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Social Sustainability and New Communities: Moving from concept to practice in the UK

Saffron Woodcraft[*]

Founding Director, Social Life, 18 Victoria Park Square, London E2 9PF

Abstract

Social sustainability is an emerging field of urban planning policy and practice. While a social dimension to sustainability is now widely accepted as important (alongside environmental and economic dimensions) it is under-theorized and not clearly defined in policy discourse or practice. Much academic work about social sustainability focuses on defining and theorising the multiple and fluid interpretations of the concept, ranging from philosophical and political ideas of human rights, wellbeing, equality and social justice, to related ideas of community social capital and empowerment. This paper argues that closer attention should be paid to the practical and operational aspects of social sustainability, in particular, to understanding how the concept is translated by different actors and used as justification for making decisions about interventions and investments in the material and social fabric of cities.

1. Introduction

"… [social sustainability] is a concept in chaos, and we argue that this severely compromises its importance and utility." (Vallance et al. 2011). Social sustainability is an emerging area of urban planning policy and practice in the developed and developing world (Dempsey et al. 2011; Colantonio & T. Dixon 2010; Karuppannan & Sivam 2011). The concept is increasingly used by governments, public agencies, policy makers, NGOs and corporations to frame decisions about urban development, regeneration and housing, as part of a burgeoning policy discourse on the sustainability and resilience of cities. Porter and

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[*] Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000 .
E-mail address: saffron.woodcraft@social-life.co.

Davoudi call for the close scrutiny and careful deconstruction of 'elastic concepts' like sustainability, in particular where they are appropriated and applied to the framing of planning problems (2012, p.329). Yet the social sustainability literature has been described as fragmented (Weingaertner & Moberg 2011), even conceptually chaotic (Vallance et al. 2011). Dempsey et al identify describe the lack of theoretical debate about defining social sustainability as an example of "the policy agenda overtaking the research agenda" (2011, p.290). While there is a need for a more rigorous approach to defining and theorizing social sustainability there is also an argument for research that pays close attention to the discourse of social sustainability and how it is deployed in planning practice; in particular, to understanding how the concept is translated by different actors and used as justification for making decisions about interventions and investments in the material and social fabric of cities. This paper explores the emergence of social sustainability as a conceptual field and a planning discourse, and identifies some of the challenges of operationalizing social sustainability as a planning practice. It draws on literature about social sustainability but is also informed by my experience as an applied researcher working with housing providers, local authorities and community organisations in the UK.

2. Situating Social Sustainability

Social sustainability as a distinct concept is a relatively recent addition to both policy discourse and an extensive academic literature about the theory, policy and practice of sustainable development (Vallance et al. 2011; Murphy 2012).† Although it is 25 years since the Brundtland Report‡ established the concept of sustainable development around the tripartite of environmental, economic and social sustainability, the social aspect has consistently received less attention in policy and research terms (McKenzie 2004; Manzi 2010; Vallance et al. 2011; Murphy 2012).

Over the past decade however, social sustainability has emerged as a field of research, policy and practice. A diverse set of stakeholders are involved in initiatives to apply social sustainability as a planning practice with a particular focus on the social outcomes of urban development, housing and regeneration. Global actors include the World Bank, United Nations Environment Programme, European Investment Bank, and European Bank for Reconstruction and Development, all of which are involved in programmes, policy and research that focus explicitly on social sustainability (as distinct from the social implications of environmental management and the social outcomes of economic development). Cross-sector strategies focusing on social sustainability and urban development involving central and local governments, state agencies, universities, and public and private housing providers can be found in the UK, Australia, Canada, Israel and Sweden. Other initiatives connect social sustainability to work on labour rights, ethical tourism and socially responsible finance, while a small, but growing number, of tools for measuring and reporting on social sustainability are being created for policymakers and practitioners.§

Arguably, much of the emerging work on social sustainability falls into what Bristow calls "the 'grey area' between academic, policy and practice discourse" (As quoted Davoudi et al. 2012). Here, there are parallels to be drawn between the embryonic field of social sustainability and the expanding (but still

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† This wealth of literature encompasses specific bodies of work on environmental justice, ecological modernization, environmental policy, green social policy, and sustainable development indicators (as categorized by Murphy 2012), and an abundance of research about green buildings and sustainable urban design.

‡ World Commission on Environment and Development, 1987

§ Measurement tools and frameworks that report on social sustainability include: Social Accountability, AccountAbility, Igloo's Footprint (sustainable investment policies), The Berkeley Group Social Sustainability Measurement Framework.

relatively new) concept of resilience as a planning theory and practice where Davoudi et al note "it is not quite clear what resilience means, beyond the simple assumption that it is good to be resilient" (2012).

The same could be said of social sustainability. It is not quite clear what it means in conceptual or practical terms, but there is growing interest in its potential among planners, politicians and policymakers who need to mediate the tensions that arise from attempting to act on the principles of sustainable development.

A literal reading of social sustainability would interpret it as the ability to maintain society; drawing on the definition of social as 'relating to society or its organization', and sustainable as 'able to be maintained at a certain rate or level' (Oxford Dictionaries 2012). However, the cross-disciplinary literature of social sustainability has identified multiple, often conflicting, interpretations of the term that encompass a broad range of philosophical, political and practical issues. For example, (Sachs 1999; Agyeman 2008) argue social sustainability must be grounded in equality, democracy and social justice. Vallance et al (2011) identify work addressing underdevelopment, basic needs, and the promotion of stronger environmental ethics. Other authors emphasize the preservation of social values, cultural traditions and ways of life (Barbier 1987; Koning 2002; Vallance et al. 2011).

The challenge of reaching a definitive conception of social sustainability is a recurring theme in the literature (Dillard et al. 2009; Dempsey et al. 2011; Weingaertner & Moberg 2011; Murphy 2012). However, in spite of its multiple interpretations and a sense of ambiguity about the policy objectives, there appears to be a consensus in the literature that social sustainability incorporates a set of underlying themes that could be described as social capital, human capital and well-being (Colantonio & T. Dixon 2010; Dempsey et al. 2011; Weingaertner & Moberg 2011; Murphy 2012; Magee et al. 2012).

Writing in 1996, Campbell uses the concept of the "planner's triangle" to articulate the inherent conflicts between promoting economic growth, constructing environmentally sound cities, and advocating social justice. He describes how this conceptual model can generate different perspectives about urban development: the city as an economic space for production, consumption and innovation; the city as an ecological space in competition with nature for scarce resources; and the city as a social space that generates competition over distribution of resources, opportunities and services. And, he details the practical challenges planners face as they try to balance divergent priorities in the context of professional, fiscal (and arguably political) constraints.

These tensions remain unresolved in contemporary planning practice and arguably, the emergence of social sustainability as a contemporary policy discourse can be seen as a response to these ongoing difficulties. It is important however, to recognize other political and economic conditions that are shaping social sustainability as a nascent planning practice. Among these is a political narrative of economic decline and scarce public resources evident in policy and planning discourse in planning in the UK, Europe and North America, which Keith Shaw describes as the "lexicon of the new austerity" (Davoudi et al. 2012). What Shaw describes is a 'perfect storm' of forces: global economic recession, public sector spending crises, population growth, housing need, urban development and expansion, pressure on natural resources and the need for climate change mitigation. Increasingly however, there is another important strand of narrative in the UK and Europe that links the challenges of sustainable development to the threat of social unrest. The 2011 riots in London, Paris, Madrid and other European cities are frequently connected in planning discourse to failing urban development strategies, in particular, to the extremes of income inequality, differential access to services and opportunities, and unaffordable housing experienced by many city dwellers.

In the UK at least, the combination of recession, riots, urban growth and housing need, has created an opening in discourse on planning policy to question current thinking and practice, which "arguably creates a space for innovation and change that we have not seen for decades" (Bertolini et al. 2011, p.430).

3. Is it 'Good' to be Socially Sustainable?

It can be argued that social sustainability has become shorthand in policy discourse for creating places 'that work' - where people want to live now and in the future (Bacon et al. 2012; Woodcraft 2011). Crucially however, the usefulness of social sustainability as a planning tool depends on how it is enacted in practice. A radical application of social sustainability could open up opportunities for debate in planning discourse about what a 'good life' and a 'good city' mean for urban populations of different social and ethnic backgrounds: an aspect of debate which is absent from much of the policy discourse and literature about social sustainability. While an uncritical acceptance of the term social sustainability could at best diminish its potential as a planning tool, and at worst exacerbate the negative social outcomes of urban development: gentrification rather than renewal, lack of affordable housing, poor spatial and social integration being some of them.

It is important to recognize that the relationship between the social, material and natural worlds has long been a concern in urban planning. Many of the concepts, themes and policy objectives contained in current conceptualizations of social sustainability are well-established as individual fields of social policy research and practice, notably social capital, social cohesion, wellbeing and quality of life. In the UK policy on sustainable development and sustainable communities has been widely debated over the past decade. Public agencies and programmes like the Sustainable Development Commission (SDC), the Commission on Architecture and the Built Environment (CABE), and the Egan Review (2004) did much to promote the sustainable communities policy agenda and to develop research exploring the connection between the built environment and social experience. However, shifts in government policy and spending priorities, changes to the planning system, and lack of resources and capacity in local government have stalled debate, development and practical application of many aspects of this agenda.

Social sustainability is a different discourse and one that is emerging under different conditions to the pan-European sustainable communities agenda. Although it draws on familiar themes and concepts it attempts to combine both normative ideas about sustainability, such as social justice, equitable resource distribution, and wellbeing, by translating them into practical policy objectives and interventions that can be materialized in urban planning and development.

There are several important issues that need to be brought into planning policy discourse about social sustainability as the idea gains ground. First, is to pose a set of questions about the purpose of social sustainability. Who and what is being sustained? Why and at what cost?

Social sustainability, like other notions of sustainability, is not an a-political discourse or a neutral practice. Arguments made in the name of sustainability influence political decision-making, policy, investments and interventions that have real and long-term consequences for individuals, places and institutions. There are questions to be addressed about power, voice, access to resources, decision-making and accountability, associated with social sustainability as an emergent planning practice. Key issues are around legitimacy and boundaries: who are the stakeholders involved in promoting social sustainability as a planning discourse, what kind of conceptualizations are they enacting, and for what purpose?

Littig and Griessler identify that the social objectives of sustainable development are often a function of power rather than coherent policy (2005). Clearly politics is central to how sustainability discourse is translated into policy, and measures to assess these interventions. Close attention must be paid to the different political and sociocultural priorities that are shaping these decisions (Colantonio 2007) and to the stakeholders who are involved in promoting and enacting social sustainability. As Weingartner and Moberg describe: "Promoting social sustainability issues within the urban development context is largely assumed to be a role of the public sector, and more specifically local authorities; but other groups such as politicians, party networks, lobby groups, business interests, landowners, developers and residents also have responsibilities in this complex process of governance." (Healey 2007, as quoted 2011).

Arguably the language of planning policy de-politicizes the inevitable conflicts and trade-offs that will arise as decisions are made about investments in different places. The recognition of conflict as an integral part of the planning process is important.   There is an unquestioning acceptance that sustainability is a good thing and will "generate desirable outcomes for all, all of the time" (Vallance et al. 2011, p.343), which demands critical attention. For example, the UK's recent National Planning Policy Framework (NPPF) is explicit in identifying a social role for the planning system but the language neutralizes the conflicts that inevitably arise in planning practice, say, between social needs and market-driven property development, or in allocating resources between communities with different needs. The NPPF states as one of its objectives: " … supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being" (Department for Communities and Local 2012).

Another way to explore these issues is to ask: is social sustainability what is needed? Is resilience, with its emphasis on adaptive capacity, fluidity and constant change, a more valuable idea for planning practice? As Davoudi et al describe: " The comfort with which resilience thinking eschews any particular state to be "normal" is also potentially very liberating. If, after a disturbance or upheaval of some kind, a system transforms into something different, then this is not seen as a failure in resilience terms, but as an inherent possibility within that system. Under these assumptions, we would, for example, be better armed if we cease talking about returning to a "normal" housing market or a "normal" economy, and instead focus on the possibilities for transformation and change to a potentially better housing market or more just distribution of resources." (2012).

Second is the challenge of translating conceptual ideas about social sustainability into practical planning tools that retain integrity. A key question is what can social sustainability deliver as a planning framework? Does the evidence base exist to determine the kind of interventions and practices that can support social sustainability? If so, can these concepts be incorporated in planning practice to achieve positive social outcomes? Campbell identifies the challenge of translating thinking about sustainability into planning practice and notes: "The challenge for planners is to write the best translations among the languages of the economic, the ecological, and the social views, and to avoid a quasi-colonial dominance by the economic lingua franca, by creating equal two-way translations." (Campbell 1996).

The scale at which social sustainability is operationalized also presents a challenge. Sustainability strategies tend to be developed and debated at citywide level (Karuppannan & Sivam 2011) but social sustainability is conceptualized, and is beginning to be practiced, at neighbourhood scale. 'Scaling up' to engage with citywide planning strategies, without losing the social specificity of neighbourhood experience will be difficult – especially so in the current UK context where local planning authorities are struggling with financial pressures, staff cuts and new planning legislation.

4. Measuring What We Know about Social Sustainability

Jenks suggests that sustainable cities are places where people actually want to live and therefore have a degree of support from residents. I argue that an important addition to this concept is creating cities and communities where people are able to live, which means paying close attention to the social problems that could be addressed by applying social sustainability as planning framework. A radical application of social sustainability to planning practice could open up opportunities for rethinking the linkages between social experience, urban development, economic growth and ecological systems. In practical terms this could create space for a debate about the what 'affordable' housing means, different financial models for delivering residential housing, alternative approaches to regeneration, and reconnecting economic and

environmental strategies to social experience. However, there is still much work to do in clearly defining the concept of social sustainability in planning terms and building the evidence base for what supports social sustainability at the neighbourhood level.

Table 1. Urban social sustainability: contributory factors as identified in the review of literature (in no particular order) by Dempsey et al., 2009 (As quoted Dempsey et al. 2011)

Non-physical factors	Predominantly physical factors
Education and training	Urbanity
Social justice: inter- and intra-generational	Attractive public realm
Participation and local democracy	Decent housing
Health, quality of life and well-being	Local environmental quality and amenity
Social inclusion (and eradication of social exclusion)	Accessibility (e.g. to local services and facilities/employment/green space)
Social capital	Sustainable urban design
Community	Neighbourhood
Safety	Walkable neighbourhood: pedestrian friendly
Mixed tenure	
Fair distribution of income	
Social order	
Social cohesion	
Community cohesion (i.e. cohesion between and among different groups)	
Social networks	
Social interaction	
Sense of community and belonging	
Employment	
Residential stability (vs turnover)	
Active community organizations	
Cultural traditions	

I will briefly describe a project by Social Life** and Professor Tim Dixon from the University of Reading, undertaken in 2012 to attempt to innovate in this area.†† Working with The Berkeley Group, a UK house builder, the research team has developed a set of indicators to measure social sustainability in new housing developments by collecting resident survey and site survey data. The purpose of the work was to create and test a practical and cost-effective measurement framework that could be used by The Berkeley Group across a wide range of its developments. This is a very brief narrative about the work, which was completed in September 2012. A full discussion about the project including details about the

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** Social Life is a new social enterprise created by the Young Foundation in 2012 to develop work on social sustainability and innovation in placemaking. See www.social-life.co
†† See Bacon, N., Cochrane, Douglas & Woodcraft, S., 2012. *Creating strong communities: how to measure the social sustainability of new housing developments*, London: The Berkeley Group.

research methodology, findings and lessons, will be published in a separate paper in 2012/13. The research team used social sustainability as a conceptual framework to bring together and measure a wide range of factors that are known to influence quality of life and community strength. A review of academic literature and policy work identified what is known theoretically and practically about social sustainability and its relationship to the built environment (Bramley 2006; Colantonio 2007; Dillard et al. 2009; Colantonio & T. Dixon 2010; Vallance et al. 2011; Dempsey et al. 2011; Woodcraft 2011; Weingaertner & Moberg 2011; Murphy 2012; Magee et al. 2012;). Insights from this work were combined with evidence from UK national government surveys about the relationship between wellbeing, quality of life and local factors such as community involvement. See Table 1 for an example of the factors identified as contributing to urban social sustainability from the literature reviewed for this project.

4.1. Developing a framework and indicator sets

Based on this review and detailed qualitative work undertaken by Social Life in 2011,[‡‡] the research team developed the following definition of social sustainability that could be operationalized by The Berkeley Group: "Social sustainability is about people's quality of life, now and in the future. It describes the extent to which a neighbourhood supports individual and collective wellbeing. Social sustainability combines design of the physical environment with a focus on how the people who live in and use a space relate to each other and function as a community. It is enhanced by development which provides the right infrastructure to support a strong social and cultural life, opportunities for people to get involved, and scope for the place and the community to evolve." (Bacon et al. 2012, p.9) A framework and a set of metrics were developed to measure the experience of residents living in new housing developments against this definition of social sustainability. The framework consists of three dimensions (see figure 1):

- 'Amenities and infrastructure' captures past attempts to lay the foundations for a thriving community through design and provision of services.
- 'Social and cultural life' illustrates the present, how people experience the development.
- 'Voice and influence' illustrates the residents' potential to shape their future.

A fourth dimension, 'change in the neighbourhood' captures the impact over time of a new community on the surrounding neighbourhoods and wider area. It was identified as important to a practical assessment of social sustainability at the local level, in particular for understanding how new development changes the demographic profile of a neighbourhood and housing affordability. However, this dimension was not included in the initial testing process because the chosen research method involved benchmarking primary survey data against large-scale national datasets. The dataset required to benchmark the 'change in the neighbourhood' dimension is the 2011 Census, which will not be available until the end of 2012.

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[‡‡] See Woodcraft, S., 2011. *Design for Social Sustainability: A framework for creating thriving communities*, London: The Young Foundation.
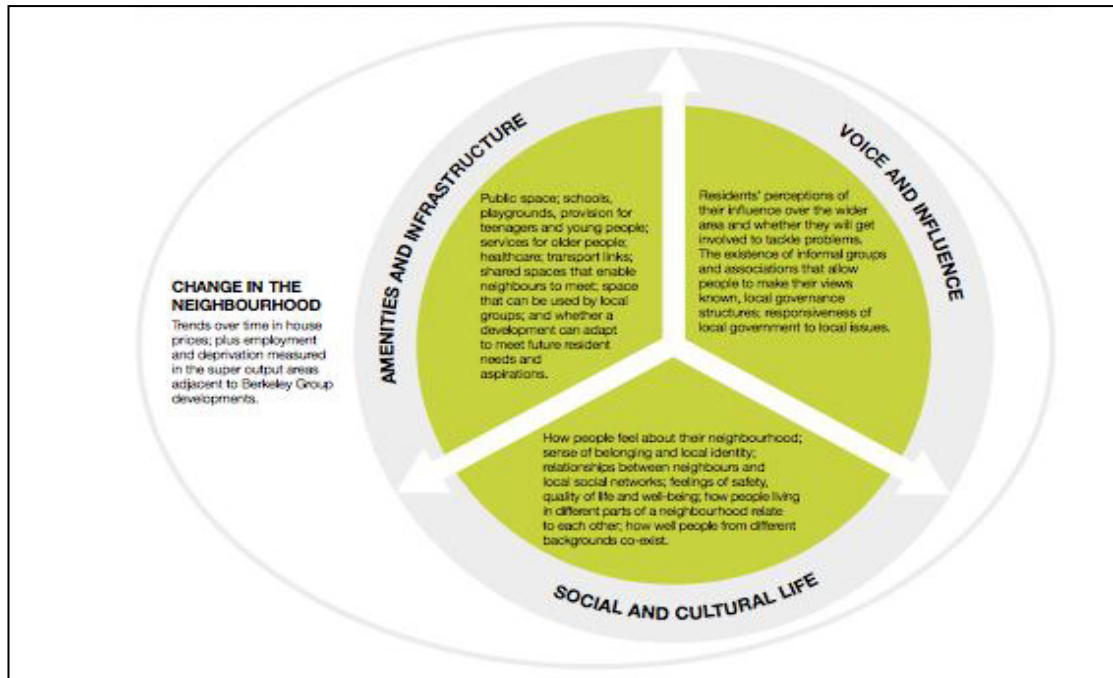
Fig. 1. Four dimensions of social sustainability assessment framework

Table 2. National surveys included in the analysis

British Household Panel Survey/Understanding Society (BHPS/US)
• Institute for Social and Economic Research (ISER), 1996 to present
• 100,000 individuals in 40,000 British households
• Data used from 2008-09 Innovation Panel Waves 1-2
Taking Part (TP)
• Department of Culture Media and Sport, 2005 to present
• 14,000 participants
• Data taken from 2010-2011 survey
Crime Survey for England and Wales (formerly British Crime Survey (BCS))
• Home Office,1986 to present
• 51,000 participants
• Data taken from 2010-2011 survey
Citizenship Survey (CS)
• Department for Communities and Local Government, 2001 to 2011 (biannual to 2007, annual 2008 to 2011)
• 11,000 participants
• Data taken from 2009-10 survey

The three different dimensions of the framework contain 13 different indicators. Each indicator is informed by a number of different questions, drawn primarily from pre-existing national datasets or industry-standard assessment tools. In total, 45 different questions were used to inform the indicators. This approach was chosen because the research team wanted where possible, to develop a resident survey and site survey that used pre-tested and validated questions, and to have the ability to benchmark the resident survey findings against national datasets. The indicators for the 'social and cultural life' and 'voice and influence' dimensions were created by selecting questions from four national datasets: the Understanding Society Survey, the Taking Part Survey, the Crime Survey for England and Wales, and the Citizenship Survey. A number of questions were created for the social and cultural life dimension where appropriate questions did not already exist.[§§]

The indicators from the 'amenities and infrastructure' dimension of the framework were created by selecting questions from the Building for Life assessment tool,[***] an industry standard that is endorsed by the British government; from the Public Transport Accessibility Level (PTAL) tool (an assessment used widely in London); and from additional sources of secondary data about residents' travel habits. Additionally, a number of questions were created for this dimension where appropriate questions did not already exist.
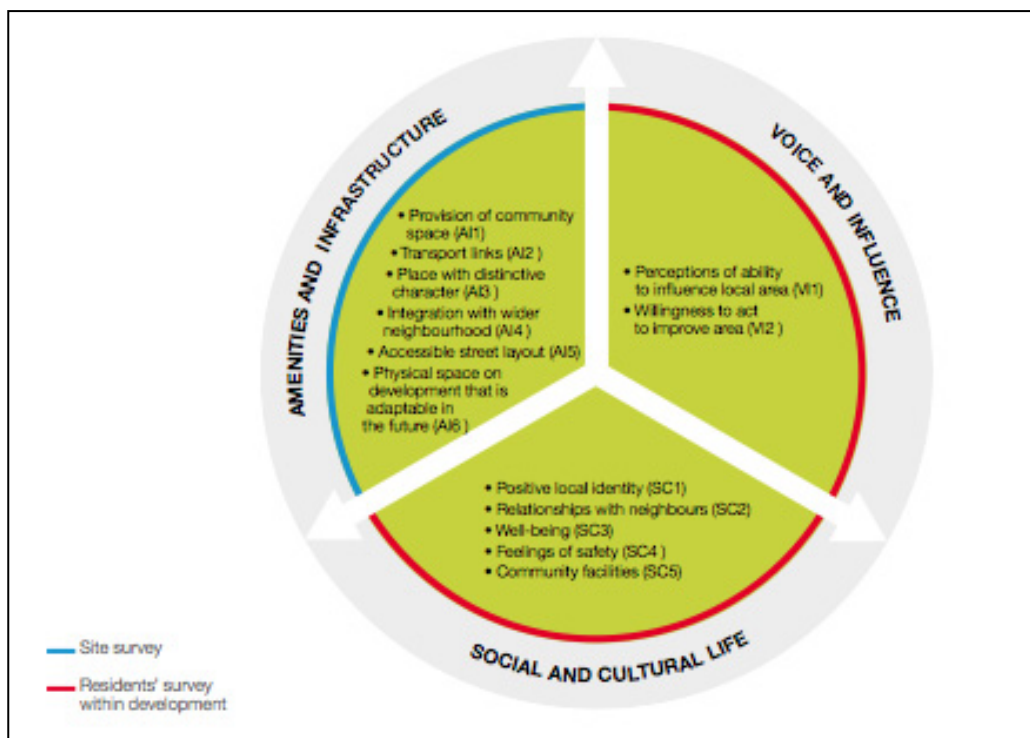

Fig. 2. 13 indicators in the social sustainability assessment framework

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[§§] Full details of the questions used in the resident survey and site survey can be found ip33-37 here http://www.berkeleygroup.co.uk/media/pdf/f/l/BG_Socail_Sus_essay_PART2.pdf
[***] Building for Life is an assessment tool developed by the Commission for Architecture and the Built Environment. See: http://www.designcouncil.org.uk/our-work/cabe/sectors/housing/building-for-life/

4.2. Testing the framework

The framework was tested by carrying out an assessment of four different housing developments that had been completed in the past five years (see table 3 for summary details.) On each of the four sites a resident survey and site survey were carried out and a small number of contextual interviews with local stakeholders (such as the estate manager, a community representative or council officer) provided additional qualitative insights to aid interpretation of the survey results.   In total 598 face-to-face interviews were carried out with residents of the four housing developments. A quota sampling method was used to ensure the survey responses reflected the tenure mix for each housing development.

Table 3. The four test sites

Name of development	Typology	Where	Brief description
Empire Square	Regeneration	In London Borough of Southwark, South London. Inner city.	Former warehouse site, 567 homes, 30% affordable
The Hamptons	Suburban dwellings	In London Borough of Sutton, South West London. Suburbs.	Former sewage works, 645 homes, 33% affordable
Imperial Wharf	Urban	In London Borough of Hammersmith and Fulham. Inner city.	Former gas works, 1428 homes, 47% affordable
Knowle Village	Rural/semi-rural	In Winchester City Council area, Hampshire. Rural.	Former hospital for mentally ill, 701 homes, 31% affordable

The results of the resident surveys were benchmarked against geo-demographic classifications. The Office of National Statistics Output Area Classification (OAC) was used for questions taken from Understanding Society and Taking Part surveys, and the Index of Multiple Deprivation (IMD) for the Crime Survey for England and Wales and the Citizenship survey. This enabled us to compare the responses of people living on the four Berkeley housing developments to the average responses that would be expected for people from comparable social groups in comparable areas.

The differences between the actual and expected scores were subjected to statistical testing. These results were then used to populate the 'voice and influence' and 'social and cultural life' dimensions of the framework. These benchmarks are referred to as the 'benchmarks for comparable places'. A small number of questions underpinning the 'social and cultural life' dimension were created specifically for the framework to fill gaps where there were no appropriate pre-existing questions from national surveys. Consequently, it was not possible to benchmark the results of these questions, so an assessment was generated by comparing results across the four sites.

The results for the 'amenities and infrastructure' dimension of the framework were based on the site survey, which followed the structure and scoring system of the original Building for Life survey, and a combination of PTAL scores and assessments of secondary data about residents' travel patterns and transport provision on the developments.

4.3. Assessing local social sustainability

The performance of the four developments was rated against the different indicators and a RAG (red-yellow-green) rating system created to provide a simple graphic representation of the results. The RAG Rating system was adopted for two reasons: to present the results in a form that is practical and meaningful for different audiences but in particular, to enable development teams and local government partners to consider how they plan and invest in new housing developments at different points in the planning process; and secondly to enable presentation of a range of responses rather than a single social sustainability 'score'. RAG Ratings were constructed to reflect the results from different data sources, where green indicates a positive result, higher or better than would be expected; yellow a satisfactory result in line with comparable areas, and red a negative response, lower than would be expected. An example of the RAG Rating tool can be seen in Figure 3.
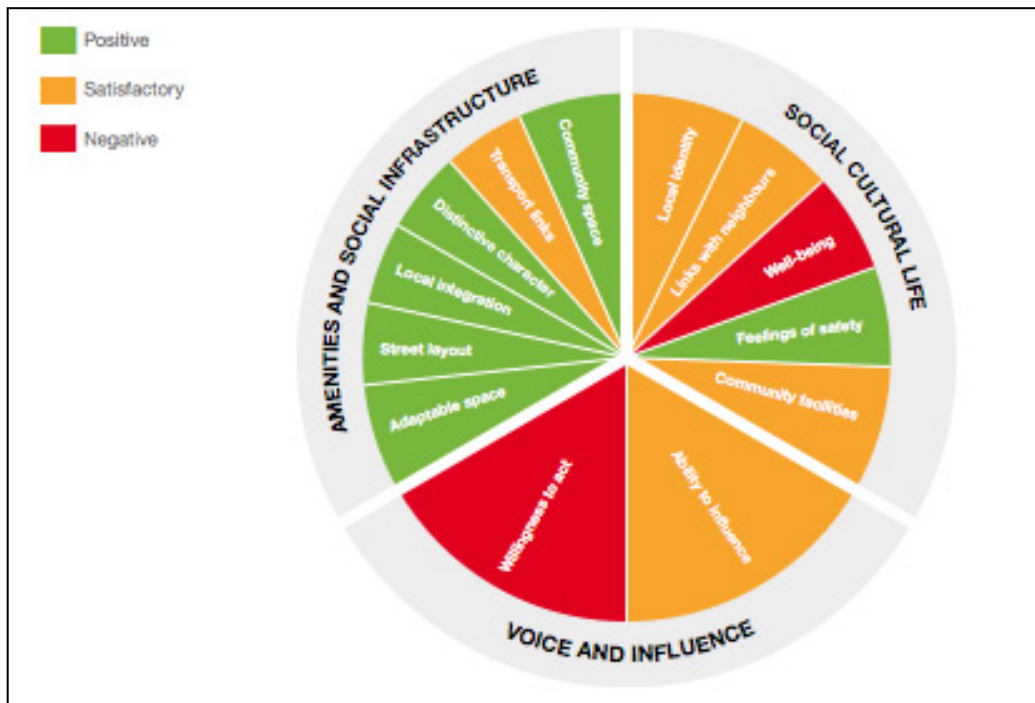

Fig. 3. RAG Rating tool for The Hamptons

4.4. Emerging lessons

This project is experimental and has only recently been completed so there is still much to consider and learn from the work. It is the first time a house builder in the UK has attempted to operationalize and measure the concept of social sustainability. Findings from the testing work needs to be incorporated into development planning processes by The Berkeley Group. However, there are initial lessons from the project that can be identified. Some of these are detailed below:

- *Need for analysis of underlying factors:* The measurement framework has been developed to provide a single house builder with the means to highlight findings about specific developments (whether positive or negative). It has been designed to help illuminate emerging patterns by enabling broad-brush comparisons with appropriate benchmarks for comparable places or other new housing developments. It does not, without supplementary analysis, identify the underlying factors or practical concerns that play an important part in shaping how people experience a place.

- *Contextual, qualitative work:* In-depth contextual interviews were carried out to enable the research team to make interpret the survey findings. Although these insights were not scored or formerly represented in the final assessments, they became an essential part of the project enabling contextual analysis of the results.

- *Snapshot versus longitudinal data:* This measurement framework has been designed as a practical, replicable tool. It is has not been created to track a large sample of residents over a long period but to provide a snapshot of community strength and quality of life at a point in time. Our approach is not as robust as a large-scale longitudinal study in tracking changes in communities and individuals, and neither is it designed to measure the impact of any specific intervention. However, if applied periodically (say two, five and 10 years after completion) and/or to a range of different developments (as in this study), the framework can provide opportunities for meaningful comparisons over time. What is lost in robustness is gained in ease of use – and meaningful information emerges from this relatively low cost approach.

- *Mixed methods and data sources:* One of the major challenges in constructing this framework was combining the different types of data that underpin each indicator. Different types of data were selected to contribute different insights and perspectives to the framework. The site survey work focuses on predicting the likely outcomes for residents based on the well-established assumptions and experience of urban design practitioners, that good design and provision of community facilities will have a positive impact on outcomes for residents. The residents' survey attempts to measure what happens in communities after they are completed. For example, the data reflected in the 'social and cultural life' dimension investigates how people feel about their neighbourhood, their neighbours and their own wellbeing. The residents survey also attempts to look ahead to capture data about whether residents are willing and able to have a say in shaping the future of their local area ('voice and influence'). It was impossible to directly aggregate information from the site survey (with a three tier grading system from a single source) and the residents survey (with a broader sample with statistically benchmarked responses). Doing this would have generated misleading results. The two types of data were therefore split between different dimensions of the framework.

- *Scope:* This measurement framework has been designed for a particular housing developer. The focus therefore was on the aspects of community strength and quality of life that a house builder could reasonably be held directly accountable for, or could influence through relationships with public agencies. This has meant that some important dimensions of social sustainability are not represented in this framework; specifically, measures focused on social equity and justice and access to education and employment. They have been excluded where they are beyond the control or influence of a house builder.

5. Conclusion

Social sustainability is emerging as an area of planning policy and practice in the UK. While there is clearly a need for a more rigorous approach to defining and theorizing social sustainability there is still much work needed to examine how the idea is deployed in planning practice, in particular, to understanding how the concept is translated by different actors and used as justification for making

decisions about interventions and investments in the material and social fabric of cities. In policy and practice terms more work is needed to define the concept of social sustainability in planning theory and policy, and to investigate what supports social sustainability at the neighbourhood level to ensure the policy agenda does not overtake the research and evidence base as Dempsey *et al* identify (2011, p.290).

Acknowledgements

References

Agyeman, J., (2008). Toward a "just" sustainability? *Continuum*, 22(6), pp.751–756. Available at:
    http://www.tandfonline.com/doi/abs/10.1080/10304310802452487 [Accessed July 4, 2012].
Bacon, N., Cochrane, Douglas & Woodcraft, S., 2012. *Creating strong communities: how to measure the social sustainability of new housing developments*, London: The Berkeley Group.
Barbier, E.B., (1987). The Concept of Sustainable Economic Development. *Environmental Conservation*, 14(02), pp.101–110.
Bertolini, L. et al., (2011). Planning and the Recession. *Planning Theory & Practice*, 12(3), pp.429–451. Available at:
    http://www.tandfonline.com/doi/abs/10.1080/14649357.2011.617499 [Accessed September 19, 2012].
Bramley, G., (2006). WHAT IS "SOCIAL SUSTAINABILITY", AND HOW DO OUR EXISTING URBAN FORMS PERFORM IN NURTURING IT? In Planning Research Conference. Bartlett School of Planning, UCL, LONDON.
Campbell, S., (1996). Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. *Journal of the American Planning Association*, 62(3), p.296. Available at:
    http://www.cob.sjsu.edu/osland_a/Substantiability%20Articles/greencitiesgrowingcitiesarticle.pdf [Accessed September 25, 2012].
Colantonio, A., (2007). *Social Sustainability: An Exploratory Analysis of its Definition, Assessment Methods, Metrics and Tools: Best Practice from Urban Renewal in the EU*, Oxford: Oxford Brooks University.
Colantonio, A. & Dixon, T., 2010. *Urban Regeneration & Social Sustainability: Best Practice from European Cities*, John Wiley & Sons.
Davoudi, S. et al., (2012). Resilience: A Bridging Concept or a Dead End? "Reframing" Resilience: Challenges for Planning Theory and Practice Interacting Traps: Resilience Assessment of a Pasture Management System in Northern Afghanistan Urban Resilience: What Does it Mean in Planning Practice? Resilience as a Useful Concept for Climate Change Adaptation? The Politics of Resilience for Planning: A Cautionary Note. *Planning Theory & Practice*, 13(2), pp.299–333. Available at:
    http://www.tandfonline.com/doi/abs/10.1080/14649357.2012.677124 [Accessed September 19, 2012].
Dempsey, N. et al., (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5), pp.289–300. Available at: http://doi.wiley.com/10.1002/sd.417 [Accessed July 4, 2012].
Department for Communities and Local, 2012. National Planning Policy Framework. Available at:
    http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyframework/ [Accessed September 28, 2012].
Department for Communities and Local, (2004). The Egan Review: Skills for Sustainable Communities. Available at:
    http://www.communities.gov.uk/publications/communities/eganreview [Accessed September 28, 2012].
Dillard, J., Dujon, V. & King, M.C. eds., (2009). *Understanding the social dimension of sustainability*, New York; Abingdon: Routledge.
Karuppannan, S. & Sivam, A., (2011). Social sustainability and neighbourhood design: an investigation of residents' satisfaction in Delhi. *Local Environment*, 16(9), pp.849–870. Available at:
    http://www.tandfonline.com/doi/abs/10.1080/13549839.2011.607159 [Accessed February 19, 2012].

Koning, J., 2002. *Social sustainability in a globalizing world: context, theory and methodology explored*, The Hague: UNESCO. Available at: http://portal.unesco.org/pv_obj_cache/pv_obj_id_8E1EC1D61DD174F1C413A101BF68527466320700/filename/moreonmost. pdf#page=61.

Littig, B. & Griessler, E., (2005). Social sustainability: a catchword between political pragmatism and social theory. *International Journal of Sustainable Development*, 8(1), pp.65–79. Available at: http://econpapers.repec.org/article/idsijsusd/v_3a8_3ay_3a2005_3ai_3a1_3ap_3a65-79.htm [Accessed September 28, 2012].

Magee, L., Scerri, A. & James, P., (2012). Measuring Social Sustainability: A Community-Centred Approach. *Applied Research in Quality of Life*, 7(3), pp.239–261. Available at: http://www.springerlink.com.libproxy.ucl.ac.uk/content/6887603286343817/abstract/ [Accessed August 15, 2012].

Manzi, T. & et eds., (2010). *Social sustainability in urban areas : communities, connectivity and the urban fabric*, London: Earthscan.

McKenzie, S., (2004). *Social Sustainability: Towards Some Definitions*, Magill, South Australia: Hawke Research Institute.

Murphy, K., (2012). The social pillar of sustainable development: a literature review and framework for policy analysis. *Sustainability: Science, Practice, & Policy*, 8(1).

Sachs, I., (1999). Social sustainability and whole development: exploring the dimensions of sustainable development. In *Sustainability and the Social Sciences*. London: Zed Books.

Vallance, S., Perkins, H.C. & Dixon, J.E., (2011). What is social sustainability? A clarification of concepts. *Geoforum*, 42, pp.342–248.

Weingaertner, C. & Moberg, Å., (2011). Exploring Social Sustainability: Learning from Perspectives on Urban Development and Companies and Products. *Sustainable Development*, p.n/a–n/a. Available at: http://doi.wiley.com/10.1002/sd.536 [Accessed July 4, 2012].

Woodcraft, S., (2011). *Design for Social Sustainability: A framework for creating thriving communities*, London: The Young Foundation.

World Commission on Environment and Development, (1987). Our common future.