1995). New Urbanism itself comes under trenchant criticism from the field of critical planning theory, which highlights how the approach reduces the work of planning to a set of design principles, ignoring the political work of planning and regeneration in negotiating values and futures (Rydin, 1995; Owens and Cowell, 2002), and could be broadly (though not entirely) theorised as part of a wider shift towards neo-liberal governance. This critique resonates with debates in the sustainability field which seek to move conceptualising sustainability from a *status quo* or technical fix approach towards requiring a full analytical engagement with the sociocultural and political contexts within which sustainability dimensions are experienced. In crude terms, one could interpret the borrowing of aspects of New Urbanism (with the qualification that such borrowing is often incomplete and misguided) into the ‘planning for sustainability’ agenda as a form of weak sustainability.

A significant body of evidence clearly demonstrates how attempts by city governments to live by their growth agendas (in other words *status quo* approaches to urban regeneration) have almost universally failed to deliver widespread and sustained social and environmental benefits (Smith, 1987 and 1996; Moulaert *et al.*, 2003; Levine, 2000; Dieleman and Robert, 2000; Lees, 2003). Indeed, urban regeneration itself, as a policy agenda to address inner-city failure, is coming under increased criticism in the UK and elsewhere (see Atkinson, 2004; Atkinson and Helms, 2007; and Porter and Shaw, 2009). The addition of sustainability, then, to urban regeneration policy, can be similarly analysed in terms of whether it enhances, or not, the delivery of sustained socioeconomic and environmental benefits to cities. As noted earlier, the literature suggests that, while many city governments are increasingly adopting a language of sustainability within urban policy, in reality the underlying principles have changed little despite the sustainability ‘window-dressing’. Some have theorised this turn to sustainability as

a spatio-institutional fix to safeguard growth trajectories in the wake of industrial capitalism’s long downturn, the global ‘ecological crisis’ and the rise of popular environmentalism (While *et al.*, 2004, 551).

Here, urban governments selectively incorporate environmental goals “determined by the balance of pressures for and against environmental policy within and across the city” (While *et al.*, 2004, p. 552). Whatever theoretical approach is taken to this policy turn, all of these commentators suggest to us that the form of regeneration policy being widely adopted, even in its more recent ‘sustainable’ version, is rooted in a *status quo* or weak conceptualisation of sustainability.

From this discussion, it is possible to develop a framework by which we might critically assess a range of sustainability conceptualisations in urban regeneration practice and policy. A weak sustainability conceptualisation would lead to a bias for technological fixes and other selective environmental goals independent of issues of social and economic equity. A strong sustainability conceptualisation would adopt an approach that saw changes in the socioeconomic structure to preserve planetary life services—or, in popular language, ‘the environment’. In this paper, we develop this framework further into a set of analytical categories and test these within our case study of Eastside in Birmingham. To begin to develop this, we introduce our methodological framework for analysing a spectrum of sustainability conceptualisations in the next section.

Background and Methodology

This paper offers insights drawn from an analysis of the sustainability agenda for Birmingham’s Eastside redevelopment to assess the integration and implementation of sustainability principles in public policy and, more specifically, in urban policy. In this section, we draw on the body of research knowledge outlined in the previous section, particularly that of the role of the three dimensions and the weak–strong continuum, to begin thinking about different sustainability conceptualisations within a particular case development site. The data are generated from extensive research into the sustainable conceptualisations operating in the case study area of Eastside, in Birmingham, UK. The ‘mapping’ exercise from Hopwood and colleagues (2005), described earlier (see Figure 2), provides the analytical starting-point for our analysis. In this section, we first introduce our case study site, then our adaptations of the Hopwood methodology.

Eastside as the Exemplar Sustainable Quarter

Birmingham’s Eastside area is a city quarter of 170 hectares lying on the eastern edge of Birmingham’s central activities district. It is the current focus of considerable regeneration energy and investment by Birmingham City Council (BCC), the regional development agency Advantage West Midlands (AWM) and other major partners. Briefly, the area is characterised as predominantly industrial, with many derelict and vacant sites and a small residential population. The quarter has important heritage significance as the origins of industrial manufacturing in the city, and is home to numerous historically significant buildings, sites and activities. The regeneration focus for Eastside arises from similar initiatives undertaken elsewhere in the city, notably the western edge of the city centre that underwent substantial redevelopment in the 1980s and 1990s, and which has been the subject of considerable analysis (Loftman, 1990; Loftman and Nevin, 1992; Webster, 2001; Pollard, 2004).

The regeneration of Birmingham’s Eastside area is held up as an exemplar of sustainable regeneration in the UK. This has been a policy aspiration for Eastside since BCC and its partners received significant ERDF funding to enable key infrastructure projects to kick-start development in the quarter (Porter and Hunt, 2005). Eastside’s regeneration was given a sustainability ‘branding’ by BCC in 2001 with the publication of the Eastside Development Framework, which emphasises sustainable design and environmental technologies for the built environment, and on transport (Birmingham City Council, 2001). BCC had already adopted a Sustainability Strategy for the whole city in 2000. In December 2001, Birmingham joined a European Commission project to assess participating cities’ progress towards

sustainable urban development (PRESUD, 2004) and positioning Eastside as a potential exemplar of sustainability gained important recognition in the PRESUD process. Key champions within BCC had pushed for Eastside to be an exemplar of sustainable regeneration and supported the establishment of an external advisory body (the Eastside Sustainability Advisory Group (ESAG), dissolved in February 2008) to monitor progress in that direction.¹ The BCC Eastside team was set up in 1998 to facilitate delivery for this regeneration programme. The focus of that team was then, and remains despite its reorganisation into a broader city-centre development team, land assembly for private capital investment and generation of proposals by private developers.

Methodology

Document analysis, observation and in-depth interviews were utilised to investigate the operation of sustainability conceptualisations, or discourses, within Eastside regeneration. Document analysis was undertaken on texts selected for their relevance to Eastside, including national, regional and local public policy, planning guidance and planning strategy, and Eastside-specific documents including strategic planning frameworks, site-specific planning applications, design briefs and marketing brochures. Participant observation was conducted at public and private (by invitation) meetings related to individual projects or Eastside as a whole, and stakeholder events were observed more generally. In-depth interviews were conducted by the authors with a range of stakeholders in the Eastside regeneration programme, including planners and policy-makers, councillors, sustainability officers, designers and architects, developers, engineers, cost consultants and property agents, between 2004 and 2007.

Data analysis combined both interpretive and more quantitative approaches. The data were coded and analysed in the traditional interpretive manner as part of a wider reporting of the research programme.² Using these coded data, we then developed a system to ‘score’ the conceptualisations of sustainability in each interview or document. The purpose of the quantification was to be able to map the distribution of data along the spectrum of sustainability previously discussed (Figure 2)—to assess, for example, whether a particular interviewee or policy represented a *status quo* position, or reform or transformation. Semi-structured interviews were used to explore interviewees’ perspective (Table 2). The lines of enquiry appear in the left-hand column—nature of sustainable development, nature and root of problem, and actions to redress. Columns 2–4 present the dimensions of sustainability: *status quo*, reform and transformation as discussed in previous sections.

Data are analysed, as described earlier, to interpret the meaning and means of implementing conceptualisations of sustainability. Using Table 2, we can now map those interpretations to the corresponding sustainability spectrum we have theorised: *status quo*, reform or transformation. For example, in *status quo*, pollution is a minor problem; in reform, environmental degradation is a mounting problem; and in transformation, it is promoted to a crisis. The mention of ‘pollution’ in a data source, therefore, is not sufficient to assign a score; the context is critical. A data source that raised all issues scored 1.00; if all issues were raised as mounting problems (or as in the reform column, Table 2) it scored 2.00; and should all issues have been raised as critical, it would have scored 3.00. A document or interview would have scored zero

if there was no mention of any of the issues raised in Table 2: not surprisingly, this did not occur.

The following sets out a series of examples to illustrate our scoring and analytical approach. The following document was scored 0.50 as Eastside developments are positioned as ‘sustainable’ because they occur on brownfield sites, provide a mix of uses, have access to public transport networks, will stimulate growth of jobs due to economic investment and feature good design—all well within the existing market structure, that is, *status quo*. However, no mention was made of technology as a solution, pollution or poverty as a problem, or evolving consumer demand

The scheme is mixed use with a substantial residential element. This is in order to encourage a busy place, diverse in its social composition and activity. A large area of the site is physically planned in order to encourage a vibrant public realm. Pedestrianised with lively frontage of shops, cafes and other public uses, these areas encourage movement and interaction between the buildings ... car parking is minimised and restricted to basement areas ... the landscaped areas are designed to encourage activity with terraced areas, steps and ramps, water features and planted trees (Edward Cullinan Architects, 2002).

If some issues were mentioned in the data source but none were stressed, it scored between 0.50 and 1.00 (*status quo*). If all issues were raised, but none stressed, it scored 1.00. A document that promoted public transport, mixed use, heritage and improved policies to guide the private market in addition to brownfield redevelopment, for example, scored 1.0—as in this example

Find innovative and sustainable economic regeneration through conservation (BCC, 2001).

In the case where many issues were mentioned but only some were stressed, it scored between 1.00 and 1.50. If all of the issues raised were stressed, it scored between 1.50 and 2.00 (reform). An example would be this document which stressed the role of policy in driving change

Sustainability is as concerned with employment leisure equality, health and freedom from crime as it is about protecting biological diversity and reducing air pollution. (BCC, 2000).

By extension, if a subset of issues was deemed critical, it scored between 2.00 and 2.50. Had there been a case where all issues were raised and deemed critical, it would have scored 3.00. The distinction between a mention and stress rested on an interpretation of the meaning of portions of text in its wider context—for example, our interpretation of a policy’s aims and objectives, or the context in which an interviewee spoke about that issue.

To position a data point on a two-dimensional map, x and y co-ordinates must be assigned to represent environmental and socioeconomic dimensions separately. While Hopwood and colleagues’ (2005) analysis does extrapolate the spectrum along broadly socioeconomic and environmental axes and apparently assigns x and y values independently (Figure 2), these two dimensions are not explicitly theorised independently. In this paper, we have developed Hopwood and colleagues’ analysis by explicitly disaggregating data along the two individual axes. In doing so, we contend that it is possible to explore their different roles in the conceptualisation of sustainability. This is accomplished by revisiting the dimensions in Table 2 and assigning them to one of two categories: environment or socioeconomic. Each data

source is then assigned a dual score: a number between 0.00 and 3.00 for environmental dimensions (*x*-axis) and a number between 0.00 and 3.00 for socioeconomic issues (*y*-axis).

Our early coding of the data had suggested an interesting paradox between the perception of the sustainability problem and the actions required to address it—this next disaggregation arose particularly when asking whether policy was leading or lagging the sustainability discourse. Captured in Table 2 as separate questions, this was not something planned in the interview guide, but rather recognised later in data analysis. At some points, the data source addresses what is essentially the root of the problem (for example, pollution or environmental degradation is a problem requiring a response), whereas at others, the data source begins to address the required actions as distinct from the roots (increase information, modify the market, or radically reform same) all describing responses to the perceived problem.

Table 2. Framework for analysis of data sources along four lines of enquiry: nature of sustainable development, nature and root of problem, and actions to redress; with associated issues from the data sources corresponding to the relevant position on the weak–strong (or *status quo*–reform–transformation) spectrum of sustainability

<i>Lines of enquiry</i>	<i>Status quo: issue raised</i>	<i>Reform: issue stressed</i>	<i>Transformation: issue deemed critical</i>
<i>Nature of sustainable development</i>			
Environmental	‘Weak sustainability’ Technology as a solution	Reduce energy/carbon use Reuse materials Healthier ecology	Transformation of society and/or human relations with the environment
Socioeconomic	Weak concern with poverty and lack of equity in political power	‘Sustainable, accountable and equitable forms of capitalism’ Social issues important, human needs, poverty, democratic revitalisation	Radical reform to socioeconomic structure Strong commitment to social equity
<i>Nature of problem</i>			
Environmental	Minor problem: pollution	Mounting problems: environmental degradation; global instability	Mounting crisis: environmental degradation; possible future collapse
Socioeconomic	Minor problem: poverty.	Mounting problem: inequality and	Mounting crisis: poverty, lack of justice.

		poverty	
Root of problem (socioeconomic)	Lack of information, existing values	Failure to capture externalities	Existing economic and power structures of society
Actions required to redress (socioeconomic)	Increase information Change values Improve management techniques New technologies Taxes and trading Generate and evolve consumer demand	Good science and information Modify the market through taxes and subsidies Role of technology Reform government, increase democracy and participation	Build alliances, mobilise coalitions and polity Radical reform to markets, taxes, and subsidies Inclusive social and political action within and outside existing

Analysis and Discussion of Key findings

In this section, we discuss our findings, which address the key questions introduced initially

(1) An assessment of the variation of the conceptualisation of sustainability across the project: this includes people and documents analysed and an analysis of the three dimensions of sustainability and distribution of our data along the weak–strong spectrum.

(2) An analysis of the difference between the way our interviewees conceptualised sustainability and what the policies actually specify: is policy leading the discourse, or lagging in its requirements?

We discuss each of these in turn in the following sub-sections.

How Does the Conceptualisation of Sustainability Vary across a Single Regeneration Project?

We find it noteworthy that, although we are mapping only one sector of the economy (urban regeneration) rather than the broader societal debate (as Hopwood and colleagues do, Figure 2), we arrive at a similar distribution of data (Figure 3). The data fall largely into the shaded area on the Hopwood chart labelled ‘sustainable development debate’, with a small cluster in the lower-left corner of *status quo*. There are very few conceptualisations of sustainability in the transformative paradigm; the dominant conceptualisations of sustainability in Eastside reside in *status quo* and reform viewpoints (Figure 3), consistent with Hopwood and colleagues’ view that sustainability is dominated by a managerial approach which seeks to achieve sustainability through the (existing) market system (Hopwood *et al.*, 2005, p. 42).

Three dimensions of sustainability. A content analysis of data sources according to where the term ‘sustainability’ appears, and in what context, reveals that sustainability is mostly described as a ‘three-pillar’ issue. This means that there is at least acknowledgement that there are social, economic and environmental dimensions

pertaining to sustainability, albeit to varying degrees and using different language. One may also note that the chart is bottom-heavy—more sources score higher on environmental dimensions than on the socioeconomic. We unpack this by examining the three pillars of sustainability in various data sources.

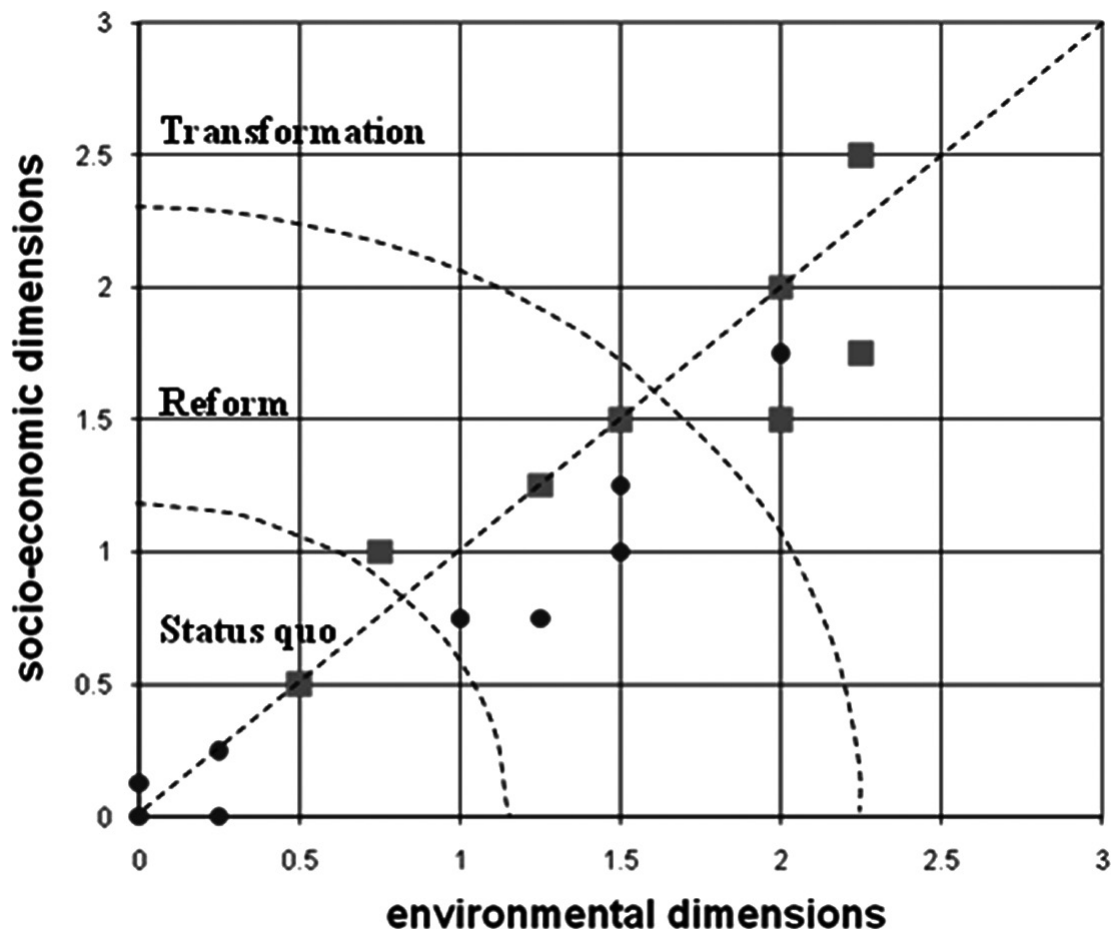


Figure 3. Mapping of conceptualisations of sustainability operating for Eastside (all sources, averaging problem and action). *Notes:* Dotted lines delineating *status quo*, reform and transformation are intended as estimates only. Interviews and observations (i.e. what people said) in squares, documents in circles.

A conceptualisation of sustainability that specifically uses the three-pillar approach is to be found in BCC and its partners' bid to the ERDF for funds to demolish Masshouse Circus and commence the regeneration programme (Ecotec, n.d.). This document, scoring 1.50 on environment and 1.00 on socioeconomic, is key to the story about sustainability in Eastside, as our earlier research found it was one of the driving influences of branding the future development of Eastside as a sustainability exemplar (Porter and Hunt, 2005). An analysis of the bid document shows that the term 'sustainability' is almost universally used in relation to environmental issues, although other economic and social issues are important to the entirety of the bid. On 'sustainability', for example, it notes that Eastside

plans a series of measures to promote energy and water efficient design, and an energy consumption strategy as well as measures to promote sustainability in business and building (Ecotec, n.d.).

In summary, the entirety of the bid is directed towards broad sustainability (regenerative) principles, including the stimulation of new local businesses, jobs growth (a massive feature of the bid and the measures for success), social inclusion and community development, as well as environmental mitigation measures. It is only the latter, however, that are *named* as sustainability. This is likely to be due to the parameters of the ERDF Objective 2 funding bid requirements, which had only shortly beforehand instituted environmental measures as a central feature of the package.

This senior civil servant involved with the Eastside regeneration describes a vision of Eastside that encompasses economic activity, social benefits such as education and dynamism, as well as environmental concerns

I have a vision about what Eastside could be, and it's a very broad vision. Eastside should be a lot of things. It should be a fantastic new quarter of the city centre; it should provide expansion of economic activity and jobs, that's important. It should provide more ability to learn because an advanced society needs to be reskilling itself. ... There should be good sustainable principles, it should be a high quality urban design (interview, 24 February 2009).

A developer clearly articulated a sense of the lack of balance between economic, social and environmental aspects of his version of sustainability, expressing concern that the socioeconomic elements were relatively neglected on the whole

There are balances to be struck, and I often think that there is too much focus on, if you like, the engineering. I am as keen as the next person on CO₂ reductions and wind turbines and all that sort of thing. But I also think there's so much focus on that, it takes away from the social aspects which I think in the long run must be equally as important. ... I'm thinking about things like genuinely diverse mixes of people in schemes, really encouraging local businesses (interview, 8 February 2006).

The spread between the socioeconomic score and the environmental score becomes greater when people are asked about the nature of the problem sustainability is addressing. Despite world-wide recognition of social and economic inequity having the potential for major upheaval and crisis (for example, WCED, 1987), a distinct trend emerges showing that sustainability is considered an 'environmental' problem. A rising awareness of global climate change as a serious issue may have led to a popular consensus that 'sustainability' equates with environmental crises. A member of the development industry explained it thus

If you actually believe that the whole industry, our whole society, is going in a certain direction—which is essentially it starts with Kyoto and has moved them a long way and I think it's subtle and it's very strange the way it works, but this last climate change report suddenly has got people believing a little bit more (interview, 16 November 2006).

Despite, in some cases, a rather broad and balanced conceptualisation of sustainability, the architects and consultants to the development are sometimes confined to implementing sustainability in terms of cost components in the built form. One industry consultant described his work on sustainability as customer-led to the environmental pillar, despite his own strong interest in the broader issues. His interview scored 2.00 on environment and 1.50 on socioeconomic issues

We try as far as possible to ensure that it encompasses the social and economic as well as the environmental. But to be honest most of our involvement is on the environmental side. Because when we tend to get involved, it's at a stage

once the outline planning permission has been granted, and the principle of development on the site has been established (interview, 31 August 2006).

Most participants, including those who see the narrowness of definition as a weakness, perceive how crucial it is to the development industry to have particular deliverable initiatives to ‘sell’ to them, the easiest (most saleable) of which tend to be environmental mitigation technologies. An architect working on one Eastside development presenting a reformist view of sustainability issues (scoring 1.50 on environment, 1.50 on socioeconomic) reflected during an interview

The only experience I’ve had of the planning process of sustainability is asking you whether your bricks are sourced locally or not, and that’s as far as it goes—and so you get the tick in the box to send in the scheme (interview, 6 March 2006).

Reports to BCC Cabinet regarding site-specific planning proposals incorporate a standard heading of ‘sustainability’ which is generally interpreted as issues falling on the environmental axis: in every BCC report pertaining to Eastside, the nature of sustainability in development is related, often almost exclusively, to the rehabilitation of brownfield land. For example, a report to BCC Cabinet regarding a major residential development in Eastside states that

the proposals would result in the redevelopment of a brownfield site and assist in the regeneration of Digbeth and are considered to have a positive sustainable effect (Birmingham City Council, 2005, p. 10).

Environmental measures such as ecological surveys set out in *Planning Policy Statement 9: biodiversity and geological conservation* (ODPM, 2005) feature in separate sections of planning reports. Those socioeconomic aspects of sustainability such as affordable housing and public open space (either real or in-kind) are generally provided through other mechanisms, such as planning gain, that are not as strongly associated with sustainability but still addressing certain dimensions thereof.

The lack of recognition of the socioeconomic dimensions of sustainability can be seen in the conflict that came to a head in late 2006 between small property owners and BCC and AWM over the compulsory purchase of their properties to assemble the site for the Technology Park and Learning and Leisure Quarter. The singular focus of attention on ‘brownfield’ regeneration being inherently sustainable, and the development of new ‘sustainable’ economic niches through high-tech campuses built with sustainable technologies, have been used to justify the displacement of existing local people, businesses, activities and uses (Birmingham City Council, 2006; and see Porter, 2009, for a commentary). The question ‘what is worth sustaining?’ in a locality is not asked and socioeconomic issues of social equity and participation are ignored (Giddings *et al.*, 2002). It thus becomes possible not only to remove ‘hindrances’ to a narrow, techno-fix-focused version of sustainability, but to render local communities and businesses as ‘hindrances’ in the first place, in order to deliver ‘brand new sustainable developments’. This begs the question: if the conceptualisation of sustainability was itself nested (Figure 1, left), what effect would this have on the approach and outcome? We ask this as a speculative question here, and suggest that further research might usefully focus in this way.

Weak–strong continuum. As Figure 3 shows, there is considerable diversity along the spectrum from *status quo* in the lower left-hand corner of the chart, to transformation near the upper right. The dashed lines delineating the regions are intended only as guides. Within the clustering of documents in the very left-hand corner, the sources

(dated 1996–2000) indicate a relatively narrow view of sustainability, generally positioned within an overarching ‘growth-first’ philosophy. This is especially pronounced regarding public policy and planning activity on specific sites within Eastside. For example, the Eastside Development Framework scored 0.25 environmental and 0.00 socioeconomic, encouraging city-centre expansion and regeneration through the promotion of a mix of uses

High quality mixed use activities will be encouraged throughout Eastside. The area should become a thriving and dynamic place in which to live, work and visit. There are both major sites and empty or underutilised buildings which, together with their proximity to the City Centre, offer excellent opportunities for quality mixed uses including education, technology, housing, leisure, offices, work spaces, design studios, and specialist retailing. Sustainable developments incorporating innovative fuel technologies and materials will be particularly encouraged (BCC, 2001, p. 13).

More strategic and high-level policy documents governing BCC’s approach to sustainability are much more reformist. BCC’s Sustainability Strategy uses a ‘three dimensions’ approach, defining it as being

as concerned with employment, leisure, equality, health and freedom from crime as it is about protecting biological diversity and reducing air pollution (BCC, 2000, p. 3).

At the city-wide strategic scale, then, BCC is able to take a more reformist and integrated view of sustainability, whereas at the site scale reformist dimensions seem to be lost in *status quo* approaches.

The Eastside Sustainability Advisory Group (ESAG) provided a specifically defined three-dimension conceptualisation of sustainability in its vision document *Have you got Eastside sussed?* which sets out the economic, social and environmental principles upon which sustainability in Eastside should be based (ESAG, 2002). The document addresses: built environment; public space and infrastructure; social diversity and housing; resource management; economy, business and industry; and participation, scoring 2.00 on environment and 1.75 on socioeconomic.

The most transformative document analysed in this research was the sustainability charter of one of the developers active in Eastside, isis waterside regeneration (isis, 2006); the charter scored 2.25 on environment and 2.50 on socioeconomic dimensions. The document lays out 16 sustainability principles grouped into three themes: regeneration, environmental sustainability, and waterside urban design; a fourth theme related to health and happiness is under consideration. The charter is used to assess new projects for their potential to advance its principles and to guide the evolution of existing projects.

The following observations may be made from this weak–strong spectrum analysis, although with the *caveat* of a limited database: the older documents (1996–2000) are clustered in the lower left corner of the chart, indicating the strongest *status quo* position. Newer documents are spread throughout reform and transformation along with the majority of interviews, perhaps reflecting the evolution of the public discourse around sustainability. It is impossible to assess how much of this distribution is related to time: certainly, UK sustainability strategies were evolving rapidly in the 1990s. The distinction between interviews and document sources is developed further in the next section.

Is Policy Leading the Discourse?

Looking again at Figure 3, we see that interviews and observations (i.e. data derived from what people said) are represented by squares and all documents (i.e. data derived from document analysis) are represented by circles. There is a greater concentration of documents in the *status quo* region and more people further along the spectrum towards transformation. To some extent, this may be attributed to the time-lag in developing policy—if the document has been drafted, consulted, redrafted and passed by Council, it necessarily reflects past views to some extent. However, the document analysis includes a policy with draft status in 2007, during the same time that the interviews were taking place—so while this may be part of the reason, it is not entirely so.

If conceptualisation shapes action, this trend raises the possibility of a dissonance between what people think and the policies they develop and implement. This distinction is potentially a further contribution to the literature and to the comparative analysis of such data sources. While unable analytically to unpack this divergence fully, we offer some initial comments in the following section.

In the previous section, the data analysis showed that, although some data sources presented a three-dimension balanced approach to sustainability, often both people and policies came back to the environmental pillar for both the source of the problem (global climate change) and the required actions (technological add-ons such as renewable energy), consistent with Klostermann and Cramer's (2006, p.275) observation that "'sustainable' is a label for all issues and activities previously labelled as environmental". The senior civil servant whose vision of Eastside was described as encompassing economic activity, social benefits and environmental concerns characterised sustainability as a "huge, massive" issue, a characterisation falling clearly into the transformational range. Nevertheless, here, the interviewee *still* narrows down to a techno-centred environmentally focused conceptualisation of the largely *status quo* actions required

[It's] about coming up with more sustainable forms of development and trying to address the issues that are being addressed like global and governmental issues down on the ground. So, how do we make better use of resources? How do we make things work more efficiently in terms of energy use, or indeed in terms of end uses? ... At its widest sense it's a whole huge embracing sort of thing, and a more narrow focus would focus it more on the energy, the ecology, the developmental side of things (interview, 24 February 2006).

This evolution from broad vision to narrow implementation may result from the propensity to look to familiar resources and tools for solutions for as long as they serve (Ehrenfeld, 2000). The narrowing may also derive from a limited lead from policy. This industry consultant previously described his work on sustainability as customer-led to the environmental dimension; here, he attributes it to policy limitations:

We have our personal views of what sustainability should be, but a lot of the work is based on what policy agenda set by government says that it should be, and therefore what our clients need to be addressing. So it's in part based around things like the UK sustainable development strategy, sustainable procurement strategies ... all these various initiatives setting priorities for the UK, either within the public sector or more generally through the planning system as to what sustainability is (interview, 31 August 2006).

Various actors in the private sector identified policy as the necessary 'stick' to advance the sustainability agenda. By demonstration, the following developer drew an analogy with the ban on smoking in pubs to exemplify his expectation of the role of policy in shifting public opinion:

So there you have got a classic, you've got a shift in public opinion which is quite a right shift that this isn't tenable anymore but it needs legislation to do it. ... So legislation, I think, is going to have to be a key to encouraging people to do that (interview, 24 February 2006)

Looking to the BCC documents, a strong policy lead beyond *status quo* was not evident; reliance on environmental technology as a 'fix' was particularly prevalent, focused on environmental mitigation and sustainable building technologies, and thus consistent with a reform or weak-sustainability position. For example, BCC's brief to consultants regarding the preparation of a masterplan for the Eastside Technology Park precinct stressed environmental technology 'fixes'

New development should be sustainable both during construction and operation. Development incorporating innovative fuel technologies as well as minimising energy consumption will be particularly encouraged. The potential for a Combined Heat and Power (CHP) scheme to serve the area must be investigated. Water conservation and water minimisation techniques should also be adopted as well as the introduction of a waste management system. Solar gain, shading and outlook also need to be considered. For residential schemes at least a 'very good' Eco Homes' standard will be strongly encouraged (Birmingham City Council, 2004, p. 9).

These are tangible, and relatively straightforward, requirements to implement in sustainability terms and fit neatly into a 'growth-oriented' ethic.

In contrast, when interviewees assessed what was necessary to advance towards more sustainable developments, people leaned more heavily towards socioeconomic reform: changing people's values, behaviours, the way we use space (for example, density, mixed use) and *changing regulations* to force shifts in the approach taken by developers. The ability of technological fixes to have a lasting impact was questioned by an industry consultant

I think the 1930s buildings, the Victorian buildings, are sustainable. They're still here, they still work, people can still live in them, they're cost effective, all that sort of stuff. That's sustainable development from my perspective, so anything that is long-term, is flexible, in that you can change it from one use to the other, it can be personalised, it has a long life ... my personal feeling is this green roof, brown roof, fuel this fuel that, windmills, all that sort of stuff, it's almost a fad, you know, it's grasping at straws stuff (interview, 29 March 2006).

In summary, interviewees from both civil service and the private sector have described reliance on policy to lead the way in advancing the sustainability agenda, and identified the prevalence of *status quo* environmentally focused actions as being in response to policy. Policy is not taking the lead in this discourse where various actors have reformist or even transformational views, despite widespread recognition that this is necessary to shift the field. Reformist and transformational solutions require changes to the socio-political structure (capturing externalities, modifying the market, reforming the role of government). Yet as we noted earlier, whilst the aspirational solutions envisaged by our interviewees rest in the socioeconomic regime, much of what actually gets implemented (evidenced in the policy discourse) are tangible technological fixes to the built form which fit relatively neatly to the

‘growth-oriented’ ethic of property development and are deliverable by the market—that is, *status quo*. Many of the people we interviewed were the architects of the policies analysed. This is possibly a function of the dimensions of contemporary policy-making requiring negotiation and consensus-building between stakeholders, an inherent short-termism in the political system and a lack of political will to address difficult issues (While *et al.*, 2004). Further analysis of the wider political-economic context would enable a disaggregation of these factors (Ward, 2003). We suggest that much of the problem lies in the consensual nature of the policy-making processes (Swyngedouw, 2007) as discussed earlier: the path forward is under debate, consistent with Owens and Cowell’s (2002) discussion. Whereas Owens and Cowell (2002) show that an implementation deficit remains in sustainability not because it is difficult but because it is contested, we build on this and raise the question of whether the policies focusing on environmental fixes specifically seek to reduce the contested to the merely difficult.

Conclusions

This paper has analysed conceptualisations of sustainability in the current UK urban regeneration programme of Eastside in Birmingham, a regeneration programme that has come to have a ‘sustainability’ label attached to its approach and policy framing. At first glance, many of the trappings of sustainability are present in Eastside, with any number of checklists, advisors, specific policies and other tools in place to push for more sustainable development (Hunt *et al.*, 2008). A clear sustainability strategy exists at the city scale (BCC, 2000) as well as the national level (DETR, 2005). The combination of key champions within the BCC and a mandate from the European funding to deliver something approximating sustainable development appear to have given additional weight to the notion of sustainability in Eastside’s regeneration. Yet, actual development in Eastside has largely been ‘business as usual’ with some occasional add-ons of environmental technologies to specific schemes and the addition of the Sustainability Advisors and the Eastside Jobs Team which has provided the opportunity to enhance sustainability options in some key areas. Fluid and competing rationalities of sustainability operate in Eastside’s urban development policies, such that almost anything can ‘tick the box’ of sustainability simply because it is located on brownfield land.

Given that all these supposed ‘requirements’ for sustainability exist, and especially given the apparently greater enlightenment of key actors involved in the development process, at least in Eastside, it does lead us to question why a more transformative conceptualisation of sustainability, and the necessary actions to move towards it, have not been forthcoming. Our sense is that this is the product of the continuing and pervasive dominance of a ‘growth-first’ ethic in urban regeneration and planning discourse in Birmingham, and perhaps elsewhere. The sustainability agenda is thus very easily reduced to design-led, technology-focused solutions to environmental mitigation, rather than a more holistic approach to regenerating urban neighbourhoods that are liveable, inclusive, mixed, well-serviced and future-proofed. We suggest that it is only when that ‘growth-first’ ethic comes to be seriously challenged through the adoption of more transformative conceptualisations of sustainability (both as problem and action), that real progress towards the sustainable city can be realised. This is true from the overarching socioeconomic questions of equity, manifesting in retention of local businesses, tapping into local residents’ histories and knowledge, rebuilding genuinely inclusive inner-city places that reject ‘growth-first’ and ‘at-any-cost’

approaches, down to the very specifics of getting alternative energy schemes up and running or knowing whether reduced car parking on a site will be acceptable to the planners.

Far from a coherent conceptualisation of sustainability operating in Eastside, we find instead that there are diverse ideas and policy-making requiring negotiation and consensus-building between stakeholders, an inherent short-termism in the political system and a lack of political will to address difficult issues (While *et al.*, 2004). Further analysis of the wider political-economic context would enable a disaggregation of these factors (Ward, 2003). We suggest that much of the problem lies in the consensual nature of the policy-making processes (Swyngedouw, 2007) as discussed earlier: the path forward is under debate, consistent with Owens and Cowell's (2002) discussion. Whereas Owens and Cowell (2002) show that an implementation deficit remains in sustainability not because it is difficult but because it is contested, we build on this and raise the question of whether the policies focusing on environmental fixes specifically seek to reduce the contested to the merely difficult.

To what extent is Eastside likely to become a 'truly exemplar sustainable development', as is claimed? Our findings suggest that there is a considerable distance yet to travel to achieve a transformative conceptualisation of the problem of sustainability and the action required, capturing both socioeconomic and environmental dimensions adequately, to achieve the implementation of sustainability principles in Eastside. It should be noted, however, that the research presented in this paper is based on a live regeneration programme, which we as a research team have been involved in from a relatively early stage. It is only now as we publish this paper that actual physical changes to the built form in Eastside are being completed on a few development plots, as a result of the regeneration programme—many individual projects have yet even to finalise designs. Due to this, our data represent only early conclusions and we are limited at this stage of the research to analysis of the conceptualisation of sustainability through document and interview analysis. We are not able, as yet, to comment on what impact these diverse, rather fractured conceptualisations of sustainability are having on the actual outcome of the built form in Eastside. We hope that this will be the subject of further research to extend our findings. The explicit distinction we have drawn in this paper between the socioeconomic and environmental dimensions of sustainability, and the conceptualisations of problem and action in relation to sustainability, now need to be assessed in terms of what difference they make to outcomes in the built form. In this way, we can build towards a greater understanding of what is required to move the conceptualisation of sustainability in Eastside, and in other regeneration programmes, towards more transformative positions and achieve genuine change.

Notes

1. The first two authors were members of ESAG.
2. For further information about the research programme, see: www.esr.bham.ac.uk.

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