Re-building the social capital: lessons from the City of Edinburgh

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Abstract

This paper intends to explore the relationship between the built environment and social sustainability. It is based on both the authors’ experiences of developing a sustainable development strategy for the City of Edinburgh and the work carried out by students in the Course “Sustainable Cities” (University of Edinburgh, UK – Department of Architecture 2001). The teaching explored some of the paradoxes inherent in the idea of social sustainability and suggested how some new approaches to the planning of public urban space can lead to a re-engineering of the city and the realisation of what the authors call the sustainability potential of urban living.

This paper offers a conceptual framework for urban planning and the formation of public space in which social inclusion is accepted as an integral condition of sustainable development.

The work advocates a planning system which seeks to bring together the social, economic and environmental components of sustainability and which recognises the critical importance of public space to the processes of social learning, public participation, social inclusion and social integration – all vital processes for enabling a city to realise its full sustainability potential.
1 Introduction: Current defects as design opportunities

Since it is simply not possible to envisage a future that is not rooted in urban living, we must achieve a sustainable built environment.

How – as designers of spaces – can we make sure that what we build does not work against system efficiency?

This paper shall focus on the influence of the built environment on social structures. If the built environment is among the main drivers responsible for future sustainability, it is vital that architects recognise current defects as design opportunities. If as currently the built environment contributes to generating unsustainable behaviour, can the built environment change and become a ‘builder’ of the community?

The sustainability agenda is constantly evolving. Whilst achieving massive efficiency gains in the way we plan, design, construct and operate buildings must remains a primary objective of policy, it is now becoming clear that the ultimate barriers to change are neither technical nor economic but social.

2 The need of a sustainable social capital

Offering economic or technical ‘solutions’ that are insensitive to issues of equity and inclusion is no longer an option. Increasingly powerful forces now successfully oppose such actions by companies and governments on ethical grounds. This is a lesson being slowly, and often painfully, learned by big business in confronting the social values agenda. Without diminishing the ethical case for ‘right actions’, the authors want to add a second level of argument – that inequity and exclusion simply do not make ecological sense. It is a fundamental presumption of Agenda 21 that sustainable development is only possible if it is built by, through and with the commitment of local communities.

Any action or policy that causes social division and threatens social cohesion weakens the capacity of a community to work together to solve its own problems, to build towards a collective social sustainability and to ensure the effective functioning of life-supporting eco-systems.

We therefore need the built environment to enhance Social Capital, which is, according to Robert Putnam, the working product of interpersonal networks, contacts, knowledge and related human resources.

2.1 The focus on social sustainability

The significance of the challenge of building urban communities that are simultaneously resource-efficient, ecologically sound and inclusive is reflected in the identification by Medard Gable [1] of the nine most critical values for a desirable future world. Such a world, in Gable’s view, will need to be abundant, regenerative, dependable, safe, appropriate, equitable, flexible, efficient and open-minded and locally controlled.
Capra [2] argues that achieving sustainability will depend upon our ability to understand the key concepts of ecology and to apply these to fields as disparate as education, management, politics and building. Capra identifies these key principles of ecology as interdependence, networks, recycling, feedback, partnership, flexibility and diversity. He argues that whilst we cannot learn everything about human values from eco-systems, what we can learn from them is how to live sustainably.

Social sustainability is about building the capacity of local communities to be able to work out solutions to social problems for themselves, since the ability of central and local government to solve these problems is strictly limited.

Seen through the eyes of a designer, all these issues automatically become very interesting design themes, which informs the design dialogue between designer and community.

Is our built environment really interdependent, flexible, equitable and diverse? If not, can we design spaces to satisfy a system of safe, efficient, regenerative and locally controlled functions? How can we design spaces which are welcomed by local communities? How can we design a space which answers the needs of good health? How, from a design point of view, can we prevent isolation and exclusion?

The questions themselves can become clear guidelines. Some answers might fortunately seem pretty obvious, and yet are not implemented. There is room for a change.

2.2 The inequity of urban fragmentation and separation

Principal amongst the social values upon which sustainable planning must be founded is the concept of social inclusion. Social division and urban sustainability are mutually incompatible. Shifts in urban planning goals to satisfying individual and private needs, rather than the collective and public, weakens interdependence and the expression of a common interest.

To better understand the significance to sustainability of social inclusion we need first to examine the problems of social exclusion.

Urban fragmentation and separation are the manifestations of inequity. The too rich and the too poor. On one hand the power that comes with wealth is able to create the "urban citadel", the separation born of privilege and created by the demand for defensible community spaces and the expression of self interest and special identity. On the other, social division is expressed through poverty and alienation, manifest in the ghetto. Globally the urban poor are growing in number and their condition is deteriorating.

Over-consumption by the powerful and protected members of urban populations is a well documented root cause of ecological dysfunction and the perpetuation of environmental degradation on a global scale. But so too is ethnic exclusivity and socio-economic polarisation.
Sections of the urban population alienated from the mainstream of city life damage the environment and disturb the essential ecological balance of city life, to their own and others’ detriment, examples as diverse as Bombay, Los Angeles and Sao Paulo amply demonstrate [3].

If the divisive, market driven, mono-functional urban planning characteristic of Los Angeles, Houston and Phoenix fails to offer a supportive model of sustainable development then so too does much recent European urban planning practice. Think of Britain’s recent social tensions, in particular in the North of England, where the documented causes are described as social and cultural exclusion. Here there is a failure of imagination and a failure of nerve; to see the possibilities of truly "social" space and to reclaim these for the city and the citizens.

The reclaiming of public space, by the community, for the community is an essential precursor of building sustainable cities. The examples of participatory planning in Curitiba, Rotterdam, Barcelona, San Francisco Seattle and Portland all offer models - and hope.

In this paper we want to offer a conceptual framework for urban planning and the formation of urban space in which social inclusion is accepted as an integral condition of sustainable development. We want to do this by reference to a case study based on recent work we have been involved in the City of Edinburgh, which to a greater or lesser degree, faces the same problems and challenges as every other urban area of the world.

3 A sustainable development strategy for Edinburgh

Recognising these problems during its policy reviews in 1996 and 1997, the new City of Edinburgh Council took the innovative step of promoting the establishment of an independent civic Commission on Sustainable Development. The role of the Commission was to help the City give practical expression to the concept of sustainable development for politicians, planners and citizens alike and to propose a unifying policy framework for progressing the City’s sustainable development agenda on the basis of consensus.

The Commission, of which Dr. Roger Talbot was a member, was the first of its kind in the United Kingdom, and was officially launched in January 1997. Fourteen Commissioners were selected on the basis of their experience and knowledge of sustainable development in all its different aspects. Commissioners were drawn from business, the Universities, Non-Governmental Organisations, local government and other public institutions, the trade unions and community groups.

Over a period of twelve months the Commission conducted the most extensive and inclusive public consultation exercise ever carried out on behalf of a local authority in Scotland. The Commission gathered evidence from all sectors of the community and structured its findings under seven main headings [4]:
A key finding of the Commission was that Edinburgh - despite its image - was a city with a high level of social exclusion and that such a condition presented a major barrier to sustainability. The Commission concluded that progress towards ecological and economic sustainability for the City would ultimately depend upon solving the problem of social exclusion. It recommended that the City - in the interest of all its citizens, not just those excluded - should move towards a more inclusive structure which ensured that the conditions of poverty, poor health, inadequate housing and unemployment that blight areas of the city are reduced and that all in the community are given a say in the future direction of their city. The positive response of the City of Edinburgh Council to this recommendation has been to establish a second Commission to undertake a more in depth study of social exclusion within the City.

The Commission envisioned a Sustainable Edinburgh as:

**An ecologically sound city**
- which was organised on ecological principles
- where the basic resources of air, land and water are clean and free of pollution and where use of both renewable and non-renewable resources are kept within sustainable limits
- which values its existing building stock and seeks to make the best use of what it has, including a particular attention to Cultural Heritage

**An inclusive city**
- where everyone has equal access to opportunities, where people are integrated into their community and fully aware of both their rights and responsibilities
- in which the planning and development processes are as transparent and as accountable as possible

**A learning city**
- where high quality education is available to all citizens
- which has developed and maintains effective and open structures for accessing and sharing an extensive knowledge and resource base
- which has promoted and facilitated a high level understanding of sustainability principles and practices
which sees itself as a leader but is open to sharing its experiences, its ideas and its resources freely with others

A prosperous city
- where people can earn a livelihood that will provide for themselves and their dependants
- which recognises the importance of local sourcing of goods and services

A connected city
- with exemplary methods of communication
- where there is a partnership approach to research that ensures the benefits of innovation are widely applied;
- characterised by the lack of institutional barriers not the presence of them;
- in which the network rather than the hierarchy is the dominant organisational structure;

An efficiently and effectively managed city
- where the integration and co-operation of different groups within the city reduces duplication of tasks and strengthens the overall positive impact of policies;

A compact city
- where there is a high density of population living within easy access of services, leisure facilities and green space. Such a criterion is based upon the belief that high urban density leads to energy efficiency and to support for an effective integrated transport system.

Such a vision embodies key principles about the interdependency of ecological soundness and inclusiveness and about the duality of ethics and ecology. It reinforces the concept of the ‘learning city’ as a necessary precondition for urban sustainability. The conclusions of the Commission on Sustainable Development for the City of Edinburgh lend weight to the author’s contention that community learning offers a practical and highly cost effective approach to empowering communities through knowledge and helping to build the capacity for sustainable urban development. Sustainable communities will need to learn new skills and new capabilities: in essence they need to become learning communities.

4 The Course “Sustainable Cities”

(University of Edinburgh, UK – Department of Architecture 2001).
The course, organised in flexible and interdependent partnership with Dr. Roger Talbot, Richard Atkins and Gian Carlo Magnoli, aimed to focus on designing social inclusion in Edinburgh.
Twenty-four students, among which the co-authors of this paper George Ferrari, Kamil Malek Shah, and Tammy Chong, participated in this ambitious project firstly to understand the wider city, then to focus on a particular district within the city and finally to propose new interventions into Edinburgh’s existing building stock in order to address the local, regional and global issues under discussion.

Students were asked to start from the previously described work of the Commission on Sustainable Development.

Three areas of Edinburgh were selected, to represent some of the different characters of the capital:

1) the wealthy but socially sterile Stockbridge, near the central New Town;
2) the poor, physically and socially excluded, but wonderfully located Lochend, with the hidden potentialities of a city hub;
3) the bourgeois, separated, and sleepy but formerly productive sea resort of Portobello, on the East shore of the Edinburgh area.

The Students were asked to self-divide into three groups and choose an area. The first phase was to analyse the area structure, with a particular attention to the issue of social exclusion.

We soon acknowledged that Scotland parties representative of the so-called developed world, where the problem is not the complete lack of basic services, but where social exclusion is gradually eroding social cohesion, resulting in disaffected and disempowered populations. This helped in organising the ideas and classifying the different faces of Exclusion, each of which becomes a design opportunity:

Exclusion within the city means:
- Isolation, or exclusion from the social development process;
- Unemployment, or exclusion from the economy;
- Marginalisation, discrimination and rootlessness, or exclusion from the mainstream political and cultural process;
- Vulnerability, or exclusion from security networks;
- Poor health, or exclusion from the fulfilments of human rights;
- Lack of formal education, or exclusion from the fulfilments of human rights and the expression of a personal potential.

4.1 Methodology: the need of a systemic multifunctional city

Enabling communities to become sustainable, through their own actions and meeting their needs from within the resources of their own bio-regions, whilst providing equality of opportunity to participate in decision-making processes and without diminishing the chances of future generations, then represents perhaps the greatest challenge facing human society in the 21st Century. How can we design the spaces for it?
In an architectural course, with no budget limitations, once we know the City’s defects and the needed functions to compensate them, we are rather close to figuring out which kind of spaces are required to contribute to the sustainable city.

After surveying the city beginning on a regional basis and working towards individual districts and looking at the functioning of the city, the students were asked to design a system of spaces and functions that could enhance the sustainability potential of the city. A fundamental requirement was that each single design could work as a part of a more complex system, composed of twenty-four different answers to the problems of social exclusion and the students were encouraged to relate their solutions to those of their peers and the wider city context.

4.1.1 Designing a system of spaces for local democracy: the need of a tool

Fundamental questions were asked by all of us: how can the built environment respond to these present, urgent needs? How can it contribute to strengthen the cohesion of Social Capital?

We were looking at the urban environment as an artificial environment designed and built by people because of the common convenience or indeed necessity in living together, close to each other. The students were asked to analyse Edinburgh in the context of this assumption, from the architect’s point of view, with a precise aim: making Edinburgh more inclusive. We needed a methodological tool, and we eventually shaped it as a metaphor.

In the author’s view, Edinburgh and its learning community could metaphorically be seen as a coral reef: a huge structure designed to survive and built by the social behaviour of a large number of single tiny animals. Many single simple actions become a complex social behaviour. Without building such an environment the life of each organism would not be possible.

The environment built within the coral reef works very well, and not only for mere survival: a system of spaces is created where many other kinds of living beings can gather, finding an abundant, diverse, equitable, efficient, flexible, diverse, interdependent, regenerative, locally controlled, safe, and convenient place. A complex ecosystem finds eventually its space in and around the coral reef, and the mutually beneficial chain of life is established: each element performs its function in a particular space, or niche, and the system of different performances enhances both the sustainability potential and the quality of life in the ecosystem.

Like a coral reef the beauty of Edinburgh is undeniable, but also like a reef those areas of the city damaged by external forces are left barren and bereft of life. If any city or reef becomes so damaged as to lose its integrity then ultimately it dies.
From a spatial point of view, a system of both structures and spaces is required to retain the health of the city and with this frame of mind it was reasonably easy to implement the design process.

4.1.2 Historic perspective: learning from the past
Coral reefs are basically rings, which separate inner shallow waters from the depth of the ocean.

Extending the metaphor, coral reefs could be compared to many medieval cites, where an inner pattern of buildings was surrounded by a wall. At that time and at that scale the built environment did need to establish physical borders between the wild natural environment and urban life. Furthermore, the city’s ecological footprint – the area from which urban life draws resources to develop - was dictated by the twin constraints of gathering from and protecting the agricultural hinterland / foreshore by foot, animal or sail boat.

The collapse of a symbolic building, such a Town Hall or a Cathedral, was always related to a serious shock, for either political or spiritual life. If the community was able to survive such a shock (often generated by political, health-related or economic problems) those functions were put back in place: the built environment was re-built, to testify its fundamental contribution to the cohesion of social capital. If the learning community chose to change the path of development, a different built answer was configured.

4.1.3 Which design process does the city need to re-build its social capital?
Since medieval times, the socio-economic conditions of the world have changed substantially. In today’s globalised world cities no longer stand apart as islands [5]. In a real sense the world should be considered as completely urbanised. And this implies a new kind of problems and shocks. For instance the ecological footprint of London is bigger that Britain, and we now face other imperatives such as the erosion of Social Capital operated by the built environment.

With the students, the authors tried to update the metaphor, automatically updating the answer: in a globalised world each city, and Edinburgh in particular, should perhaps work like our planet, the Earth itself, whose biosphere is inevitably inclusive. Nothing can be excluded from the Earth’s ecological balance, which affects all of us. Not even local problems can be excluded or ignored: local defects have worldwide/system repercussions.

Edinburgh was therefore seen as a number of ecosystems, where inclusion and physiological separation (such as the eco-niche, or right of privacy) work together for a superior and necessarily inclusive behaviour. In looking at ecosystems, exclusion is never physiological: it is indeed pathological. Cities are therefore places where exclusion is unnecessary to system efficiency. City space should therefore work for, and not against, this very efficiency. Curiously, as we know this is not often the case.
4.2 Designing spaces for social opportunities

The built environment was seen as a generator of opportunities for the social capital.

Students found out that a system of multifunctional buildings could better provide an answer to the constantly changing needs of the area. The risk of obsolescence had to be avoided: flexible, interdependent, multifunctional buildings were preferred.

As much as monoculture in agriculture is not sustainable, monoculture in cities often leads to urban obsolescence.

Public spaces and public functions were shown to be key drivers in promoting beneficial change and that by incorporating these in, multifunctional spaces, which maximises both the utility of the space and the intensity of public life seemed to be an answer to the needs of social diversification.

Local Economic Development was seen as a key, as much as local cultural development.

5 Conclusion : the need of public space

Our vision of a sustainable Edinburgh, of a city realising its full sustainable potential of all its citizens learning and working together includes the following essential conditions. A sustainable Edinburgh should be:

- A city, which has developed and maintains effective and open structures for accessing and sharing an extensive knowledge and resource base - the self-researching society. Public spaces and public functions – interior as well as exterior – provide a critical focus for sharing knowledge and an awareness of culture.
- A city which has promoted and facilitated a high degree of learning about and understanding of sustainability amongst decision-makers at all levels and across all sectors - the self learning society. Public spaces and public functions are where deep and collective social learning (Milbrath, 1989) can take place.
- A city built on networks and with exemplary methods of communication. Public spaces and public functions provide vital nodes of urban communication.
- A city which has established permanent, participatory, cross-sector public consultation, such as forums for reviewing and revising the City’s vision of sustainable development. For any such forum to take place anywhere other than in truly democratic forms of public space (not space merely "borrowed" from some private body) is to deny citizens the necessary open, full and unconstrained participation in the City’s drive towards sustainability.
- A city in which the planning and development processes are as transparent and as accountable as possible. Transparency requires open exposure
and full public accessibility, not in spaces in which we are treated as at best guests or at worst intruders but in spaces fully "owned" by the public itself, and in which we not only have the right but the responsibility to attend.

References